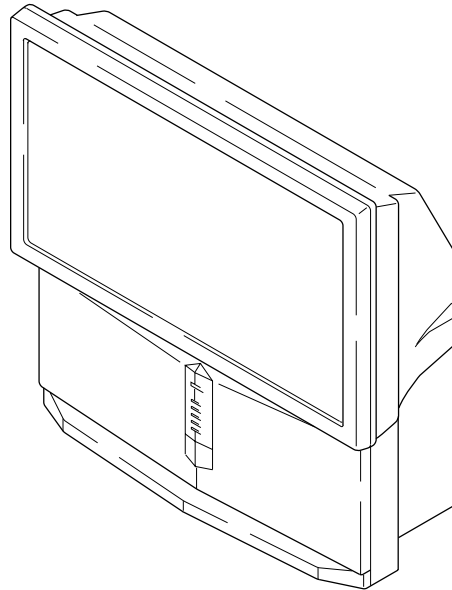


SERVICE MANUAL RE-2D CHASSIS

<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>
KP-51DS1U	RM-892	UK	SCC-P26B-A



RM-892



* Please file according to model size. ...

SPECIFICATIONS

TV system

I

Colour system

PAL

NTSC 3.58, 4.43 (only Video In)

Channel coverage













UHF: B21-B69

Projected picture size





51 inches

Approx. 130 cm measured diagonally

Rear Terminals

-   Centre speaker input terminals (2 terminals)
-  (L,R) audio outputs (phono jacks)
-  1/  21-pin Euro connector (CENELEC standard) including audio/video input, RGB input, TV audio/video output
-  2/  2 21-pin Euro connector (CENELEC standard) including audio/video input, S video input, selectable audio/video output
-  3 21-pin Euro connector (CENELEC standard) including audio/video input, selectable audio/video output (selectable the same output source as  2/  2 connector)
-  PCMCIA socket
-  MODEM connection

Front Terminals

-  2 video input - phono jack
-  2 audio inputs - phono jacks
-  2 S video input - 4 pin DIN
-  Headphones jack - minijack stereo

Sound output

2 x 30 W (music power)

2 x 15 W (RMS)

Centre SP input

30 W (RMS) (using as the centre speaker)

Power consumption

165 W

Standby Power consumption

0.7 W

Dimensions (w x h x d)

Approx. 1256 x 1264 x 650 mm

Weight

Approx. 63 kg

Accessories supplied

1 Remote Control (RM-892)

2 Batteries (IEC designated)

Other features

Digital Comb filter (High resolution)

TELETEXT, Fastext, EPG

NICAM

Sleep Timer

Smartlink

PCMCIA connection

MODEM connection

Digital terrestrial reception

Design and specifications are subject to change without notice.

CAUTION

SHORT CIRCUIT THE ANODE OF HTE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING!!


COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS 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.

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SECTION 1 SELF DIAGNOSIS FUNCTION

Diagnostic Errors

The errors indicated below can be read using an Error Reader Display (Part Number S-188-900-10) connected to the service connector. Once an error has been detected it will then be displayed on the two digit error reader.

During the power up procedure and during normal run time, the micro's self diagnostic procedures monitor for various errors, as described in the table below:

Error Number	Error Description
00	No error (TV Error Reader shows 00 in normal condition)
01	Not allowed (may be confused with Sircs response flash on LED)
02	Protection circuit trip (OCP, OVP & No V-Sync)
03	Reserved for OVP (Included in error 2 for BE-3E)
04	Reserved for No V-Sync (Included in error 2 for BE-3E)
05	AKB
06	IIC Scl Low < Power Up Only >
07	IIC Sda Low < Power Up Only >
08	IIC Sda & Scl Low < Power Up Only >
09	Jungle controller no acknowledge < Power Up Only >
10	Video Switch (CXA2040) no acknowledge < Power Up Only >
11	Tuner no acknowledge
12	MSP no acknowledge
13	NVM no acknowledge
14	AV Switch (CXA2089) no acknowledge (DS10 & DX10)
15	Not Used
16	Port Expander (CXA1875) no acknowledge (DS10 & DX10)
17	Not Used
18	Dynamic Convergence (CXA8070) no acknowledge (Not used for RE-2D)
19	Cannot initialize jungle (after initial power on check OK) - < Chassis Initialization >
20	Jungle controller response failure after power up check (+9V test)
21	Video Switch (CXA2040) cannot power on reset - < Chassis Initialization >
22	Video Switch (CXA2040) response failure after power up check (+9V test)
23	NVM acknowledge fail after initialization (STBY +5V - same as micro!)
24	MSP run-time failure < May Not Be Fatal - Display On Error Reader >
25	DSP run-time failure < May Not Be Fatal - Display On Error Reader >
26	M3L bus Clock low time out after data send < Run-Time Failure >
27	M3L bus Clock low time out after data send < At Power Up Check >
28	M3L bus Clock low time out after data send < At Initialization >
29	M3L Txd Low < Power Up Only >
30	M3L Rxd Low < Power Up Only >
31	M3L Enable Low < Power Up Only >
32	Compact Text test fail < Power Up Only >
33	Compact Text does not respond (+5V test)
34	Compact text run-time failure < May Not Be Fatal - Display On Error Reader >

Protection Error (Error 2):

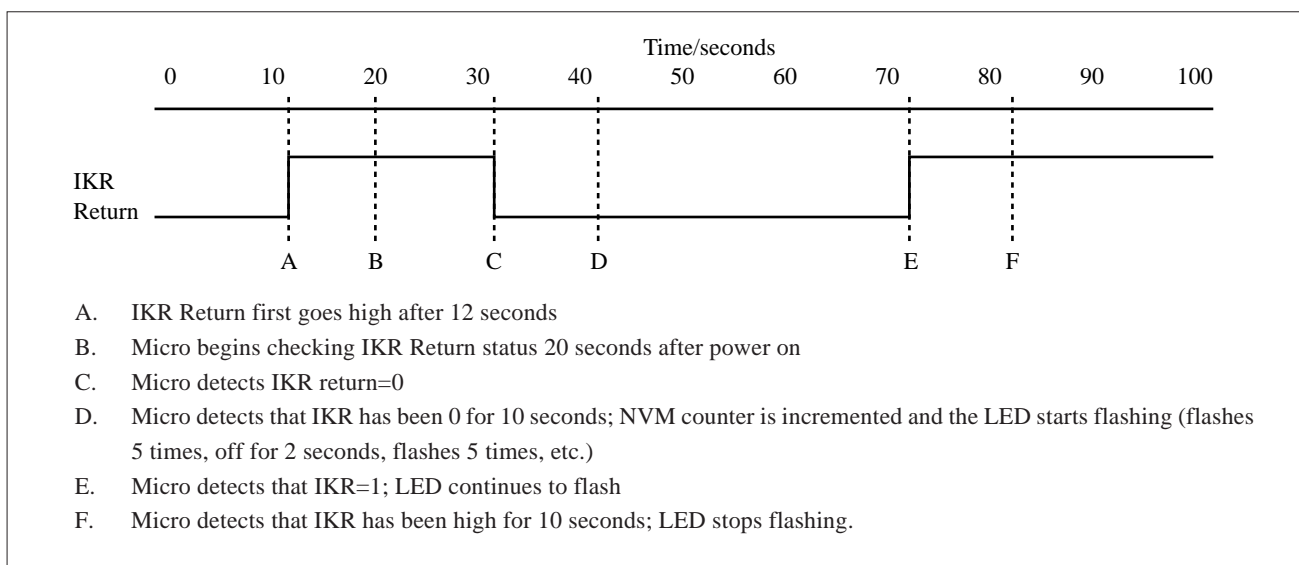
Once every main loop (approximately 200ms OSD mode, 50ms text or menu mode), the micro checks the protection pin (pin 66). If the protection pin is high 6 successive times, a protection error is diagnosed. The protection pin is **not** checked during the first 3-4 seconds after AC on.

If this error is diagnosed, the respective NVM register will be updated and the set goes straight into diagnostic standby with 2 flashes - no reset is attempted.

AKB Error (Error 5):

Once every main loop the micro checks the AKB stability by reading the IKR return from the jungle. IKR=1 means that AKB is stable, IKR=0 means that AKB is unstable. If the AKB status is unstable for 10 seconds, an AKB error is diagnosed. AKB stability is **not** checked during the first 20 seconds after AC on.

*If this error is diagnosed, the respective NVM register will be updated and the response LED will flash 5 times continually, but the set will **not** go into standby. If the AKB status becomes stable, and remains stable for 10 seconds, the LED will stop flashing.*



Startup Diagnostic Errors (Errors 6-18, 27, 29-32):

These errors are checked for during the power up sequence before attempting to retrieve data from the NVM.

- 6 - SCL pin low
- 7 - SDA pin low
- 8 - Both the SCL and the SDA pin are low
- 9 - No acknowledge from the jungle (CXA2076)
- 10 - No acknowledge from the video switch (CXA2040)
- 11 - No acknowledge from the tuner
- 12 - No acknowledge from the MSP
- 13 - No acknowledge from the NVM
- 14 - No acknowledge from the CXA2089 video switch (DS10 & DX10)
- 16 - No acknowledge from the CXA1875 Port Expander (DS10 & DX10)
- 18 - No acknowledge from the Dynamic Convergence (CXA8070) : Not used for RE-2D
- 27 - M3L_TXD pin low after Compact Text RAM test
- 29 - M3L_TXD pin low
- 30 - M3L_RXD pin low
- 31 - M3LEN pin low
- 32 - Compact Text RAM test fail

If any of these errors are detected, the respective NVM register will be incremented. The software will then carry on with the power up sequence.

General I²C Device Run-time Errors (Errors 19-23):

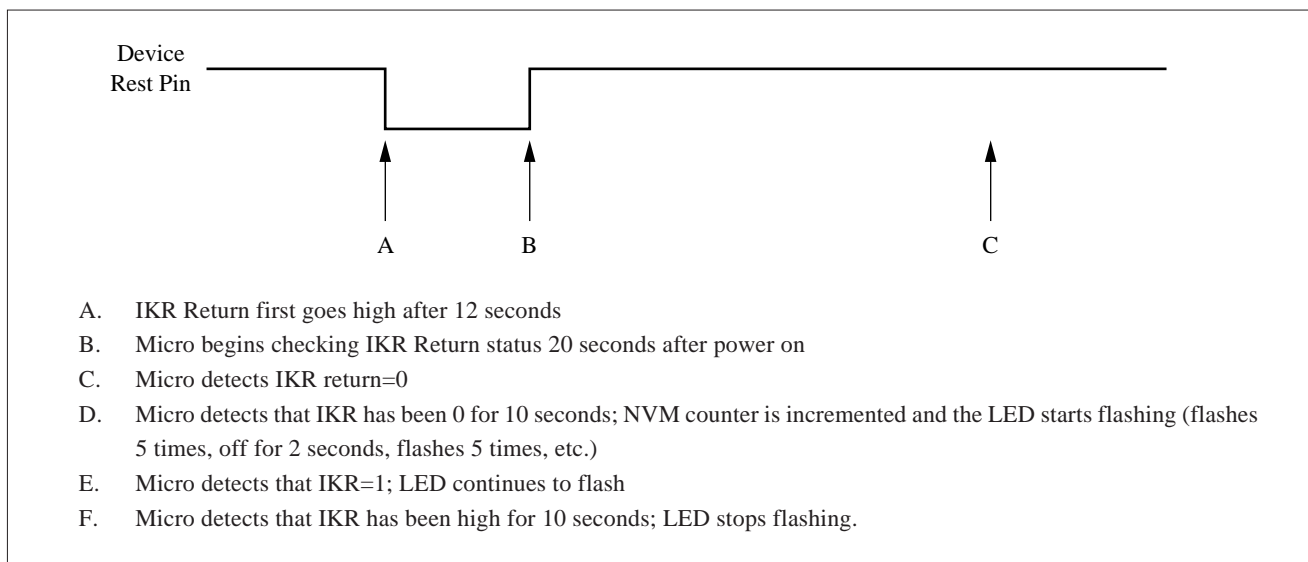
- 19 - No acknowledge from Jungle when attempting to initialize
- 20 - No acknowledge from Jungle when attempting to read registers
- 21 - AV Switch cannot complete reset during initialization
- 22 - No acknowledge from AV Switch when attempting to read registers
- 23 - No acknowledge from NVM when attempting to read or write

If any of these errors are detected, the respective NVM register will be incremented and the software will carry on.

Compact Text Run-time Errors (Errors 26, 28, 33 & 34):

- 26 - M3L_TXD pin low when checking register 81 (implies that no communication was possible)
- 28 - M3L_TXD pin low when attempting to initialize (implies that no communication was possible)
- 33 - Compact Text RAM test fail during initialization of devices

In the case of these errors, the ‘device reset’ pin will be held low for 60ms, causing a hardware reset of Compact Text. Following this reset, a longer timeout will be allowed for the M3L bus to recover. If the error still exists, the NVM register will be incremented and the software will carry on.



- 34 - Register 81 check fail, but M3L_TXD pin high (implies that Compact Text has either reset or become corrupted).

In this case, the ‘device reset’ pin will be held low for 60ms, causing a hardware reset of Compact Text. Compact Text will then be re-initialized and the NVM counter updated. This is the same as for errors 26, 28 and 33 except that the M3L bus timeout is not changed. Also, during the reset, Compact Text OSD will be disabled (using pin 59 of the micro). Only when the sync registers have been refreshed twice, will the OSD be enabled.

MSP and DSP Run-time Errors (Errors 24 & 25):

Error 24 can be caused by any of the following:

- After MSP initialization, Scart Prescale Register check fail (implies that the MSP has either reset or become corrupted).
- MSP fails to acknowledge reset instruction
- Scart Prescale Register check fail (implies that the MSP has either reset or become corrupted).

Error 25 is caused by:

- DSP test byte corrupted (implies that the DSP has either reset or become corrupted).

For both of these errors, the software will refresh the MSP and DSP registers. If the errors still exist, the NVM counter will be incremented, and the software will carry on.

Error Display Mode

Error Display Mode is entered by the following sequence of commands:

Standby → Information → Digit 5 → Volume Down → TV

This mode will display a special menu, which will list all possible errors and the number of occurrences of each error (0 – 255, as stored in the NVM). There will also be a display of the current error (00 if no error). This display mode will appear as follows:

ERROR DISPLAY MODE			
Current Error Code = 00			
Error Code	Occurrences	Error Code	Occurrences
2	2	19	0
3	—	20	0
4	—	21	0
5	0	22	0
6	0	23	0
7	0	24	0
8	0	25	4
9	0	26	5
10	0	27	89
11	0	28	3
12	0	29	0
13	0	30	0
14	0	31	0
15	3	32	0
16	0	33	3
17	0	34	38
18	6		

Whilst in this mode, the number of occurrences of each error can be reset to 0 by TT08.

Only AC off or standby off can exit this mode.

The Current Error Code can also be read by using a TV Error Reader (I2C slave address 42H). This device simply receives 1 data byte, which is the error number in binary coded decimal form.

TT command table

TT Mode is available by pressing the test key twice. It is exited by pressing 0 twice, or by pressing the Test key, or by pressing the TV key or by switching the set into standby.

Pressing the Menu key when in TT mode enters in main Test Menu. Pressing the Menu key again enters in the User Menus.

TT Modes 40-49 require TV to be in program 59 before the command is accepted. Some Test models are dependant upon the model.

TT command	Meaning
<Menu>	Enter into service menu
00	Exit from TT mode
01	Set picture level to maximum
02	Set picture level to minimum
03	Set volume to 35%
04	Set volume to 50%
05	Set volume to 65%
06	Set volume to 80%
07	Ageing mode enable / disable
08	Shipping condition
09	Reset language select menu on power up
11	Sub Picture adjustment (use red / yellow)
12	Sub Colour adjustment (use red / yellow)
13	Sub Brightness adjustment (use red / yellow)
14	Text H-Position
16	Picture level 50 %
21	Destination A/D (East Menu / West Text)
22	Destination L (West Menu / West Text)
23	Destination E (West Menu / West Text)
24	Destination U (West Menu / West Text)
25	Destination D (East Menu / Greek Text)
26	Destination B (East Menu / West Text)
27	Destination K (East Menu / East Text)
28	Destination R (Russian Menu / Russian Text)
32	Digital Status on/off
41	Re-initialize NVM
42	Re-initialize Geometry settings
43	Default programme info in NVM with Pencoed factory channel setup
44	Default favourite pages to 100, 101, 102, 103
45	Switch off all Channel Locks
46	Dealer commander mode (pending)
47	Default MSP Settings
48	Restore NVM test byte Undo TT49
49	Delete NVM test byte Sets virgin NVM
52	Noise on Left Speaker
53	Noise on Right Speaker Only

54	Noise on Centre Speaker Only
55	Noise on Surround Speaker Only
56	Set Colour to minimum and Picture to maximum
57	Set Colour & Picture to minimum and adjust sub-brightness
68	Pre-Set AV Labels
69	Picture Blanking Pulse Enable/ Disable
72	Balance Left/ Right (Press RED Key for balance left, YELLOW for balance right, and GREEN for centre balance)
73	Dual sound Headphones (GREEN key for A, BLUE key for B)
74	Dual sound Speakers (GREEN key for A, BLUE key for B)
77	Setup Trap Switch
78	Set Screen Size
79	Wide Setup
81	Velocity Modulation ON
82	Velocity Modulation OFF
83	Special Picture Mode - Personal mode, reset & brightness =0
84	Text Interlace Odd (Non Interlace mode = 3)
85	Text Interlace Even (Non interlace mode = 2)
86	Auto Cut Off ENABLE
87	Auto Cut Off DISABLE
88	Diagnostics OFF
89	Diagnostics ON
91	Clear & Disable OSD
92	Enable OSD
93	D / K Nicam Enable
94	D / K Nicam Disable
95	Reset language select menu on power up
96	Set all programme labels to default
97	MHEG mode on/off

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

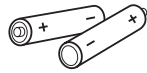
SECTION 2 GENERAL

Overview

Checking the Accessories Supplied

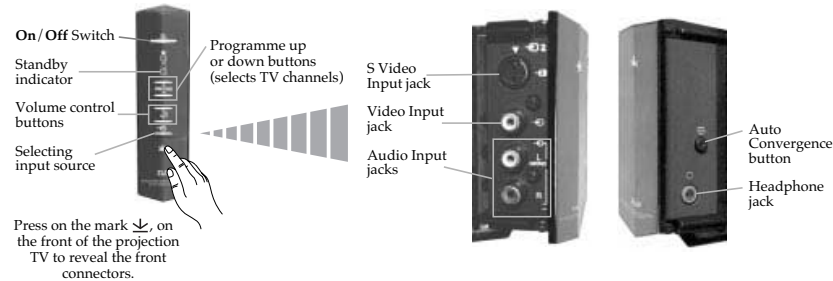



One Remote Control (RM-892)



Two batteries (R6 type)

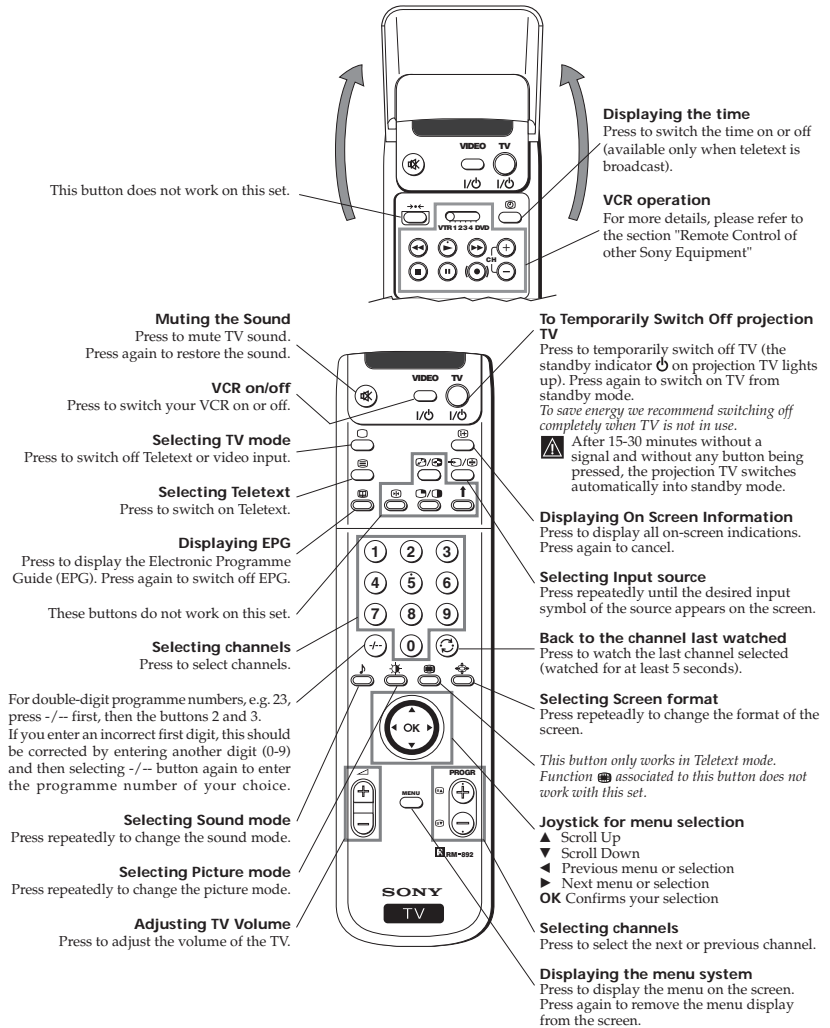
Overview of Projection TV Buttons



Press on the mark , on the front of the projection TV to reveal the front connectors.

Getting Started - Overview

Overview of Remote Control Buttons

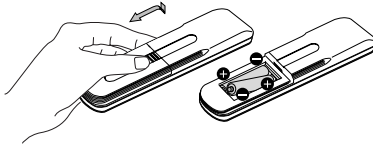


i Besides TV functions, all coloured buttons as well as green symbols are also used for Teletext operation. For more details, please refer to the "Teletext" section of this instruction manual.

Installation

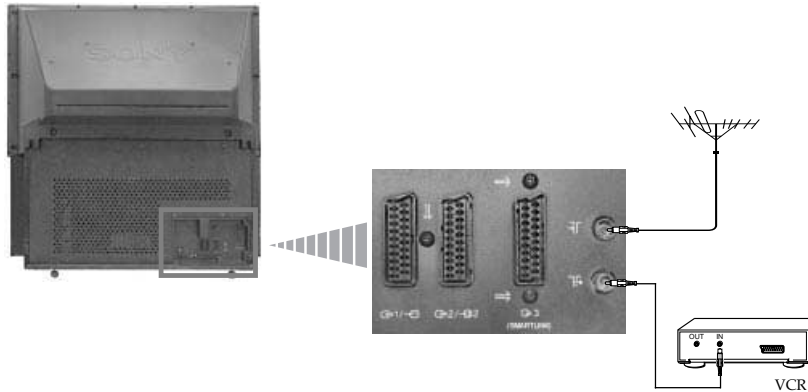
Inserting Batteries into the Remote Control

- ⚠ Make sure you insert the batteries using the correct polarities. Always remember to dispose of used batteries in an environmental friendly way.



Connecting the Aerial and VCR

- ⓘ Connecting cables are not supplied.



- ⓘ The Scart lead is optional. If you use this optional connection it can improve picture and sound quality when using a VCR.

- ⚠ If you do not use a SCART lead, after automatically tuning the projection TV refer to the "Manually Tuning the TV" section of this instruction manual, to tune in the projection TV to the output of your VCR. Also refer to your VCR instruction manual to find out how to find the output channel of your VCR.

First Time Operation

Switching on the Projection TV and Automatically Tuning

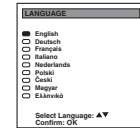
- ⓘ The first time you switch on your TV, a sequence of menu screen appear on the TV enabling you to 1) choose the language of the menu screen, 2) search and stores all available channels (TV Broadcast) and 3) change the order in which the channels (TV Broadcast) appear on the screen. However, if you need to change the language menu, change the country, change or repeat the tuning (e.g. when you move house) or rearrange again the order of the channels afterwards, you can do that by selecting the appropriate menu in the (PRESET).



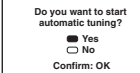
- 1 Connect the Projection TV plug to the mains socket (220-240V AC, 50 Hz). Press the on/off button on your projection TV set to switch on. The first time you press this button the **Language** menu displays automatically on the screen.



- 2 Push the joystick on the remote control to or to select the language, then press **OK** to confirm your selection. From now on all the menus will appear in the selected language.

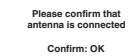


- 3 The Auto Tuning menu appears on the screen in the selected language, then press the **OK** button on the remote control to select **YES**.

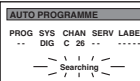


GB

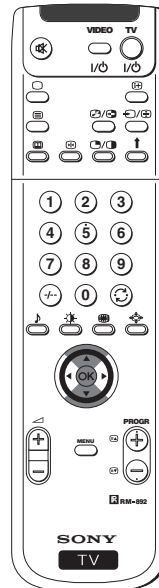
- 4 A new menu appears automatically on the screen asking you to check that the aerial is connected. Confirm that the aerial is connected and then press the **OK** button to start the automatic tuning.



- ⓘ The TV starts to automatically search and store all available channels (TV Broadcast) for you and the message "Searching" flashes on the screen until all available channels will be stored. If any analogue channel is tuned, it will be stored in programme numbers 91 to 99 but only in the case that these positions are free. However, if you wish to tune in any analogue channel and store it in the programme number of your choice, please refer to the section "Manually Tuning the TV" of this instruction manual.

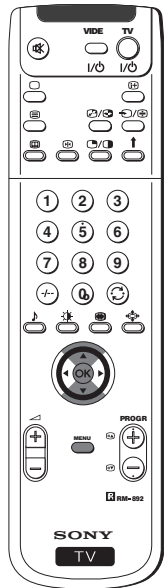


- ⚠ This procedure could take some minutes. Please, be patient and do not press any button. Otherwise the automatic tuning will not be completed.



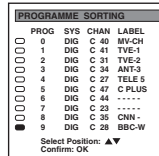
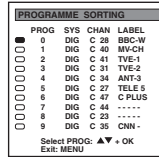
continued...

First Time Operation



- 5 **i** After all available channels are captured and stored, the Programme Sorting menu appears automatically on the screen enabling you to change the order in which the channels appear on the screen.
 - a) If you do not wish to change the channel order, go to step 6.
 - b) If you wish to change the channel order:
 - 1 Push the joystick on the remote control to ▼ or ▲ to select the programme number with the channel (TV Broadcast) you wish to rearrange, then push to ►.
 - 2 Push the joystick to ▼ or ▲ to select the new programme number position for your selected channel (TV Broadcast), then press OK.

i The selected channel now moves to its new programme position and the other channels move accordingly.
 - 3 Repeat steps b1) and b2) if you wish to change the order of the other channels.



- 6 Press the MENU button to exit and return to the normal TV screen.

i Your projection TV is now ready for use.

Introducing the Menu system

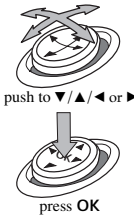
- i** Your projection TV uses an on-screen menu system to guide you through the operations. Use the following buttons on the Remote Control to operate the menu system:



- 1 Press the MENU button to switch the first level menu on.



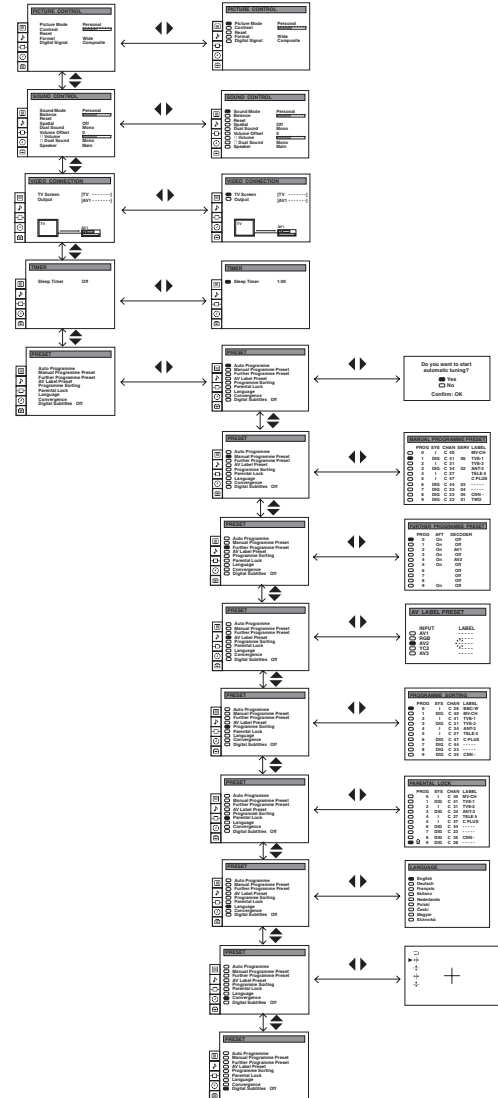
- 2 •To highlight the desired menu or option, push the joystick to ▲ or ▼.
- To enter to the selected menu or option, push to ►.
- To return to the last menu or option, push to ◀.
- To alter settings of your selected option, push to ▼/▲/◀ or ►.
- To confirm and store your selection, press OK.



- 3 Press the MENU button to remove the menu from the screen.

Menu System

On Screen display Menu Guide



(For different adjustments, please refer to the section "Adjusting the Picture")

(For different adjustments, please refer to the section "Adjusting the Sound")

(For more details, please refer to the section "Selecting the output source for the Euro AV connectors")

(For more details, please refer to the section "Using the Sleep Timer")

(For more details, please refer to the section "Switching on the projection TV and automatically tuning")

(For more details, please refer to the section "Manually Tuning the TV")

(For more details, please refer to the section "Using the Further Programme Preset function")

(For more details, please refer to the section "Labelling the Input Sources")

(For more details, please refer to the section "Switching on the projection TV and automatically tuning")

(For more details, please refer to the section "Locking Programmes").

(For more details, please refer to the section "Switching on the projection TV and automatically tuning")

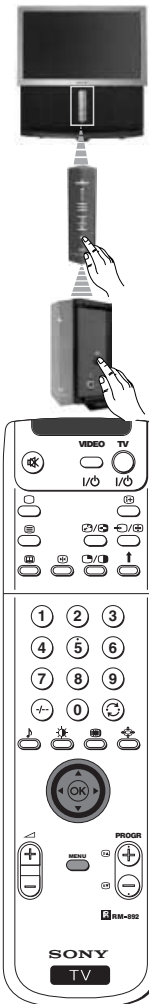
(For more details, please refer to the section "Adjusting Colour Registration (Convergence)").

(For more details, please refer to the section "Displaying subtitles for digital channels").

Menu System

Adjusting Colour Registration (Convergence)

- ① Due to the earth's magnetism, the picture might become undefined and you could see different colours on the outlines of the images. In that case, proceed as follows:



Auto converge the Red, Green, and Blue Lines

- 1 Press the , on the front of the projection TV to reveal the front connectors.
- 2 Press button on the projection TV.

The Auto Convergence function works for about 30 seconds. When the white cross disappears from the screen, your projection TV is ready for use.

Notes:

The Auto Convergence function does not work:

- when no signal is input.
- when the input signal is weak.
- when the screen is exposed to spotlights or direct sunlight.
- when you watch the teletext broadcast.

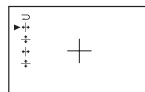
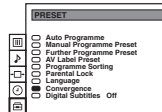
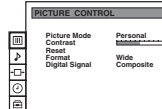
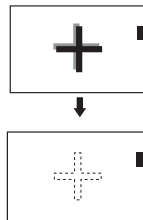
If you wish a more accurate convergence adjustment

- 1 Press the MENU button on the remote control to display the menu on the screen.
- 2 Push the joystick to to select the symbol , then push to to enter to the PRESET menu.
- 3 Push the joystick to or to select Convergence, then push to .
- 4 Push the joystick to or to select "the line" (vertical and horizontal lines in red and blue) you want to adjust.
 - : red vertical line (left/right adjustment)
 - : red horizontal line (up/down adjustment)
 - : blue vertical line (left/right adjustment)
 - : blue horizontal line (up/down adjustment)

Then press the OK button.

- 5 Push the joystick repeatedly to , , , or to converge the selected line with the green line in the centre, then press OK to confirm.
- 6 Repeat steps 4 and 5 to adjust the other lines, until all the lines have overlapped to form a white cross.
- 7 Press the MENU button to exit and return to the normal TV screen.

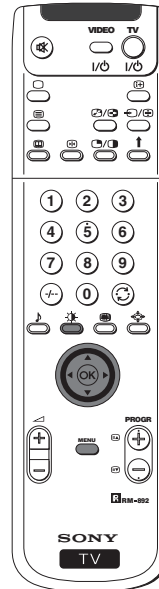
Your projection TV is ready for use.



Menu System

Adjusting the Picture

- ① Although the picture is adjusted at the factory, you can modify it to suit your own taste.



- 1 Press the MENU button on the remote control to display the menu on the screen.
- 2 Push the joystick to to enter the PICTURE CONTROL menu.
- 3 Push the joystick to or to select the item you wish to change, then push to .

Refer to the table below to choose the item and for the effect of each control:

- Picture Mode** **Picture Mode** Personal (for individual settings)
- Movie (for films)
 - Live (for live broadcast programmes)
- Brightness*** Darker Brighter
- Colour*** Less More
- Sharpness*** Softer Sharper
- Hue**** Greenish Reddish

Contrast Less More

Reset Resets picture to the factory preset levels.

Format (for details refer to the section "Changing the Screen Mode")

Digital Signal **Composite** (standard picture quality)
RGB*** (improves the picture quality)

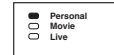
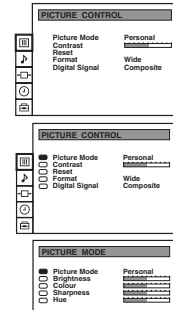
- * Can only be altered if Personal Mode is selected.
- ** Only available for NTSC colour signal (e.g. USA video tapes).
- *** Not available in 4:3 format screen mode.

- 4 Push the joystick to or to alter the selected item, then press the OK button to store the new adjustment.
- 5 Repeat steps 3 and 4 to alter the other items.
- 6 Press the MENU button to exit and return to the normal TV screen.

Changing the Picture Mode Quickly

- ① You can quickly change the Picture Mode without entering the Picture Control menu screen.

- 1 Press the button on the remote control to directly access the Picture Mode.
- 2 Push the joystick to or to select your desired picture mode (Personal, Movie or Live), then press the OK button to remove the display from the screen.



Menu System

Changing the screen mode

① Using this Screen Mode feature you can change the aspect ratio of the screen.



1 Press the **MENU** button on the remote control to display the menu on the screen.

2 Push the joystick to **▶** button to enter the **PICTURE CONTROL** menu.

3 Push the joystick to **▼** to select **Format**, then push to **▶**.

4 Push the joystick to **▼** or **▲** to select **Format, Scroll** or **Auto 16:9**.

5 Format

Push the joystick to **▶** to enter to the menu, then push to **◀** or **▶** repeatedly to select one of the following modes:

- **Smart:** imitation of wide screen effect (16:9) for 4:3 broadcasts.
- **4:3:** conventional 4:3 picture.
- **Zoom:** imitation of wide screen effect (16:9) for movies broadcast in cinemascopic format.
- **Wide:** for 16:9 broadcasts.

Press the **OK** button.

6 Scroll

① You can use **Scroll** to move the screen up- or downwards in order to see the cut-off parts. This function only works if you selected **Zoom** mode or **Smart** mode in step 5.

Push the joystick to **▶** to enter to the menu, then push to **◀** or **▶** to adjust the screen position over a range of -5 to +5. Press the **OK** button.

7 Auto 16:9

Push the joystick to **▶** to enter to the menu, then push to **◀** or **▶** to select:

- On:** if you wish the TV set to switch automatically to wide format if a 16:9 broadcast is detected or
- Off:** for normal mode.

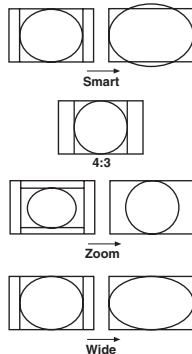
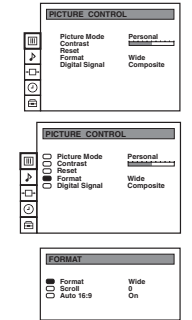
Press the **OK** button.

8 Press the **MENU** button to exit and return to the normal TV screen.

Changing the Format Screen Quickly

① You can quickly change the format screen without entering the Picture Control menu screen.

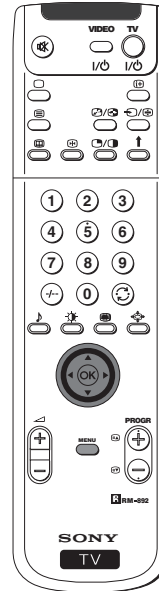
1 Press the **◀** button on the remote control repeatedly to select your desired format screen mode (**Smart, 4:3, Zoom** or **Wide**).



Menu System

Adjusting the Sound

① Although the sound is adjusted at the factory, you can modify it to suit your own taste.



1 Press the **MENU** button on the remote control to display the menu on the screen.

2 Push the joystick to **▼** to select the **▶** symbol, then push to **▶** to enter to the **SOUND CONTROL** menu.

3 Push the joystick to **▼** or **▲** to select the item you wish to change, then push to **▶**. Refer to the table below to chose the item and for the effect of each control.

Sound Mode ▶ Mode ▶ Personal (for individual settings)
 ▶ Rock
 ▶ Jazz
 ▶ Pop

▼ **Treble*** ◀ Less ▶ More

▼ **Bass*** ◀ Less ▶ More

Balance ◀ Left ▶ Right

Reset ⓧ Resets picture to the factory preset levels.

Spatial ▶ On: acoustic sound effect
 ▶ Off: normal

Dual Sound • For a stereo broadcast:
 ▶ Mono
 ▶ Stereo
 • For a bilingual broadcast:
 ▶ Mono (for mono channel if available)
 ▶ A (for channel 1)
 ▶ B (for channel 2)

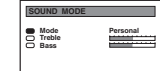
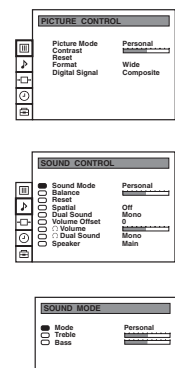
Volume Offset ◀ -12 ▶ +12
 The channel volume level can be adjusted over a range of -12 to +12.

Headphones:
 Ω **Volume** ◀ Less ▶ More

Ω **Dual Sound** • For a stereo broadcast:
 ▶ Mono
 ▶ Stereo
 • For a bilingual broadcast:
 ▶ Mono (for mono channel if available)
 ▶ A (for channel 1)
 ▶ B (for channel 2)

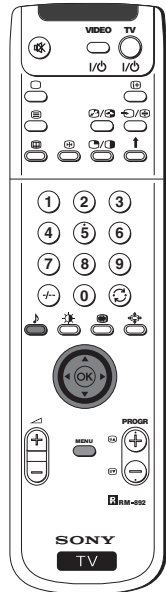
Speaker ▶ **Main:** sound from projection TV set
 ▶ **Centre in:** sound from external amplifier

* Can be only altered if "Personal" mode is selected.



Continued...

Menu System



4 Push the joystick to ◀ or ▶ to alter the selected item, then press the OK button to store the new adjustment.

5 Repeat steps 3 and 4 to alter the other items.

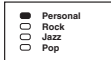
6 Press the MENU button to exit and return to the normal TV screen.

Changing Sound Mode Quickly

i You can quickly change Sound mode without entering the Sound Control menu screen.

1 Press the  button on the remote control to directly access to the Sound Mode.

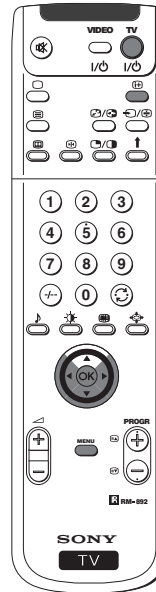
2 Push the joystick to ▼ or ▲ to select your desired sound mode (Personal, Rock, Jazz or Pop), then press the OK button to remove the display from the screen.




Menu System

Using the Sleep Timer

i You can select a time period for the TV to switch itself automatically into the standby mode.



1 Press the MENU button on the remote control to display the menu on the screen.

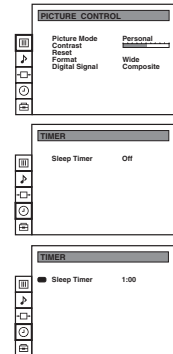
2 Push the joystick to ▼ button to select the  symbol, then push to ▶ to enter to the TIMER menu.

3 Push the joystick to ▶, then push to ◀ or ▶ repeatedly to set the time period delay

Off ▶ 0:30 ▶ 1:00..... 4:00 hours


4 Press the OK button.

5 Press the MENU button to exit and return to the normal TV screen.



i One minute before the projection TV switches into standby mode, the indication 0:01 is displayed on the screen automatically.

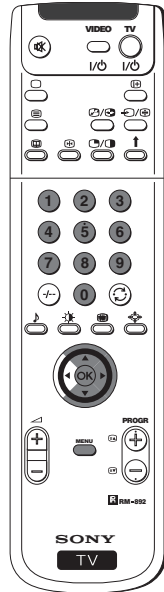
Notes:

- When watching the TV, press the  button on the remote control to display the time remaining.
- To return to normal operation from standby mode, press the TV I/O button on the remote control.

Menu System

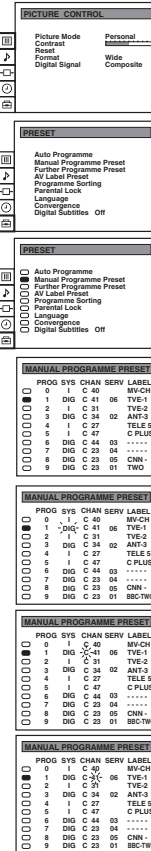
Manually Tuning the TV

- ① Use this function to preset channels or a video input source one by one to the programme order of your choice.



- 1 Press the MENU button on the remote control to display the menu on the screen.
- 2 Push the joystick to \blacktriangledown to select the ☰ symbol, then push to \blacktriangleright to enter to the PRESET menu.
- 3 Push the joystick to \blacktriangledown or \blacktriangle to select Manual Programme Preset, then push to \blacktriangleright .
- 4 Push the joystick to \blacktriangledown or \blacktriangle to select on which programme number you want to preset a channel, then push to \blacktriangleright .
- 5 Push the joystick to \blacktriangledown or \blacktriangle to select the TV Broadcast system (I for analogue channels or DIG for digital channels) or a video input source (AV1, AV2...), then push to \blacktriangleright to highlight the number digit of CHAN column.
- 6 Press the number buttons to enter the channel number of the TV Broadcast or push the joystick to \blacktriangle or \blacktriangledown to search for the next available channel.
If you do not wish to store this channel, push the joystick to \blacktriangle or \blacktriangledown to continue searching for the desired channel.
- 7 a) For analogue channels or video input source:
If this is the desired channel you wish to store, press the OK button.
b) For digital channels:
Push the joystick to \blacktriangleright to enter to the SERV column, then press the number buttons or push to \blacktriangle or \blacktriangledown to select the service number of your selected channel.
Press the OK button to store.
- 8 Repeat steps 4 to 7 if you wish to store more channels.
- 9 Press the MENU button to exit and return to the normal TV screen.

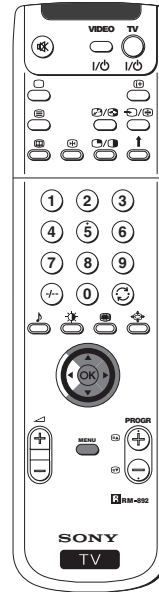
☞ Your projection TV is now ready for use.



Menu System

Using the "Further Programme Preset" function

- ① With this feature you can:
- a) Even normally the automatic fine tuning (AFT) is operating, however you can manually fine-tune the TV (only available on analogue channels) to obtain a better picture reception if the picture is distorted or
 - b) preset the AV3 output for the programme positions of channels with scrambled signals (eg from a pay TV decoder). In this way a connected VCR records the unscrambled signal.

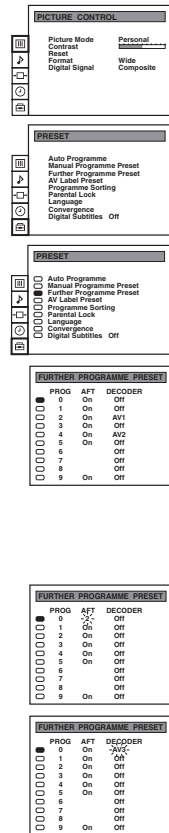


- 1 Press the MENU button on the remote control to display the menu on the screen.
- 2 Push the joystick to \blacktriangledown to select the ☰ symbol, then push to \blacktriangleright to enter to the PRESET menu.
- 3 Push the joystick to \blacktriangledown or \blacktriangle to select Further Programme Preset, then push to \blacktriangleright .
- 4 Push the joystick to \blacktriangledown or \blacktriangle to select the relevant programme number, then push to \blacktriangleright repeatedly to select:
 - a) AFT or
 - b) DECODER.

The selected item changes colour.

① AFT will only be available on analogue channels.
- 5 a) AFT
Push the joystick to \blacktriangledown or \blacktriangle to fine tune the channel frequency over a range of -15 to +15, then press the OK button.
Repeat steps 4 and 5a) if you wish to fine tune other channels.
b) DECODER
Push the joystick to \blacktriangledown or \blacktriangle to select AV3, then press the OK button.
① The picture from the decoder connected to the Euro AV 3 on the back of the projection TV will appear on this programme number.
Repeat steps 4 and 5b) to preset the AV3 output for other programme positions.
- 6 Press the MENU button to exit and return to the normal TV screen.

☞ Your projection TV is now ready for use.




Menu System

Locking Programmes

- 1** This feature enables you to prevent undesirable broadcasts appearing on the screen. We suggest you use this function to prevent children from watching programmes you consider unsuitable.





1 Press the **MENU** button on the remote control to display the menu on the screen.

2 Push the joystick to **▼** to select the  symbol, then push to **▶** to enter to the **PRESET** menu.

3 Push the joystick to **▼** or **▲** to select **Parental Lock**, then push to **▶**.

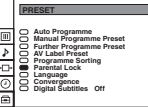
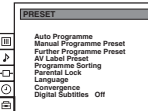
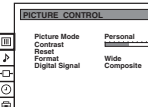
4 Push the joystick to **▼** or **▲** to select the programme number with the channel you wish to block, then press the **OK** button.

- i** The  symbol appears before the programme position to indicate this programme is now blocked. To unblock the programme, press the **OK** button again. The  symbol disappears.

5 Repeat step 4 if you wish to block other channels.

6 Press the **MENU** button to exit and return to the normal TV screen.

i When you select a blocked programme the screen appears in black, with  symbol.

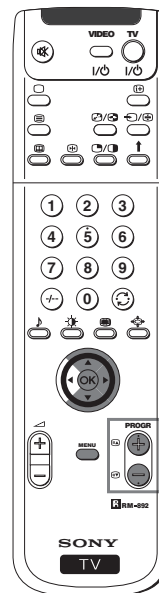


PROG	SYS	CHAN	SERV	LABEL
0	I	C 40	MV-CH	
1	DIG	C 41	TVE-1	
2	I	C 31	TVE-2	
3	DIG	C 34	ANT-3	
4	I	C 27	TELE 5	
5	I	C 47	C PLUS	
6	DIG	C 44	
7	DIG	C 23	
8	DIG	C 35	CHN -	
9	DIG	C 25	


Menu System

Skipping Programme positions

- 1** You can programme this projection TV to skip any unwanted programme numbers when they are selected with the **PROGR +/-** buttons. To cancel this function afterwards, proceed in the same way as described below by selecting the appropriate TV system (I or DIG) instead of " - - " in step 5.



1 Press the **MENU** button on the remote control to display the menu on the screen.

2 Push the joystick to **▼** to select the  symbol, then push to **▶** to enter to the **PRESET** menu.

3 Push the joystick to **▼** or **▲** to select **Manual Programme Preset**, then push to **▶**.

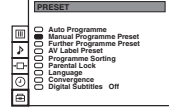
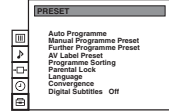
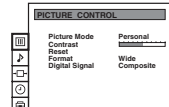
4 Push the joystick to **▼** or **▲** to select the programme position you want to skip, then push to **▶** to enter to the **SYS** column.

5 Push the joystick to **▼** to select " - - ", then press the **OK** button to store.

6 Repeat steps 4 and 5 to skip other unused programme positions.

7 Press the **MENU** button to exit and return to the normal TV screen.

i When changing channels (TV Broadcasts) with the **PROGR +/-** buttons, the skipped programme positions do not appear. You can, however, still select them using the number buttons.



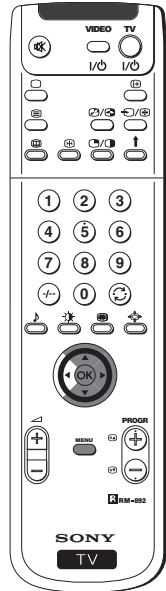
PROG	SYS	CHAN	SERV	LABEL
0	I	C 40	MV-CH	
1	DIG	C 41	06	TVE-1
2	I	C 31		TVE-2
3	DIG	C 34	02	ANT-3
4	I	C 27		TELE 5
5	I	C 47		C PLUS
6	DIG	C 44	03
7	DIG	C 23	04
8	DIG	C 23	05	CHN -
9	DIG	C 23	01	SBC-TWO

PROG	SYS	CHAN	SERV	LABEL
0	I	C 40		MV-CH
1	DIG	C 41	06	TVE-1
2	I	C 31		TVE-2
3	DIG	C 34	02	ANT-3
4	I	C 27		TELE 5
5	I	C 47		C PLUS
6	DIG	C 44	03
7	DIG	C 23	04
8	DIG	C 23	05	CHN -
9	DIG	C 23	01	SBC-TWO


Menu System

Labelling a channel (analogue channels only)

- ① Names for analogue channels (TV Broadcasts) are usually taken automatically from Teletext if available. You can however name a channel or an input video source using up to five characters (letters or numbers). Using this function, you can easily identify which channel (TV Broadcasts) or video source you are watching.



1 Press the **MENU** button on the remote control to display the menu on the screen.

2 Push the joystick to **▼** to select the  symbol, then push to **▶** to enter to the **PRESET** menu.

3 Push the joystick to **▼** or **▲** to select **Manual Programme Preset**, then push to **▶**.

4 Push the joystick to **▼** or **▲** to select the programme number with the analogue channel you wish to name.


5 Push the joystick to **▶** repeatedly until the first element of the **LABEL** column is highlighted.

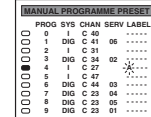
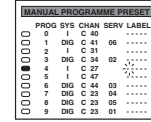
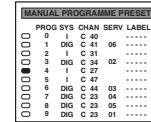
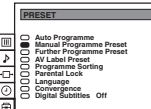
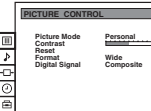
6 Push the joystick to **▼** or **▲** to select a letter or number (select “-” for a blank), then push to **▶** to confirm this character. Select the other four characters in the same way.

7 After selecting all the characters, press the **OK** button.

8 Repeat steps 4 to 7 if you wish to label other channels.

9 Press the **MENU** button to exit and return to the normal TV screen.

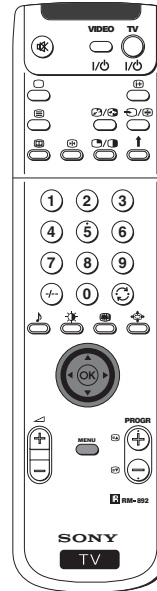
 When you select a named channel, the name appears for a few seconds on the screen.




Menu System

Displaying subtitles for digital channels

- ① With this feature you can view subtitles (if available) on the TV screen when watching digital channels. When watching analogue channels you can view subtitles via teletext.




1 Press the **MENU** button on the remote control to display the menu on the screen.

2 Push the joystick to **▼** to select the  symbol, then push to **▶** to enter to the **PRESET** menu.


3 Push the joystick to **▼** or **▲** to select **Digital Subtitles**, then push to **▶**.

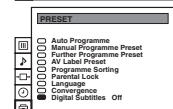
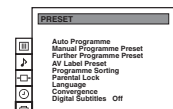
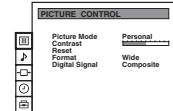
4 Push the joystick to **◀** or **▶** to select the language in which you wish the subtitles to appear. You can choose from **English**, **Welsh** or **Gaelic**.

 When you wish to cancel subtitles, set to **Off**.

5 Press the **OK** button to confirm your selection.

6 Press the **MENU** button to exit and return to the normal TV screen.

 When you select a digital channel which broadcasts subtitles, the subtitles appear on the bottom of the screen in the chosen language.



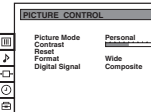
Menu System

Selecting the Output Source for the Euro AV connectors

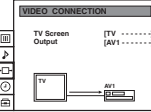
- ① Using this function you can record on your VCR any signal coming from an external equipment connected to the Euro AV connectors ② or ③ placed on the rear of the projection TV. In that case you have to select the output source as described below (if your VCR support Smartlink, this procedure is not necessary).



1 Press the **MENU** button on the remote control to display the menu on the screen.



2 Push the joystick to **▼** to select the  symbol, then push to **▶** button to enter to the **VIDEO CONNECTION** menu screen.



3 Push the joystick to **▼** or **▲** button to highlight:

TV Screen (input source for the TV screen) or

Output (output source available for ② and ③ Euro AV connectors).


Push the joystick to **▶** to confirm.


4 Push the joystick to **◀** or **▶** repeatedly to select the desired source:

TV Screen TV, AV1, RGB, AV2, YC2 or AV3


Output TV, AV1, AV2, YC2, AV3 or AUTO

Then press the **OK** button to confirm.

 If you select "AUTO", the output signal will always be the same one that is displayed on the screen.

 If you have connected a decoder, please remember to change back the Output to "TV" for correct unscrambling.

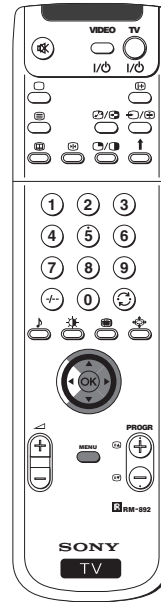
5 Press the **MENU** button to exit and return to the normal TV screen.

 The selected signal is available for your optional equipment connected to the appropriate Euro AV connector.

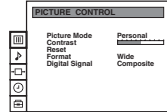
Menu System


Labelling of Input Sources

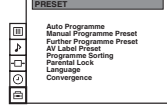
- ① This function enables you to designate a name to the optional equipment you have connected to the sockets of this projection TV. This name can be up to 5 characters (letters or numbers).



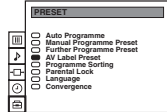
1 Press the **MENU** button on the remote control to display the menu on the screen.



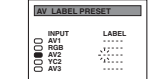
2 Push the joystick to **▼** to select the  symbol, then push to **▶** to enter to the **PRESET** menu screen.



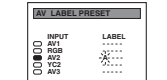
3 Push the joystick to **▼** or **▲** to select **AV Label Preset**, then push to **▶**.



4 Push the joystick to **▼** or **▲** to select the input source you wish to name (eg AV2), then push to **▶** to highlight the first element of the **LABEL** column.




5 Push the joystick to **▼** or **▲** to select a letter or number (select "." for a blank) then push to **▶** to confirm this character. Select the other four characters in the same way.



6 After selecting all the characters, press the **OK** button.

7 Repeat steps 4 to 6 if you wish to label other input sources.

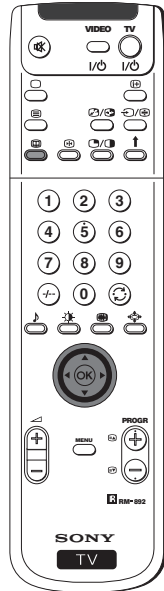
8 Press the **MENU** button to exit and return to the normal TV screen.

 Whenever the equipment with the labeled input is selected for use, the name appears for a few seconds on the screen.

Electronic Programme Guide (EPG)

Displaying and Viewing EPG

- ① The electronic Programme Guide (EPG) is a guide which provides programme information for all digital channels supporting EPG. When looking for information you can search by theme (sports, art, etc.), date or time (e.g. broadcasts between 8 and 9 pm). When you have found a programme you can go directly to this programme, use the timer to remind you of it or preset your VCR with Smartlink.



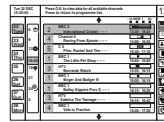
Displaying the EPG

- 1 Press the **(EPG)** button on the remote control to display the electronic programme guide (EPG) on the screen.

① You may see the message "EPG INFORMATION IS TEMPORARILY UNAVAILABLE" whilst waiting for the EPG to appear on screen.

- 2 Push the joystick to **▼**, **▲**, **◀** or **▶** to move the on-screen cursor around the guide.

- 3 Press the **(EPG)** button again to exit and return to the normal TV screen.



Viewing Information on the EPG

① You can alter the type of information presented on the EPG by changing data in each of the EPG columns. You can for example display information for all sports programmes being shown tomorrow from 5.00pm onward.

- 1 Press the **(EPG)** button on the remote control to display the EPG on the TV screen.

- 2 Push the joystick to **◀** or **▶** to highlight the **date** column, then push to **▲** or **▼** to select your chosen date.

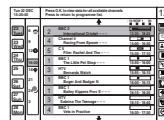
- 3 Push the joystick to **◀** or **▶** to highlight the **time** column, then push to **▲** or **▼** to select your chosen time.

- 4 Press the **OK** button. The EPG will display programme information according to the date and time you selected.

- 5 Push the joystick to **▶** to highlight **programme type** column, then push to **▲** or **▼** to select **Films**, **News**, **Lifestyle**, **Sport**, **Children Programmes**, **Entertainment** or **Education**.

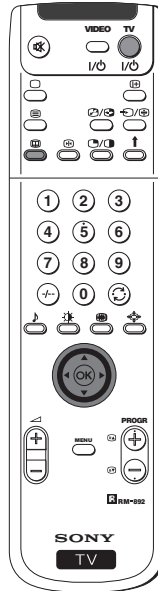
- 6 Push the joystick to **◀** or **▶** to update the programme information accordingly. If you selected tomorrow's date, 17:00 and **Sport**, you should now be able to view all the sports programmes being shown tomorrow from 5.00 pm onwards.

- 7 Press the **(EPG)** button to exit and return to the normal TV screen.



Electronic Programme Guide (EPG)

Recording Programmes using EPG



- 1 Press the **(EPG)** button on the remote control to display the programme guide on the screen.

- 2 Push the joystick to **◀** or **▶** to highlight the **programme** column, then push to **▲** or **▼** to select your desired programme.

- 3 Press the **OK** button. If the programme is currently being broadcast, it will be displayed on your TV. If not, the **TIMER** menu will be displayed on the TV screen.

- 4 At the bottom of the timer page you can see the symbols **(Return)** (back to EPG), **(Event Rec)** (to record a programme) or **(Wake up)** (to set the programme to switch on automatically).

- 5 Push the joystick to **◀** or **▶** to select one of these symbols then press the **OK** button to confirm your selection. The EPG appears on screen with the relevant icon appearing next to the programme you selected in step 2.

- 6 If you wish to cancel a recording, select the relevant programme and press the **OK** button to confirm your selection. A menu is displayed on screen requesting you to select **Return** if you wish to continue to record the programme or **Delete** if you wish to cancel the recording request.

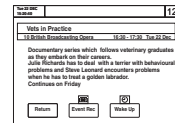
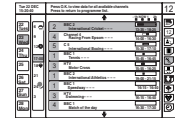
- 7 After making your selection, press the **OK** button to confirm. The record icon disappears from the EPG if **Delete** was selected in step 6.

- 8 If you have finished viewing programmes on your TV, press the **TV I/O** button before the timer recording starts to leave your projection TV in standby mode for the timer settings to be activated. If, however, you wish to continue watching other programmes after setting the timer, you can do so by changing programmes in the normal way. If you are watching another programme when the timer is due to start, a display will appear on screen advising you that, if you change channels, you automatically cancel the recording.

- 9 If you do not wish to cancel or view the recording, press the **TV I/O** button whilst one of the displays are still on screen to leave your projection TV in standby mode. The standby indicator on the front of the set will flash to show that the timer recording operation is active. If, however, you choose to change programmes, you automatically cancel the recording.

Notes:

- If your video recorder (VCR) is not Smartlink-compatible, you will need to set your VCR to switch on and off automatically after setting the timer on the EPG.
- If you want to change channel once a digital programme has started recording, select the channel by using the remote control buttons as normal. The message "STOP RECORDING" will be displayed on screen. Either do nothing to allow the recording to continue or select the required channel once more while the message is still displayed on screen. The recording will then be cancelled.

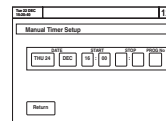
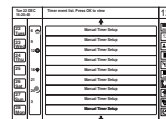
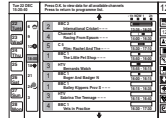


Electronic Programme Guide (EPG)

Setting The Manual Timer



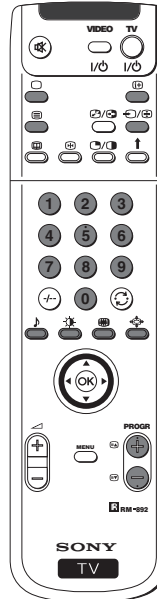
- 1 Press the button on the remote control to display the EPG on the screen.
- 2 Push the joystick to or to highlight the **programme type** column, then push to to select the timer symbol .
- 3 Press the **OK** button to display a screen of 9 programme slots, each one indicating that it is either free for programming, or that it has a programme already stored in it.
- 4 Push the joystick to to enter the **programme** column.
- 5 Push the joystick to or to select a free row then press the **OK** button to display the **Set Timer** screen. This screen asks you to confirm the date, programme number, start time and end time.
- 6 Push the joystick to to select the date area then push to or to select the date.
- 7 Push the joystick to to confirm the date then push to or to select the month.
- 8 Push the joystick to to confirm the month and to enter the start time.
- 9 Push the joystick to or to select the time when you want the timer to switch on, preferably several minutes before you set your video recorder to start recording.
- 10 Push the joystick to to confirm the entry and to enter the switch-off time.
- 11 Push the joystick to or to select the time you want the timer to switch off, preferably after your video has stopped recording.
- 12 Push the joystick to to confirm the entry and to enter the programme number.
- 13 Press the **OK** button to save the settings, then select **Return** and press **OK** button to return to the **Manual Timer Setup** menu.
- 14 Select another available slot if you wish to record a further programme. Otherwise, push the joystick to to enter the **programme type** column, then press the **OK** button to return to the EPG.
- 15 If you have finished viewing programmes on your projection TV, press the **TV I/O** button before the timer recording starts to leave your projection TV in standby mode for the timer settings to be activated. If, however, you wish to continue watching other programmes after setting a timer, you can do so by changing programmes in the normal way. If you are watching another programme when the timer is due to start a display will appear on screen advising you that, if you change channels now, you automatically cancel the recording.
- 16 If you do not wish to cancel or view the recording, press the **TV I/O** button whilst the display is still on screen to leave your projection TV in standby mode. The standby indicator on the front of the set will flash to show that the timer record operation is active. If, however, you choose to change programmes, you automatically cancel the recording.



Teletext

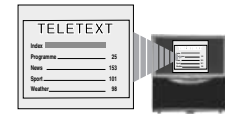
Viewing Teletext (analogue channels only)

- Teletext is an information service transmitted by most TV stations.
- Make sure to use a TV channel with a strong signal, otherwise teletext errors may occur.



Selecting Teletext

- 1 Select the TV channel which carries the teletext service you wish to view.
- 2 Press the button on the remote control to switch on the teletext.
- 3 Input three digits for the page number, using the numbered buttons on the remote control. (if you have made a mistake, type in any three digits and then, re-enter the correct page number).
- 4 Press the button to switch off teletext.



Using other Teletext functions

TO	PRESS THE BUTTON
Access the next or preceding page	for next page or for the preceding page
Superimpose teletext on to the TV	Press again to cancel teletext mode.
Freeze a teletext page	Press again to cancel the freeze.
Reveal concealed information (e.g.: answer to a quiz)	Press again to cancel.



Using Fastext

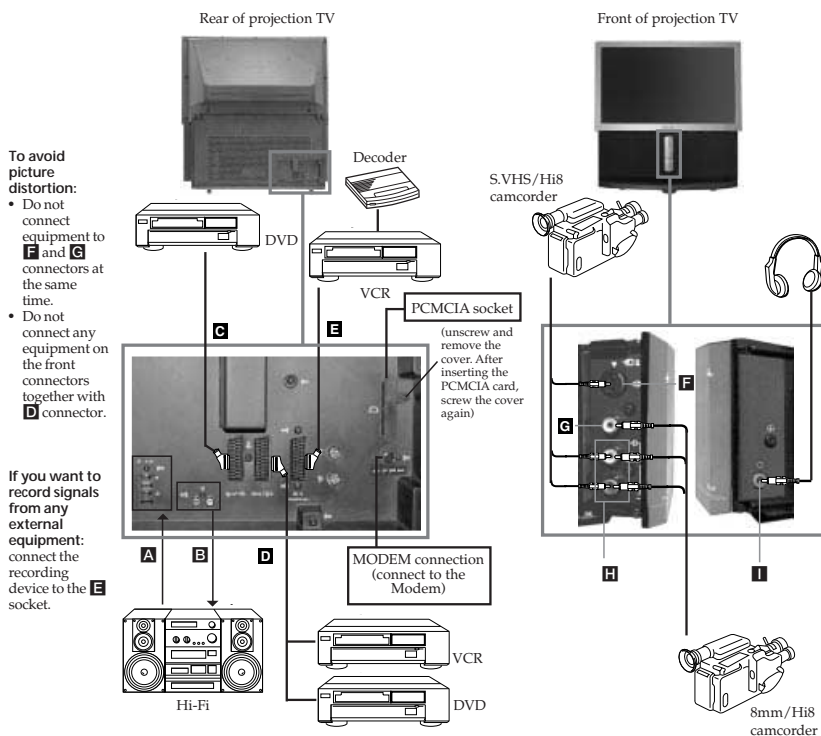
- Fastext lets you access pages with one button stroke.

When Fastext is broadcast, a colour coded menu appears at the bottom of the teletext page. Press the colour button (red, green, yellow or blue) on the remote control to access the corresponding page.

Optional Connections

Connecting Optional Equipment

① Using the following instructions, you can connect a wide range of optional equipment to your projection TV.



Acceptable input signal	Available output signal
A Centre speaker input Set "Speaker" on the SOUND CONTROL menu to "Centre in".	No outputs
B No inputs	Audio signal
C Audio/video and RGB signal	Video/audio from TV tuner
D Audio/video and S video signal	Video/audio from selected source
E Audio/video signal	Video/audio from selected source (the same output source as the 1/2 1/2 2 connector)
F S Video signal	No output
G Video signal	No output
H Audio signal	No output
I No input	Audio signal to headphones

Optional Connections

Using Optional Equipment

Additional Information when connecting equipment

Connecting a VCR

We recommend you connect your VCR to the **D** or **E** socket using a scart lead. If you do not have a scart lead, use the "Manually Tuning the TV" section of this instruction manual to tune in the VCR signal to TV programme number "0". Also refer to your VCR instruction manual to get the VCR test signal. If your video supports Smartlink please refer the "Smartlink" section of this instruction manual.

Connecting to External Audio Equipment

1 To listen to the audio of your projection TV on the Hi-Fi equipment:

Plug in your Hi-Fi equipment to the **B** sockets on the rear of the projection TV if you wish to amplify the audio output from the TV. The output level from **B** sockets can be varied by adjusting the volume of the headphones. Refer to the "Adjusting the sound" section of this instruction manual to adjust the volume of the headphones.

2 To listen to the Dolby Prologic system sound on the projection TV speakers:

Plug in your Dolby Prologic system decoder amplifier to the **A** socket on the rear of the projection TV if you wish to listen to the audio output from your equipment on the projection TV speaker. If you have a Dolby amplifier, connect the centre output from your amplifier to the **A** socket to use the projection TV as a centre speaker. Refer to the "Adjusting the Sound" section of this instruction manual and set the option "Speaker" to "Centre in".

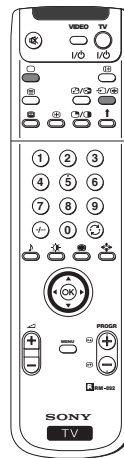
⚠ Remember that the maximum input level of this input is 30 W. Be careful never to over this limit.

For mono equipment

Connect the phono plug to the L/G/S/I socket on the front of the TV and select the 1/2 2 input signal using the instructions on this page below. Finally, refer to the "Adjusting the Sound" section of this manual and select "A" on the sound menu screen.

Select and View the Input Signal

① In order to get the input signal of a connected equipment onto the TV screen, you need to select the symbol of the connector to which you have connected the device.
e. g. : Your VCR is connected to the connector with the symbol 1/2 1 / 1/2 1. Press the button 1/2 1 on the remote control repeatedly until you see the symbol 1/2 1 on the screen.



1 Connect your equipment to the designated projection TV socket, as it is indicated on the previous page.

2 Press the 1/2 button repeatedly on your remote control until the correct input symbol appears on the screen.

Symbol Input signals

- 1/2 1 • Audio/video input signal through the Euro AV connector **C**
- 1/2 1 • RGB input signal through the Euro AV connector **C**
- 1/2 2 • Audio/Video input signal through the Euro AV connector **D** or the phono sockets **H** and **G**.
- 1/2 2 • Audio/S Video input signal through the Euro AV connector **D** or the sockets **H** and **F**.
- 1/2 3 • Audio/Video input signal through the Euro AV connector **E**

3 Switch on the connected equipment.

4 To return to the normal TV picture, press the 1/2 button on the remote control.

Optional Connections

Smartlink

Smartlink is a direct link between your projection TV set and a VCR.

For Smartlink you need:

- A VCR which supports Smartlink, NextView Link, Easy Link or Megalogic.

Megalogic is a trademark of Grundig Corporation.
EasyLink is a trademark of Philips Corporation.

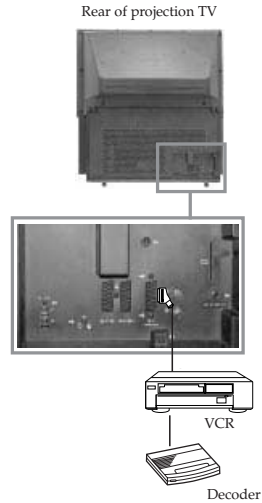
- A fully-wired 21 pin SCART cable to connect your VCR to the Euro AV connector G-3 (SMARTLINK) on the rear of the Projection TV.

The features of Smartlink are:

- Tuning information such as the channel overview are downloaded from the projection TV set to the VCR.
- Direct projection TV recording: While watching TV you need to press just one button on the VCR to record this programme.
- Projection TV in standby mode: Press the "Play ▶" button on your VCR to switch the TV automatically on.

If you have connected a decoder to a VCR which supports Smartlink feature, select the menu Further Programme Preset in the (PRESET) menu and select DECODER AV3 to each codified channel. For more details, please refer to the section "Using the Further Programme Preset function" of this instruction manual.

For more information on Smartlink, please refer to the Instruction Manual of your VCR.

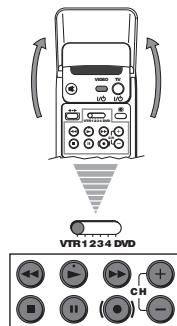


Remote Control of other Sony Equipment

Using the buttons underneath the cover of the remote control you can control other Sony equipment.

- 1 Open the cover of the Remote Control.
- 2 Set the selector VTR 1234 DVD according to the equipment you want to control:
 - VTR 1 Beta VCR
 - VTR 2 8 mm VCR
 - VTR 3 VHS VCR
 - VTR 4 Digital Video (DCR-VX 1000/9000 E, VHR-1000)
 - DVD Digital Video Disk
- 3 Use the buttons underneath the cover on the remote control to operate the equipment.

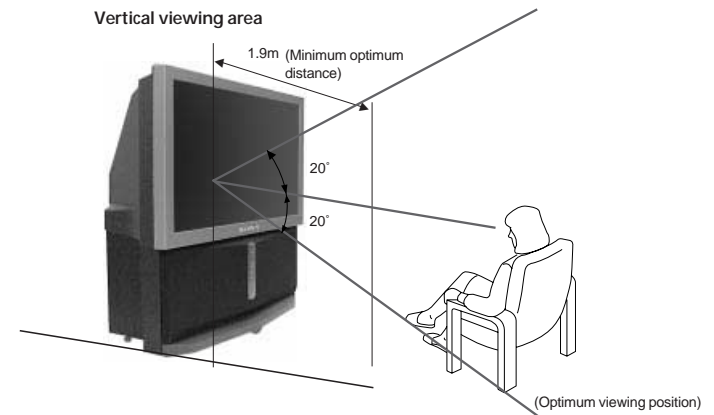
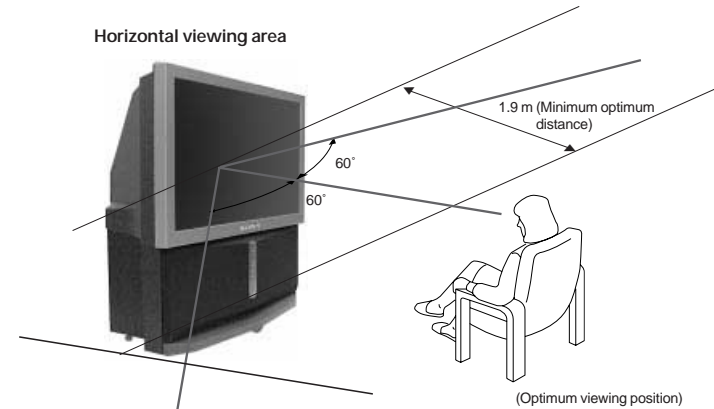
- If your video equipment has a COMMAND MODE selector, set this selector to the same position as the VTR 1234 DVD selector on the TV Remote Control.
- If the equipment does not have a certain function, the corresponding button on the remote control does not work.



Additional Information

Optimum Viewing Area

For the best picture quality, try to position the projection TV so that you can view the screen from within the areas shown below.



Additional Information

Troubleshooting

① Here are some simple solutions to the problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark), no sound	<ul style="list-style-type: none"> Plug the projection TV in. Press the ⏻ button on the front of the projection TV. If the ⏻ indicator is on, press TV I/O button or a programme number button on the remote control. Check the aerial connection. Check that the selected video source is on. Turn the projection TV off for 3 or 4 seconds and then turn it on again using the ⏻ button on the front of the projection TV.
Poor or no picture (screen is dark), but good sound	<ul style="list-style-type: none"> Using the MENU system, select the Picture Adjustment display. Adjust the brightness, picture and colour balance levels. From the Picture Adjustment display select Reset to return to the factory settings.
Poor picture quality when watching a RGB video source.	<ul style="list-style-type: none"> Press the ↺ button repeatedly on the remote control until the RGB symbol RGB is displayed on the screen.
Good picture, no sound	<ul style="list-style-type: none"> Press the △ +/- button on the remote control. If M is displayed on the screen, press the M button on the remote control. Check that "Main" speaker is selected on the SOUND CONTROL menu.
No colour on colour programmes	<ul style="list-style-type: none"> Using the MENU system, select the Picture Adjustment display. Adjust the colour balance. From the Picture Adjustment display select Reset to return to the factory settings.
Distorted picture when changing programmes or selecting teletext	<ul style="list-style-type: none"> Turn off any equipment connected to the 21 pin Euro connector on the rear of the TV.
Noisy picture when viewing TV channel	<ul style="list-style-type: none"> Adjust Fine Tuning (AFT) to obtain better picture reception. For details, please refer to the section "Using the Further Programme Preset function"
Remote control does not function	<ul style="list-style-type: none"> Replace the batteries.
The standby indicator ⏻ on the TV flashes even though the EPG is not programmed to record.	<ul style="list-style-type: none"> Contact your nearest Sony service centre.

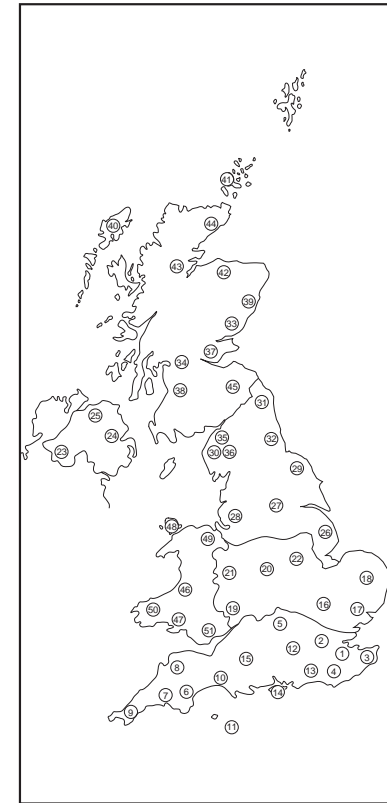
- ⚠
- If you continue to have these problems, have your TV serviced by qualified personnel.
 - NEVER open the casing yourself.

Additional Information

Television Channel Number Guide for analogue channels

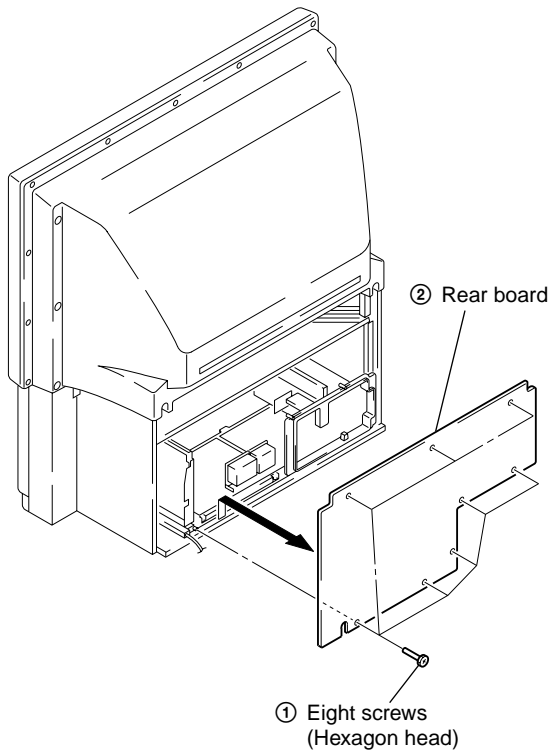
① Only the main transmitters are listed. Information regarding the regional sub-relay channel numbers can be obtained by contacting The BBC Engineering Information Dept., Telephone Number 020 7852 5040.

MAIN TRANSMITTERS	BBC1	BBC2	ITV	CH4	CH5
London & South East					
①Bluebell Hill	40	46	43	65	-
②Crystal Palace	26	33	23	30	-
③Dover	50	56	66	53	-
④Heathfield	49	52	64	67	-
⑤Oxford	57	63	60	53	49
South-West					
⑥Beacon Hill	57	63	60	53	-
⑦Caradon Hill	22	28	25	32	-
⑧Huntshaw Cross	55	62	59	65	67
⑨Redruth	51	44	41	47	37
⑩Stockland Hill	33	26	23	29	-
Channel Islands					
⑪Fremont Point	51	44	41	47	-
South					
⑫Hannington	39	45	42	66	-
⑬Midhurst	61	55	58	68	-
⑭Rowridge	31	24	27	21	-
West					
⑮Mendip	58	64	61	54	37
East					
⑯Sandy Heath	31	27	24	21	39
⑰Sudbury	51	44	41	47	-
⑱Tacolneston	62	55	59	65	52
Midlands (West)					
⑲Ridge Hill	22	28	25	32	-
⑳Sutton Coldfield	46	40	43	50	-
㉑The Wrekin	26	33	23	29	-
Midlands (East)					
㉒Waltham	58	64	61	54	-
Northern Ireland					
㉓Brougher Mountain	22	28	25	32	-
㉔Divis	31	27	24	21	-
㉕Limavady	55	62	59	65	-
North					
㉖Belmont	22	28	25	32	56
㉗Emley Moor	44	51	47	41	37
North-West					
㉘Winter Hill	55	62	59	65	48
North-East					
㉙Bilsdale West Moor	33	26	29	23	-
㉚Caldbeck	30	34	28	32	56
㉛Chatton	39	45	49	42	-
㉜Pontop Pike	58	64	61	54	-
Scotland					
㉝Angus	57	63	60	53	-
㉞Black Hill	40	46	43	50	37
㉟Sandale	22	28	-	-	-
㊱Caldbeck	-	-	28	32	56
㊲Craigkelly	31	27	24	21	48
㊳Darvel	33	26	23	29	-
㊴Durriss	22	28	25	32	67
㊵Eitshal (Lewis)	33	26	23	29	-
㊶Keelylang Hill	40	46	43	50	-
㊷Knock More	33	26	23	29	-
㊸Rosemarkie	39	45	49	42	-
㊹Rumster Forest	31	27	24	21	-
㊺Selkirk	55	62	59	65	52
Wales					
㊻Blaenplwyf	31	27	24	21	56
㊼Carmel	37	63	60	53	-
㊽Llanddona	57	63	60	53	-
㊾Moel-y-Parc	52	45	49	42	-
㊿Presely	46	40	43	50	37
①Wenfoe	44	51	41	47	-

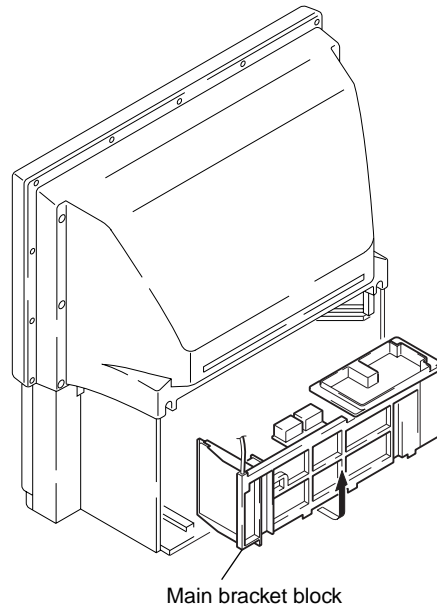


SECTION 3 DISASSEMBLY

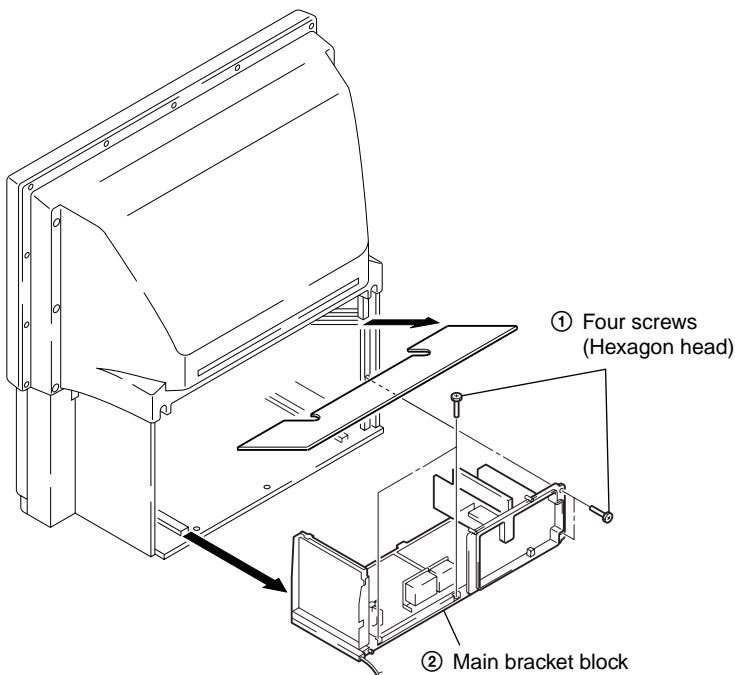
3-1. REAR BOARD REMOVAL



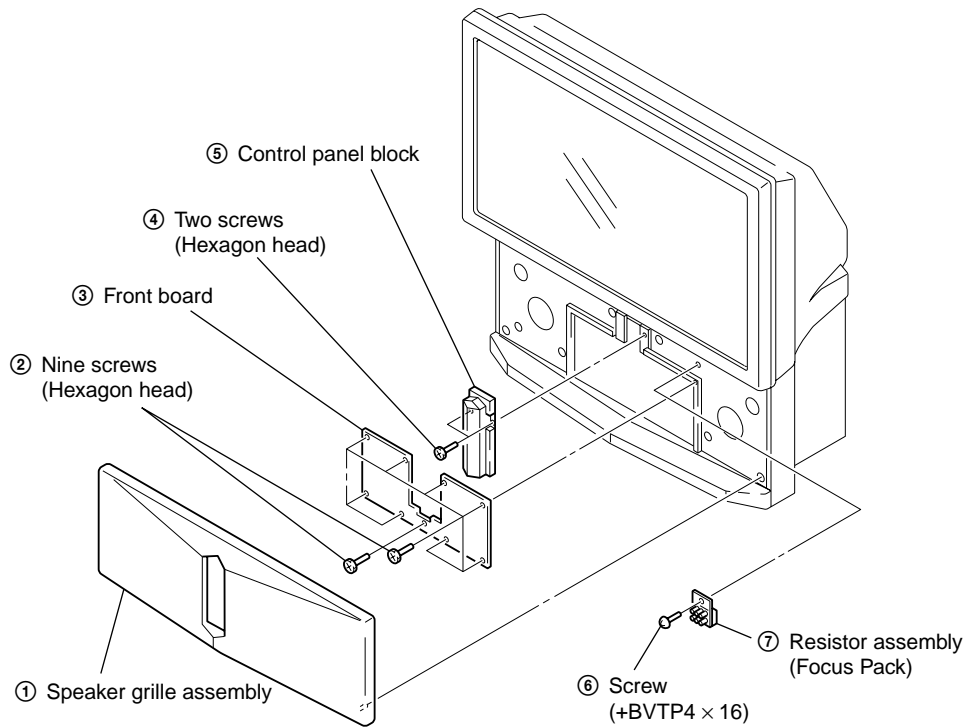
3-3. SERVICE POSITION



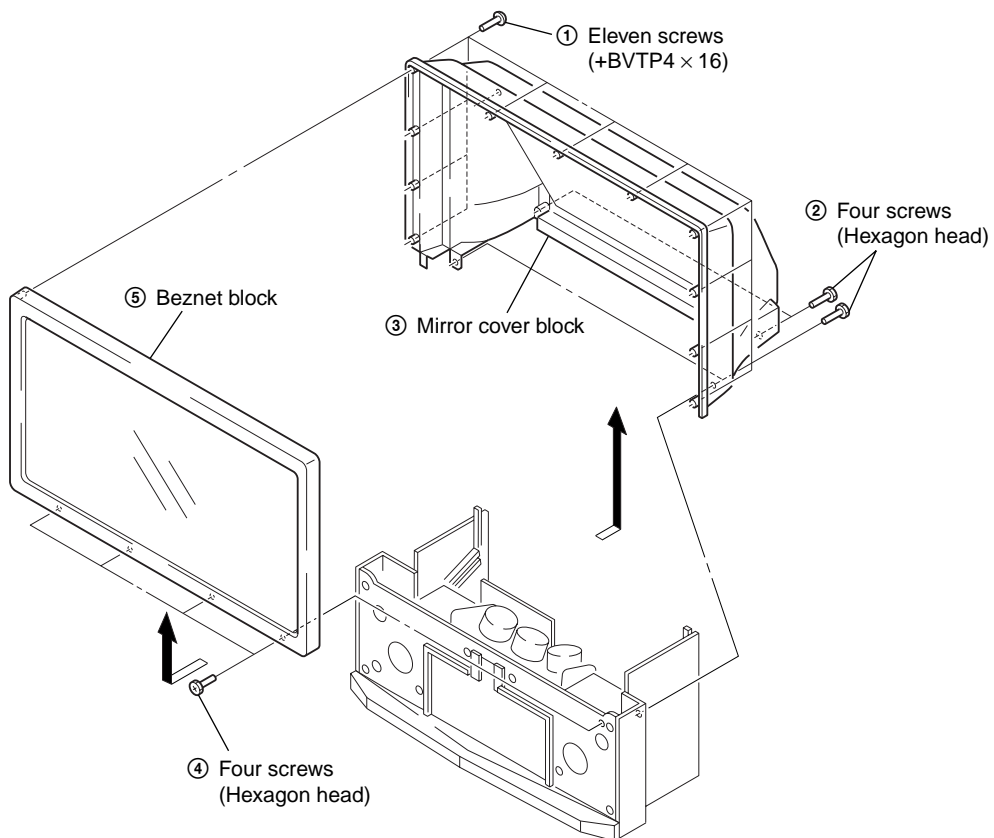
3-2. MAIN BRACKET BLOCK REMOVAL



3-4. CONTROL PANEL BLOCK AND RESISTOR ASSEMBLY (FOCUS PACK) REMOVAL

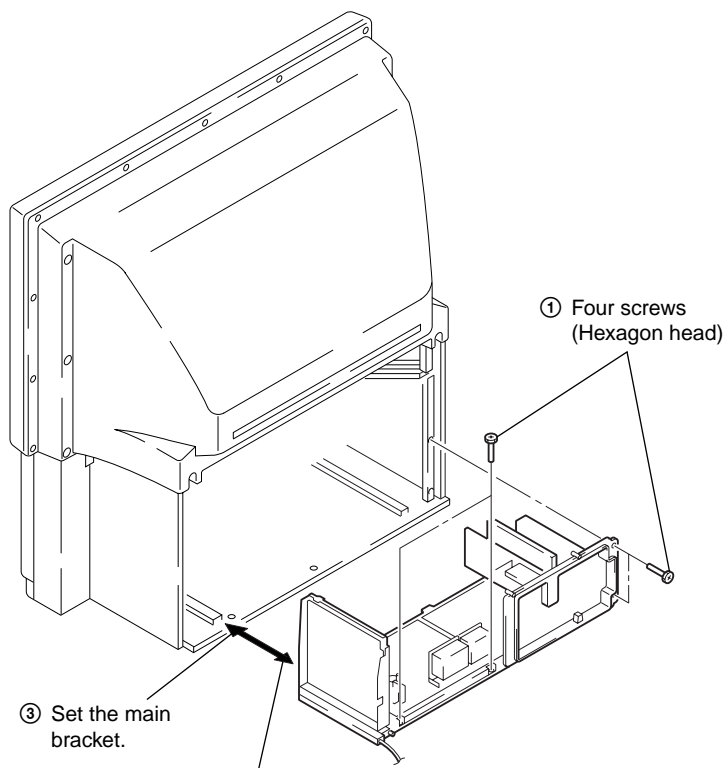


3-5. BEZNET BLOCK REMOVAL



3-6. CHASSIS BLOCK REMOVAL

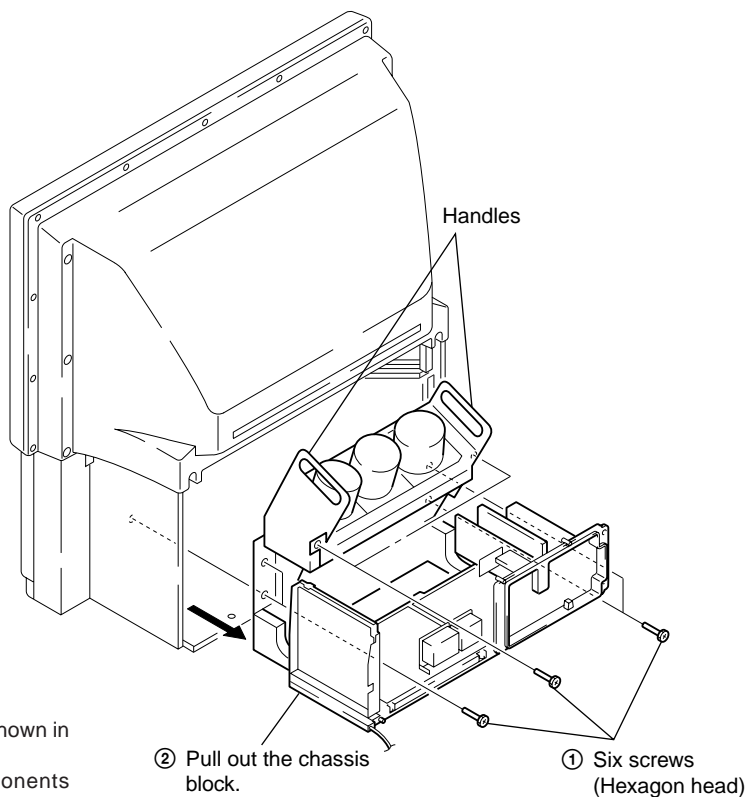
(1) MAIN BRACKET REMOVAL



※ Pay particular attention to the wires of each Printed circuit boards when pulling out the main bracket.

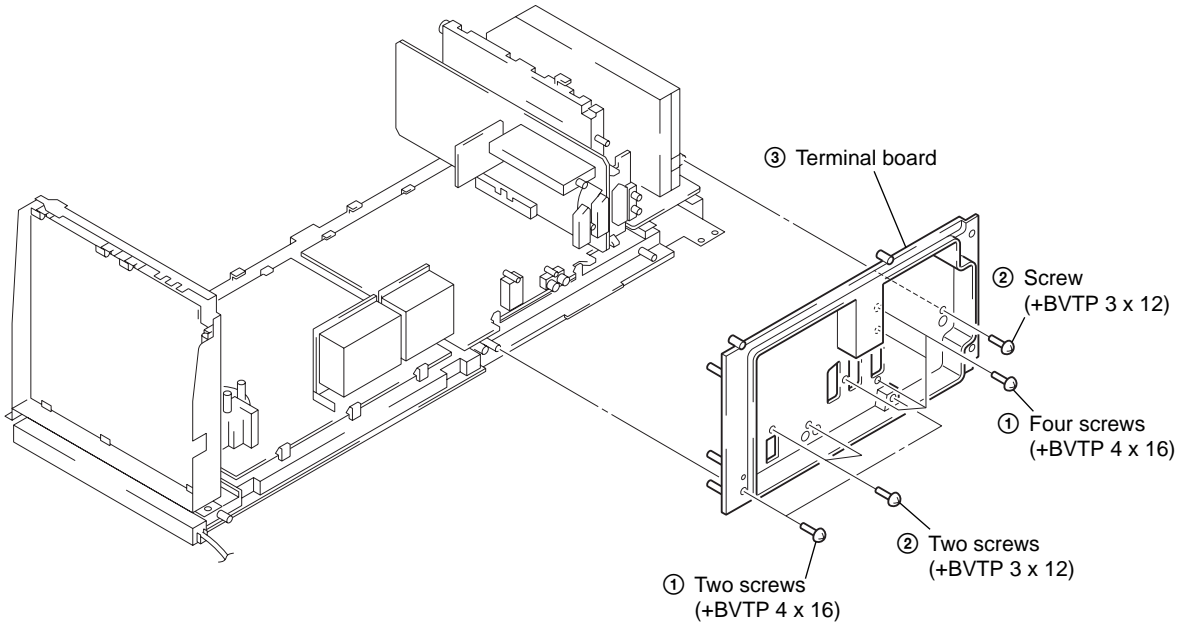
② Pull the main bracket, and remove each connections on main bracket.

(2) CHASSIS BLOCK REMOVAL

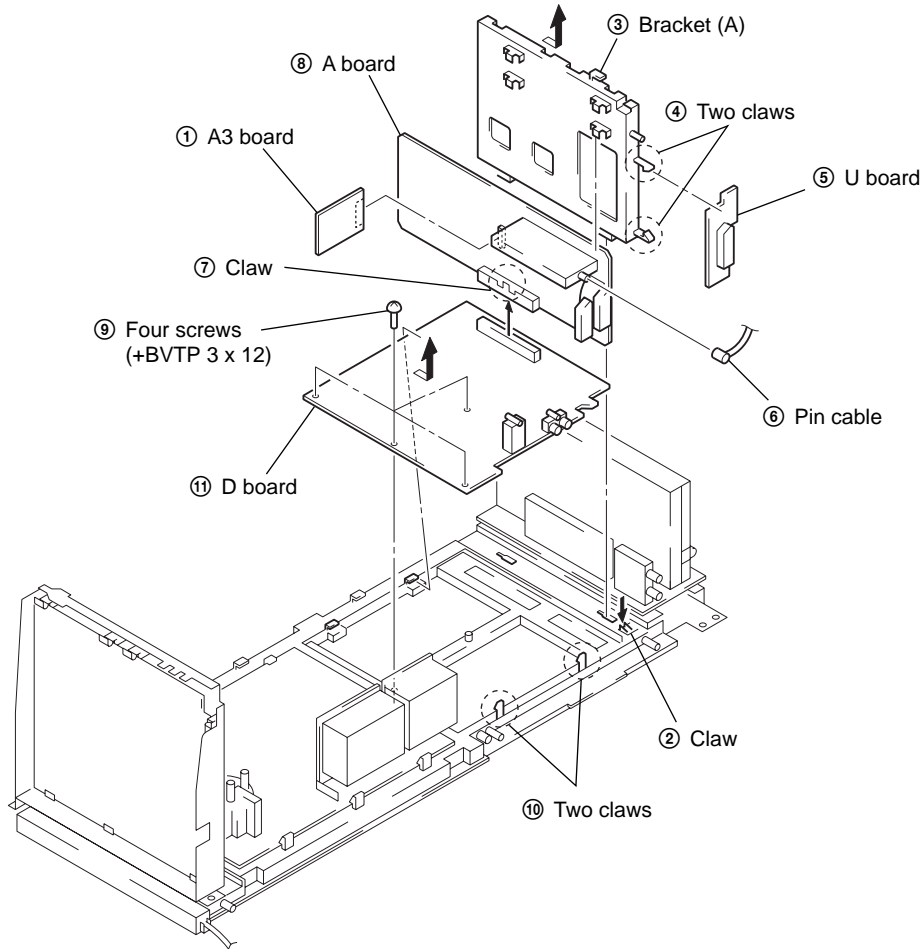


※ Pull out the chassis block by gripping the handles as shown in the diagram. At this time, pay particular attention to the components removed in (1).

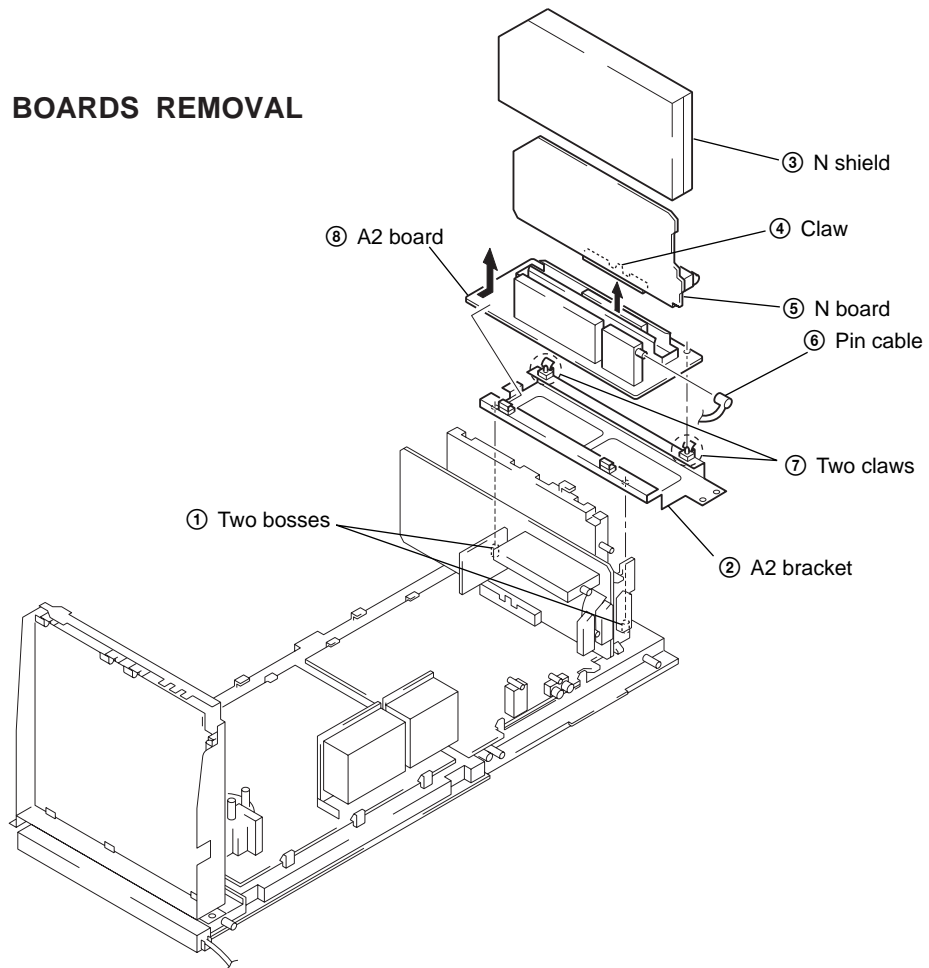
3-7. TERMINAL BOARD REMOVAL



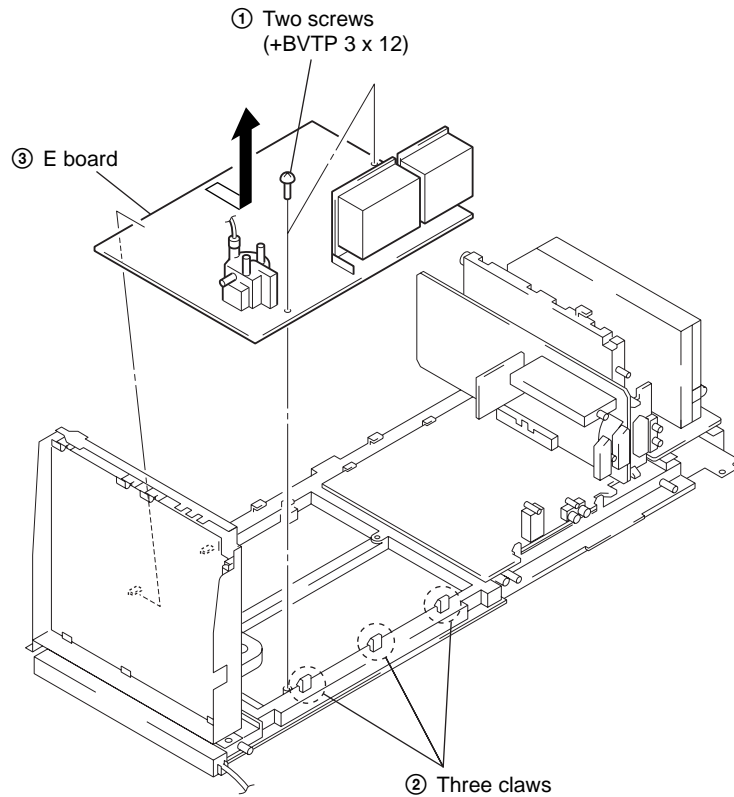
3-8. A3, U, A AND D BOARDS REMOVAL



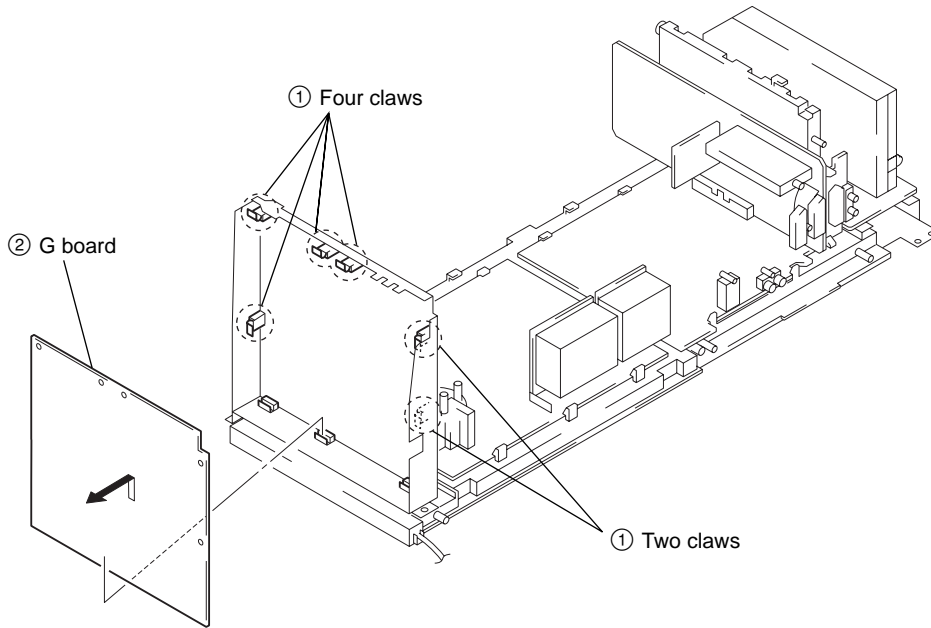
3-9. N AND A2 BOARDS REMOVAL



3-10. E BOARD REMOVAL

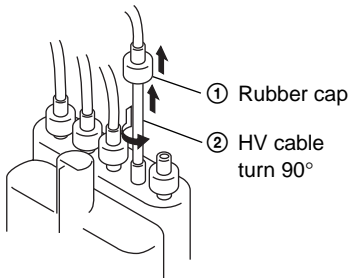


3-11. G BOARD REMOVAL

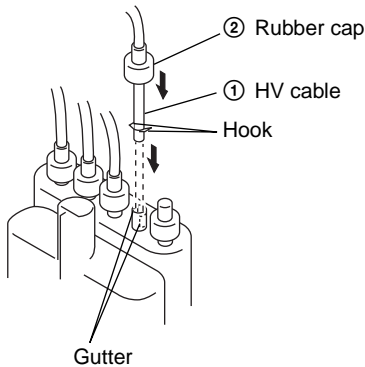


3-12. HIGH-VOLTAGE CABLE REMOVAL AND INSTALLATION

(1) Removal

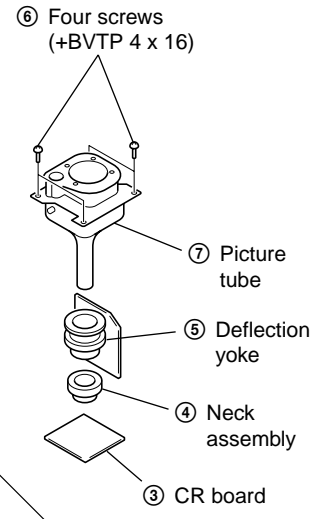
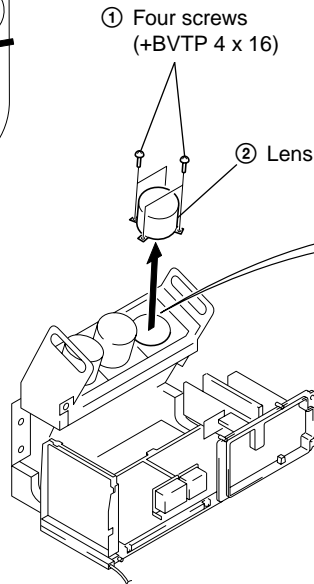
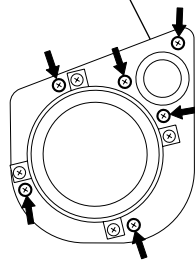


(2) Installation



3-13. PICTURE TUBE REMOVAL

Removing the arrow-marked screw is strictly inhibited. If removed, it may cause liquid spill.



SECTION 4 SET-UP ADJUSTMENTS

4-1. SCREEN VOLTAGE ADJUSTMENT (ROUGH ALIGNMENT)

1. Receive the Monoscope signal.
2. Set 50% BRIGHTNESS and minimum PICTURE.
3. Turn the red VR on the focus pack all the way to the left and then gradually turn it to the right until the point where you can see the retrace line.
4. Next gradually turn it to the left to the position where the retrace line disappears.

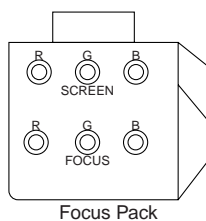


Fig. 4-1

4-2. FOCUS ADJUSTMENT

1. Loose the lens screw.
2. Set in service mode. (Refer to SECTION 6.)
3. Place the caps on the red and blue lens so that only the green color is shown.
4. Press "MENU" on the Commander and select Convergence and OSD CHSW = "00" to display the test signal (crosshatch) on the screen.
5. Rotate the green lens and align with the optimal focus point from the test signal.
6. Rotate the green focus VR on the focus pack and align to obtain the optimal focus point.
7. Perform the same alignment for red and blue lenses and electric focus.
8. Fix lens screw.

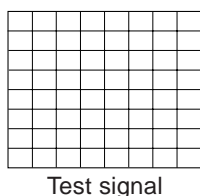


Fig. 4-2

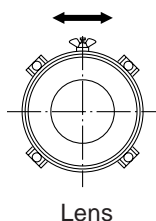


Fig. 4-3

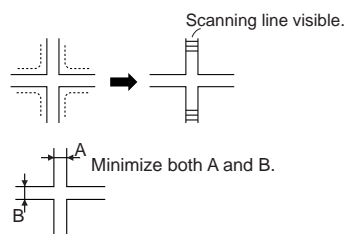


Fig. 4-4

4-3. SCREEN (G2) ADJUSTMENT

1. Connect JIG (A) to 200 V and GND.
2. Select VIDEO1 mode without signals.
3. Connect JIG to the TP701(KR), TP731(KG) or TP761(KB) of CR board, CG board and CB board.
4. Adjust R, G and B screen voltage to until retrace line disappears with screen VR on the focus pack.

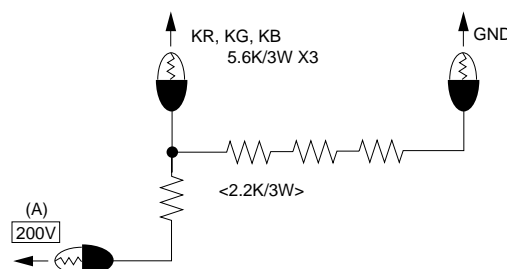
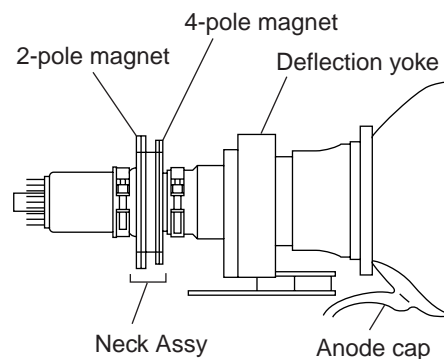


Fig. 4-5

4-4. DEFLECTION YOKE TILT ADJUSTMENT

1. Set to receive the Monoscope signal.
2. Place the caps on the red and blue lens so that only the green color.
3. Loosen the deflection yoke setscrew and align the tilt of the Deflection yoke so that the bars at the center of the monoscope pattern are horizontal.
4. After aligning the deflection yoke, fasten it securely to the funnel-shaped portion (neck) of the CRT.
5. The tilt of the deflection yoke for red and blue is aligned the same as was done for green.



Make sure deflection yoke is touching CRT closely.

Fig. 4-6

4-5. 2-POLE MAGNET ADJUSTMENT

1. Set to receive the Dot signal.
2. Place the caps on the red and blue lens so that only the green color is shown.
3. Turn the green focus VR on the focus pack to the right and set to over focus to enlarge the spot.
4. Now align the 2-Pole Magnet so that the enlarged spot is in the center of the just focus spot.
5. Align the green focus VR and set for just (precise) focus.
6. Perform the same alignment for red and blue.

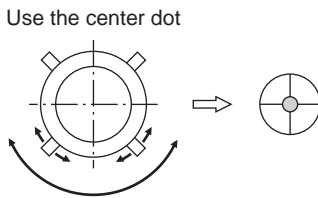


Fig. 4-7

4-6. 4-POLE MAGNET ADJUSTMENT

1. Set to receive the Dot signal.
2. Place the caps on the red and blue lens so that only the green color is shown.
3. Turn the green focus VR on the focus pack to the left and set to under focus to enlarge the spot.
4. Now align the 4-Pole Magnet so that the enlarged spot becomes a perfect circle.
5. Perform the same alignment for red and blue.

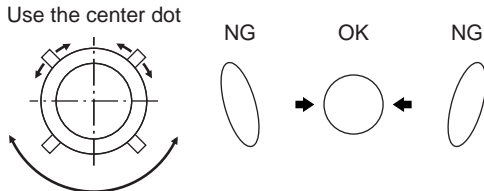


Fig. 4-8

4-7. DEFOCUS ADJUSTMENT (Blue)

1. Receive the Dot signal.
2. Place the caps on the red and green lens so that only the blue color is shown.
3. Rotate the blue focus VR on the focus pack and adjust to obtain best electrical focus.
4. Rotate the blue focus VR on the focus pack clockwise, so that diameter of the dot see caution.

[How to Blue Defocus]

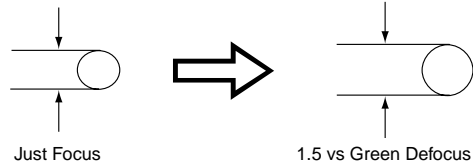


Fig. 4-9

[Change Blue Defocus]

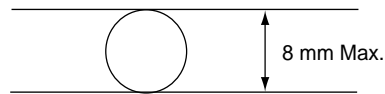


Fig. 4-10

4-8. GREEN AND RED FOCUS ADJUSTMENT

4-8-1. Green and Red Lens Focus Adjustment

1. Input a monoscope signal.
2. Place the caps on the red and blue lens so that only the green color is shown.
3. Rotate the Green lens and adjust to obtain the best lens focus.
4. Fix lens screw.
5. Repeat above process for Red.

4-8-2. Green and Red Electrical Focus Adjustment

1. Input a monoscope signal.
2. Place the caps on the red and blue lens so that only the green color is shown.
3. Rotate the green focus volume on the focus pack and adjust to obtain an optimal electrical focus in center.
4. Repeat above process for Red.

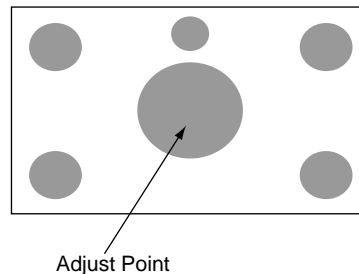


Fig. 4-11

SECTION 5 SAFETY RELATED ADJUSTMENT

When replacing the following components marked with \blacksquare on the schematic diagram, always check hold-down voltage and if necessary re-adjust.

Part Replaced (\blacksquare)
R1

Part Replaced (\blacksquare)
E Board C515, C516, C554, D504, D507, L506, Q502, R1, R514, R516, R517, T502, T504 (FBT)
G Board IC6008

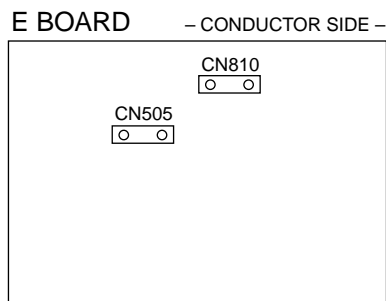


Fig. 5-3

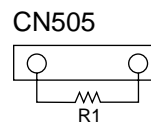


Fig. 5-4

5-1. HV HOLD-DOWN ADJUSTMENT

1. Remove CN810. Connect HV meter to HV Block.
2. Connect External Power Supply to CN810 ② pin (+135 V) and ① pin (GND).

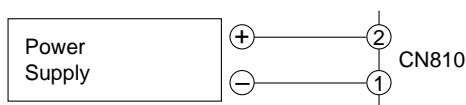


Fig. 5-1

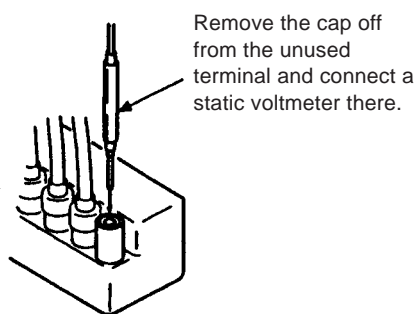


Fig. 5-2

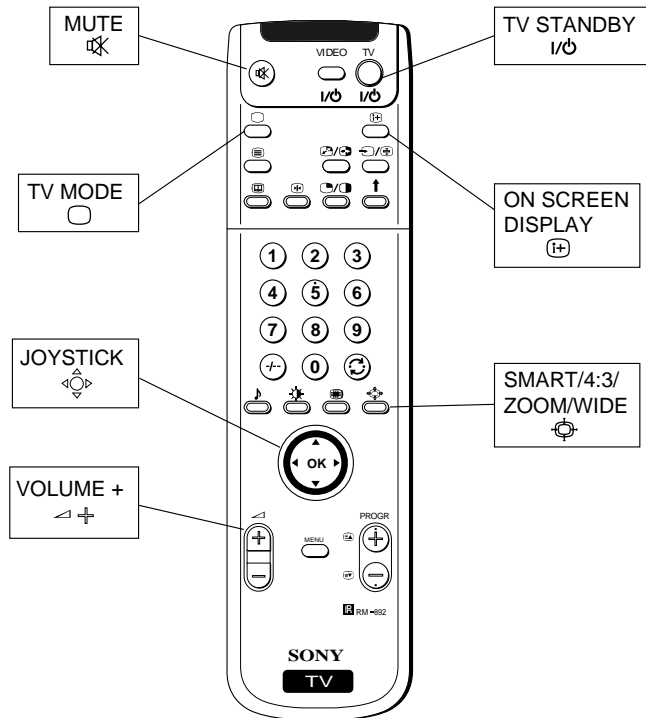
3. Turn on the set.
4. Slowly up the supply voltage from 135 V to 155 V.
5. Receive dot picture and set PICTURE/BRIGHTNESS to minimum.
6. Slowly up the voltage until hold-down circuit works (picture disappear).
7. Read the HV meter of peak HV voltage.
Spec : 34.5 ± 0.75 KV
8. If Hold-down voltage is less than 33.75 KV then solder R1 = 820 K.
9. If hold-down voltage is over than 35.25 KV then take-off R514 and solder R1 = 9.1 K.

SECTION 6 REGISTRATION ADJUSTMENTS

6-1. HOW TO ENTER THE SERVICE MODE

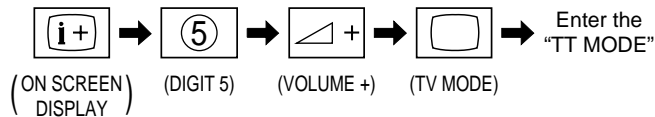
6-1-1. Adjustment Method with Commander

Service adjustment to this model can be performed with the supplied remote commander RM-892.



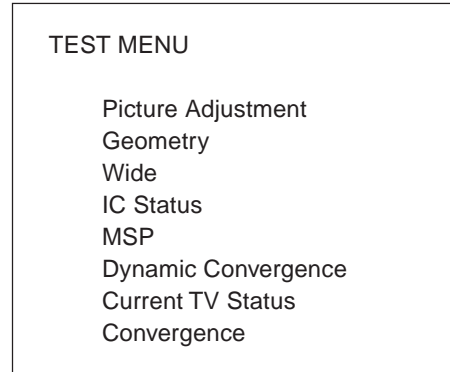
RM-892

1. Turn on the main power switch of the set and enter into standby mode.
2. Press the following sequence of buttons on the Remote Commander.



"TT - -" will appear in the top right corner of the screen.
Other status information will also be displayed.

3. Press "MENU" on the commander to obtain the following menu on the screen.



4. Move to the corresponding adjustment using the joystick (▲ or ▼ : up or down) on the commander.
5. Move the joystick to the right (▶) to enter the selected adjustment.
6. Press "OK" to exit.
7. Before TURN OFF is necessary:
 - DATA WRITE : Press "MUTE" + "0"
 - DATA COPY : Press "ON SCREEN DISPLAY" + "0"
8. Turn off the power to quit the service mode when adjustments are completed.

6-1-2. Screen Display on the Test Menu

Picture Adjustment

PICTURE ADJUSTMENT

AFC Mode	1	0 - 3
Ref Position	2	0 - 3
SCP BGR	1	0 - 3
SCP BGF	1	0 - 3
Trap F0	9	0 - 15
Sub Contrast	8	0 - 15
Sub Colour	4	0 - 15
Sub Brightness	16	0 - 63
Green Drive	16	0 - 63
Blue Drive	39	0 - 63
Green Cutoff	6	0 - 15
Blue Cutoff	12	0 - 15
Gamma	0	0 - 3
Pre / Overshoot	3	0 - 3
Y Delay	6	0 - 7
D Pic	ON	ON/OFF
D Colour	ON	ON/OFF
DC Transfer	OFF	ON/OFF

Geometry (* : No need to adjust)

GEOMETRY ADJUSTMENT					
	Wide	Smart	4:3	Zoom	
V Size	50	50	50	50	0 - 63
V Position	31	31	31	31	0 - 63
S Correction	7	7	7	7	0 - 15
V Linearity	7	7	7	7	0 - 15
H Size	40	40	40	40	0 - 63
* H Position	12	12	8	12	0 - 15
Pin Amp	20	20	20	20	0 - 63
Pin Phase	8	8	8	8	0 - 15
AFC Bow	7	7	7	7	0 - 15
AFC Angle	7	7	7	7	0 - 15
* EHT V	0	0	0	0	0 - 3
* EHT H	0	0	0	0	0 - 3
Lo Corn Pin	2	2	2	2	0 - 15
Up Corn Pin	5	5	5	5	0 - 15

Wide (* : No need to adjust)

WIDE ADJUSTMENT				
	Wide	Smart	Zoom	
* V Aspect	0	15	47	0 - 63
* V Scroll	31	31	30	0 - 63
* Upper V Lin	0	0	0	0 - 15
* Lower V Lin	0	0	0	0 - 15
* Left Blanking	15	15	15	0 - 15
* Right Blanking	15	15	15	0 - 15

IC Status

IC STATUS (CXA2076 / CXA2040)	
<u>CXA2076</u>	
H lock	1
IKR	1
V NG	0
XRAY	0
Colour System	7
CV1 Sync	0
<u>CXA2040</u>	
Sync Sep	1
S1 Mode Pin	01
S2 Mode Pin	01
<u>PORT EXPANDER</u>	
Power Good	0
<u>TUNER</u>	
Tuner Status	01100010

MSP

MSP ADJUSTMENT		
SDR	1	CONCCT 0 FAWCTIST 12
AGC On / Off	ON	ON/OFF
Constant Gain CDB	0	0 - 20
FM Prescale FMP	36	0 - 127
Zwei Mono-St WHI	36	0 - 127
Zwei St-Mono WLO	18	0 - 127
Zwei Mono-Bi WMH	36	0 - 127
Zwei Bi-Mono WLO	18	0 - 127
Time Zwei WML	41	0 - 127
FAWCT Limit	10	0 - 127
FAWCT Soll Init FAW	12	0 - 127
FAW ER Tol	2	0 - 127
NICAM Err Max CCT	10	0 - 127
NICAM Err Min	0	0 - 127
Time NICAM	26	0 - 127
Audio Clock ACO	HIZ	ON/HIZ
SCART Prescale	25	0 - 127
SCART Volume	64	0 - 127
NICAM Prescale I	127	0 - 127
NICAM Prescale L	97	0 - 127
NICAM Prescale BG	97	0 - 127
NICAM Prescale DK	97	0 - 127

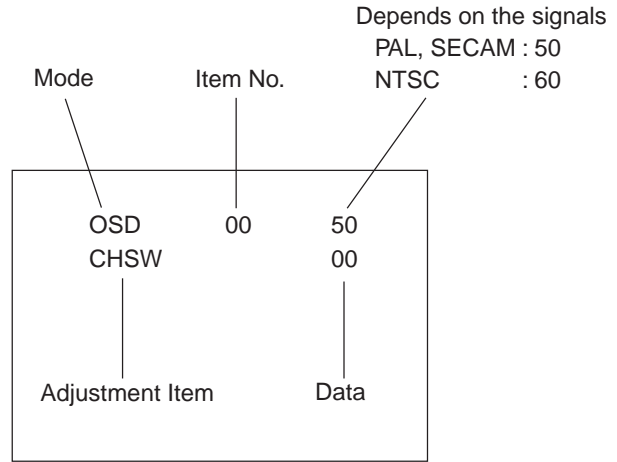
Dynamic Convergence

DYNAMIC CONVERGENCE		
Range	0	0 - 42
H stat	0	OFF - 63
H amp l	0	OFF - 63
H amp r	0	OFF - 63
Up Y	0	OFF - 63
Low Y	0	OFF - 63
Y up l	0	OFF - 63
Y up r	0	OFF - 63
Y low l	0	OFF - 63
Y low r	0	OFF - 63
Mbow up l	0	OFF - 63
Mbow up r	0	OFF - 63
Mbow low l	0	OFF - 63
Mbow low r	0	OFF - 63
V stat	0	OFF - 63

Current TV Status

TV STATUS RE-2D(TT09)	
Text System	C Text-2
Dolby Enabled	No
DSP Present	No
Text Language Set	WEST
Menu Language Set	WEST
Destination	UK
Ageing	Disabled
Auto Shut Off	Enabled
Size	PJ
Colour Trap Sw	ALL
Velocity Mod	On
AFT Status	Window
Digital PF	No
Attenuation	Off
Partial Digital Off	Enabled
Digital Tuning Mode	2K
Micro/Jungle	SDA5250/CXA2076

Convergence



6-1-3. Service List (Convergence)

Mode	Item Number	Adjustment Item	Data Range	Initial Data			Name / Description	Device
				Wide	Smart	Zoom		
OSD	00	CHSW	00, 01	01			HATCH DISPLAY 00 : Internal Pattern (Crosshatch) 01 : External Pattern	
	01	OSH	01 ~ 32	10			OSD H Position	
	02	OSV	01 ~ 32	10			OSD V Position	
	03	VMRK	00, 01	00			V SIZE MARKER ON / OFF (cannot write to NVM)	
SFT	00	SFTE	00, 01	00			SHIFT ENABLE 00 : Disable 01 : Enable	
	01	SFTF	00, 01	00			SHIFT FAST 00 : Normal 01 : Quick (cannot write to NVM)	
GH	00	GSEL	00, 01	00	00	00	OSD SELECT FOR GH, GV 00 : Green+Red 01 : Green	CXP86213
	01	CENT	-127 ~ +127	31	24	28	GREEN H CENTER	
	02	SKEW	-127 ~ +127	05	05	05	GREEN H SKEW	
	03	BOW	-127 ~ +127	05	06	08	GREEN H BOW	
	04	4BOW	-127 ~ +127	-01	-01	-01	GREEN H 4th BOW	
	05	SIZE	-127 ~ +127	01	24	04	GREEN H SIZE	
	06	LIN	-127 ~ +127	-24	13	-22	GREEN H LINEARITY	
	07	MSIZ	-127 ~ +127	-04	-61	-04	GREEN H MID SIZE	
	08	MLIN	-127 ~ +127	00	02	00	GREEN H MID LINEARITY	
	09	KEY	-127 ~ +127	-07	-06	-10	GREEN H KEYSTONE	
	10	SSKW	-127 ~ +127	03	03	05	GREEN H SUB SKEW	
	11	MPIN	-127 ~ +127	-02	-05	-05	GREEN H MID PINCUSHION	
	12	PIN	-127 ~ +127	-09	-15	-27	GREEN H PINCUSHION	
	13	SBOW	-127 ~ +127	06	07	14	GREEN H SUB BOW	
	14	MBOW	-127 ~ +127	04	04	04	GREEN H MID BOW	
	15	4PIN	-127 ~ +127	03	02	06	GREEN H 4th PINCUSHION	
16	4SBO	-127 ~ +127	01	02	02	GREEN H 4th SUB BOW		

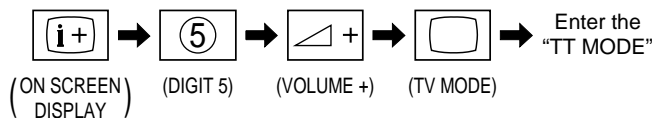
Mode	Item Number	Adjustment Item	Data Range	Initial Data			Name / Description	Device
				Wide	Smart	Zoom		
GV	00	CENT	-127 ~ +127	-01	-02	-01	GREEN V CENTER	CXP86213
	01	SKEW	-127 ~ +127	00	00	00	GREEN V SKEW	
	02	BOW	-127 ~ +127	14	14	14	GREEN V BOW	
	03	SIZE	-127 ~ +127	00	-10	24	GREEN V SIZE	
	04	LIN	-127 ~ +127	01	02	15	GREEN V LINEARITY	
	05	MSIZ	-127 ~ +127	-01	-04	-02	GREEN V MID SIZE	
	06	MKEY	-127 ~ +127	02	03	04	GREEN V MID KEYSTONE	
	07	KEY	-127 ~ +127	39	50	44	GREEN V KEYSTONE	
	08	SSKW	-127 ~ +127	03	03	03	GREEN V SUB SKEW	
	09	MPIN	-127 ~ +127	-36	-35	-33	GREEN V MID PINCUSHION	
	10	PIN	-127 ~ +127	13	40	66	GREEN V PINCUSHION	
	11	SBOW	-127 ~ +127	01	-01	-01	GREEN V SUB BOW	
	12	WAVW	-127 ~ +127	00	-05	01	GREEN V WAVE	
13	4PIN	-127 ~ +127	07	-12	09	GREEN V 4th PINCUSHION		
RH	00	CENT	-95 ~ +96	20	14	18	RED H CENTER	
	01	SKEW	-95 ~ +96	-02	-02	-02	RED H SKEW	
	02	BOW	-127 ~ +127	07	07	09	RED H BOW	
	03	4BOW	-127 ~ +127	-01	-01	-01	RED H 4th BOW	
	04	SIZE	-127 ~ +127	00	11	-03	RED H SIZE	
	05	LIN	-127 ~ +127	53	82	56	RED H LINEARITY	
	06	MSIZ	-127 ~ +127	-35	-86	-36	RED H MID SIZE	
	07	MLIN	-127 ~ +127	-28	-13	03	RED H MID LINEARTIY	
	08	KEY	-127 ~ +127	-13	-13	-17	RED H KEYSTONE	
	09	SSKW	-127 ~ +127	05	03	06	RED H SUB SKEW	
	10	MPIN	-127 ~ +127	-06	-11	-14	RED H MID PINCUSHON	
	11	PIN	-127 ~ +127	-08	-14	-25	RED H PINCUSHON	
	12	SBOW	-127 ~ +127	65	66	99	RED H SUB BOW	
	13	MBOW	-127 ~ +127	01	01	05	RED H MID BOW	
	14	4PIN	-127 ~ +127	03	03	06	RED H 4th PINCUSHON	
15	4SBO	-127 ~ +127	01	01	-02	RED H 4th SUB BOW		
RV	00	CENT	-95 ~ +96	-11	-11	-11	RED V CENTER	
	01	SKEW	-95 ~ +96	00	00	00	RED V SKEW	
	02	BOW	-127 ~ +127	13	13	13	RED V BOW	
	03	SIZE	-127 ~ +127	-12	-21	07	RED V SIZE	
	04	LIN	-127 ~ +127	02	02	14	RED V LINEARITY	
	05	MSIZ	-127 ~ +127	-01	-05	-02	RED V MID SIZE	
	06	MKEY	-127 ~ +127	11	13	23	RED V MID KEYSTONE	
	07	KEY	-127 ~ +127	10	32	21	RED V KEYSTONE	
	08	SSKW	-127 ~ +127	-01	-03	-07	RED V SUB SKEW	
	09	MPIN	-127 ~ +127	-38	-39	-40	RED V MID PINCUSHON	
	10	PIN	-127 ~ +127	-24	01	25	RED V PINCUSHON	
	11	SBOW	-127 ~ +127	03	-04	-06	RED V SUB BOW	
	12	WAVW	-127 ~ +127	32	19	39	RED V WAVE	
	13	4PIN	-127 ~ +127	-05	-20	-07	RED V 4th PINCUSHON	
14	MWAV	-31 ~ +31	00	01	-01	MID WAVE		
BH	00	BSEL	00, 01	00	00	00	OSD SELECT FOR BH, BV 00 : Blue + Green 01 : Blue + Red	
	01	CENT	-95 ~ +96	05	00	03	BLUE H CENTER	
	02	SKEW	-95 ~ +96	05	05	05	BLUE H SKEW	
	03	BOW	-127 ~ +127	04	05	06	BLUE H BOW	
	04	4BOW	-127 ~ +127	01	00	01	BLUE H 4th BOW	
	05	SIZE	-127 ~ +127	-03	28	01	BLUE H SIZE	
	06	LIN	-127 ~ +127	-89	-38	-84	BLUE H LINEARITY	
	07	MSIZ	-127 ~ +127	01	-66	-07	BLUE H MID SIZE	
	08	MLIN	-127 ~ +127	31	19	29	BLUE H MID LINEARTIY	
	09	KEY	-127 ~ +127	-03	-03	-05	BLUE H KEYSTONE	
	10	SSKW	-127 ~ +127	-04	-04	-03	BLUE H SUB SKEW	
	11	MPIN	-127 ~ +127	-03	-09	-10	BLUE H MID PINCUSHON	
	12	PIN	-127 ~ +127	-03	-04	-06	BLUE H PINCUSHON	
	13	SBOW	-127 ~ +127	-38	-46	-67	BLUE H SUB BOW	
	14	MBOW	-127 ~ +127	-01	02	00	BLUE H MID BOW	
	15	4PIN	-127 ~ +127	02	02	04	BLUE H 4th PINCUSHON	
16	4SBO	-127 ~ +127	00	02	03	BLUE H 4th SUB BOW		

Mode	Item Number	Adjustment Item	Data Range	Initial Data			Name / Description	Device
				Wide	Smart	Zoom		
BV	00	CENT	-95 ~ +96	12	12	13	BLUE V CENTER	CXP86213
	01	SKEW	-95 ~ +96	00	00	00	BLUE V SKEW	
	02	BOW	-127 ~ +127	20	20	20	BLUE V BOW	
	03	SIZE	-127 ~ +127	-08	-11	14	BLUE V SIZE	
	04	LIN	-127 ~ +127	-02	-01	11	BLUE V LINEARITY	
	05	MSIZ	-127 ~ +127	01	-03	-01	BLUE V MID SIZE	
	06	MKEY	-127 ~ +127	-08	-09	-17	BLUE V MID KEYSTONE	
	07	KEY	-127 ~ +127	72	74	76	BLUE V KEYSTONE	
	08	SSKW	-127 ~ +127	05	04	06	BLUE V SUB SKEW	
	09	MPIN	-127 ~ +127	-39	-39	-38	BLUE V MID PINCUSHON	
	10	PIN	-127 ~ +127	28	45	90	BLUE V PINCUSHON	
	11	SBOW	-127 ~ +127	-02	-05	-04	BLUE V SUB BOW	
	12	WAVW	-127 ~ +127	-42	-40	-53	BLUE V WAVE	
	13	4PIN	-127 ~ +127	-08	-23	-10	BLUE V 4th PINCUSHON	
14	MWAV	-31 ~ +31	01	02	01	MID WAVE		
ACV	00	ART0	01 ~ 08	06			DATA SAMPLE LENGTH (1 step = 1 μsec.)	
	01	AT1T	00 ~ 255	18			Data Sampling Start Time	
	02	AT1M	00 ~ 255	132			from V BLK (50Hz)	
	03	AT1B	00 ~ 255	240			(1 step = 64 μsec = approx. 1H)	
	04	AH51	01 ~ 255	18			(1 step = 1 OSD step) OSD H POS 50 (L&R)	
	05	AH52	01 ~ 255	130			OSD H POS 50 (UP&BOTTOM)	
	06	AV5T	00 ~ 255	01			(1 step = 2 lines) OSD V POS 50 (UP)	
	07	AV5M	00 ~ 255	60			OSD V POS 50 (L&R)	
	08	AV5B	00 ~ 255	130			OSD V POS 50 (BOTTOM)	
	09	AH61	01 ~ 255	18			(1 step = 1 OSD step) OSD H POS 60 (L&R)	
	10	AH62	01 ~ 255	130			OSD H POS 60 (BOTTOM)	
	11	AV6T	00 ~ 255	01			(1 step = 2 lines) OSD V POS 50 (UP)	
	12	AV6M	00 ~ 255	46			OSD V POS 50 (L&R)	
	13	AV6B	00 ~ 255	100			OSD V POS 50 (BOTTOM)	
	14	RHCO	-127 ~ +127	00			(8 step = 1 step) RH CENT ADJ OFFSET	
	15	BHCO	-127 ~ +127	00			BH CENT ADJ OFFSET	
	16	RVCO	-127 ~ +127	00			RV CENT ADJ OFFSET	
	17	BVCO	-127 ~ +127	00			BV CENT ADJ OFFSET	
	18	RHSO	-127 ~ +127	00			RH SKEW ADJ OFFSET	
	19	BHSO	-127 ~ +127	00			BH SKEW ADJ OFFSET	
	20	RVSO	-127 ~ +127	00			RV SKEW ADJ OFFSET	
	21	BVSO	-127 ~ +127	00			BV SKEW ADJ OFFSET	
22	AERR	00 ~ 255	00			(Error Code)		
MSC	00	ACTL	00 ~ 255	00			Lower byte of counter value	
	01	ACTH	00 ~ 255	00			Higher byte of counter value	

6-2. PAL REGISTRATION ADJUSTMENT

6-2-1. Registration Adjustment Method

1. Turn on the main power switch of the set and enter into standby mode.
2. Press the following sequence of buttons on the Remote Commander.



3. Press "MENU" on the commander.
4. Move to the corresponding adjustment using the joystick (▲ or ▼ : up or down) on the commander.
5. Move the joystick to the right (▶) to enter the selected adjustment.

With the joystick ◀▶ :

- ▲ or ▼ Items change
- ◀ or ▶ Data change

In internal pattern :

ITEM : Convergence

OSD CHSW = "00" Internal pattern (crosshatch)

OSD CHSW = "01" External pattern

Color of internal pattern :

ITEM : Convergence

GH GSEL = "00" Green + Red

GH GSEL = "01" Green

BH BSEL = "00" Blue + Green

BH BSEL = "01" Blue + Red

6-2-2. Geometry Adjustment

1. Receive the PAL SPCB signal.
2. Select wide mode.

Press "◉ (blue key)" : Wide ▶ Smart ▶ 4 : 3 ▶ Zoom

Need geometry adjustment to wide mode, smart mode and zoom mode. Production spec of each mode.

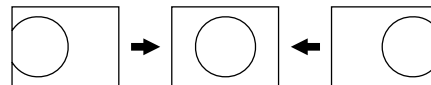
* 4 : 3 mode no adjust. (except for H Position)

3. Select service mode and enter adjustment item for green signal.

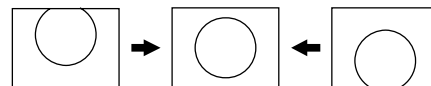
CENTER ADJUSTMENT

1. Adjust H Position and V Position.

H Position



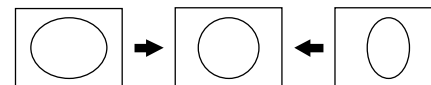
V Position



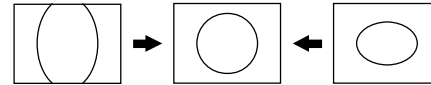
SIZE ADJUSTMENT

1. Make Convergence GH SIZE data "00".
2. Adjust Geometry H Size.
3. Make Convergence GV SIZE data "00".
4. Adjust Geometry V Size.
5. Adjust Geometry S Correction.

H Size



V Size



Signal : SPCB PAL

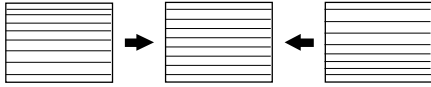
	H SIZE	V SIZE
Wide	16.6 ±0.15 sq	12.4 ±0.15 sq
Smart	17.0 ±0.15 sq	11.4 ±0.15 sq
Zoom	16.65 ±0.15 sq	9.3 ±0.15 sq

MAIN DEFLECTION ADJUSTMENT

1. Adjust V Linearity.

Correct linearity of the horizontal top and bottom lines.

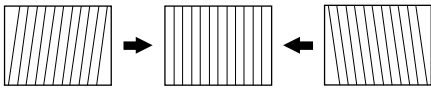
V Linearity



2. Adjust AFC Angle

Correct the vertical center line to be in parallel with the screen edges and other colors.

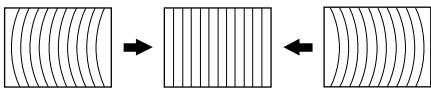
AFC Angle



3. Adjust AFC Bow

Correct linearity of the vertical center line.

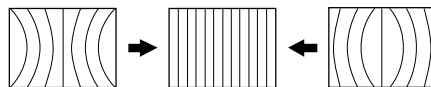
AFC Bow



4. Adjust PIN Amp

Correct the vertical left and right lines and eliminate pin-cushion-shaped distortion.

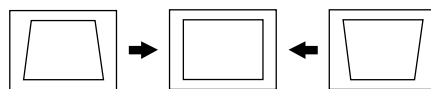
PIN Amp



5. Adjust PIN Phase

Correct the vertical left and right lines to be in parallel with each other.

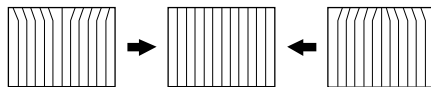
PIN Phase



6. Adjust Up Corn Pin

Correct the screen top section line bow.

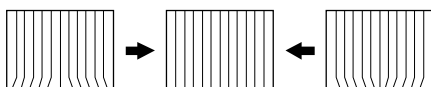
Up Corn Pin



7. Adjust Lo Corn Pin

Correct the screen bottom section line bow.

Lo Corn Pin



6-2-3. Convergence Adjustment

1. Receive the PAL SPCB signal.

2. Select wide mode.

Press “ (blue key)” : Wide → Smart → 4 : 3 → Zoom

Need geometry adjustment to wide mode, smart mode and zoom mode. Production spec of each mode.

* 4 : 3 mode no adjust.

3. Select service mode and enter adjustment item for green signal.

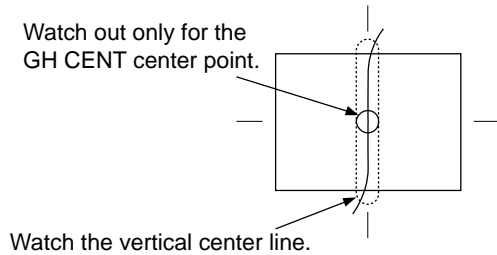
SUB DEFLECTION ADJUSTMENT ITEM

Adjustment ○ : Yes - : No

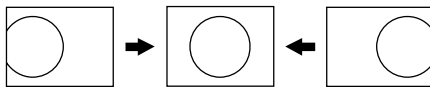
Display	Adjustment item	Adjustment type					
		GH	GV	RH	RV	BH	BV
GSEL	COL SELECT	○	-	-	-	-	-
BSEL	COL SELECT	-	-	-	-	○	-
CENT	CENT	○	○	○	○	○	○
SKEW	SKEW	○	○	○	○	○	○
BOW	BOW	○	○	○	○	○	○
4BOW	4TH BOW	○	-	○	-	○	-
SIZE	SIZE	○	○	○	○	○	○
LIN	LIN	○	○	○	○	○	○
MSIZ	MID SIZE	○	○	○	○	○	○
MLIN	MID LIN	○	-	○	-	○	-
MKEY	MID KEY	-	○	-	○	-	○
KEY	KEY	○	○	○	○	○	○
SSKW	SUB SKEW	○	○	○	○	○	○
MPIN	MID PIN	○	○	○	○	○	○
PIN	PIN	○	○	○	○	○	○
SBOW	SUB BOW	○	○	○	○	○	○
WAVW	WAVE	-	○	-	○	-	○
MBOW	MID BOW	○	-	○	-	○	-
4PIN	4TH PIN	○	○	○	○	○	○
4SBO	4TH SUB BOW	○	-	○	-	○	-
MWAV	MID WAVE	-	-	-	○	-	○

GREEN VERTICAL LINE ADJUSTMENT

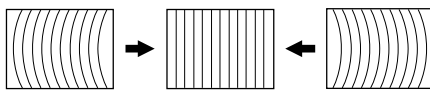
1. Receive the PAL SPCB signal.
2. Carefully watching out for the GH CENT screen center section, adjust GH CENT, GH BOW, GH SKEW.
3. GH 4BOW adjustment. Correct the corner distortion which could not be adjusted with GH BOW.



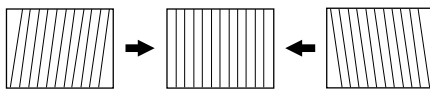
GH CENT



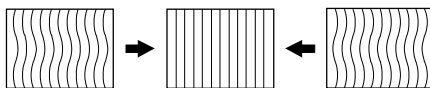
GH BOW



GH SKEW

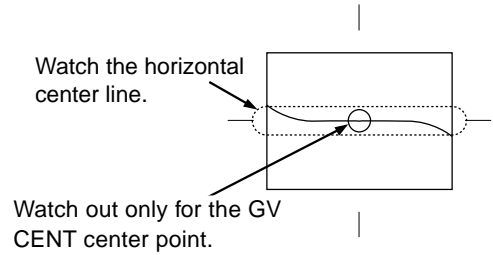


GH 4BOW

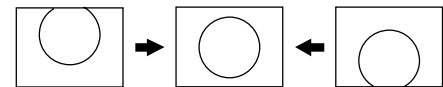


GREEN HORIZONTAL LINE ADJUSTMENT

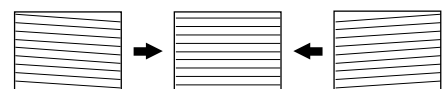
1. Receive the PAL SPCB signal.
2. Finely adjust the center position of the vertical line at the center of the screen with GV CENT.
3. Using GV SKEW and GV BOW, correct the tilt and bow of the horizontal line at the centre of the screen.



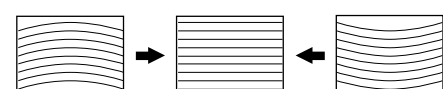
GV CENT



GV SKEW

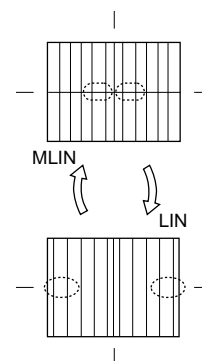


GV BOW



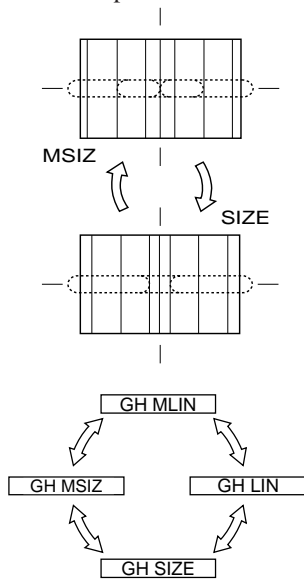
GREEN SIZE AND LINEARITY ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Balance the sizes at both sides of the center section of the screen with GH MLIN.
3. Balance the sizes on both end sections of the screen with GH LIN.
4. While tracking, adjust with GH MLIN and GH LIN so that the sizes of the horizontal line at the center of the screen are symmetrical left and right.



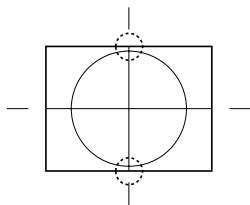
GREEN HORIZONTAL SIZE ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Adjust with GH MSIZ, so that the sizes of both edges and centre are equal.
3. Adjust with GH SIZE, so that the horizontal sizes of both edges and centre are equal.
4. While tracking adjust GH MSIZ and GH SIZE so that the space intervals for the horizontal section of the screen are equal.
5. Adjust again if M LIN is changed after GH MSIZ and GH SIZE are complete.



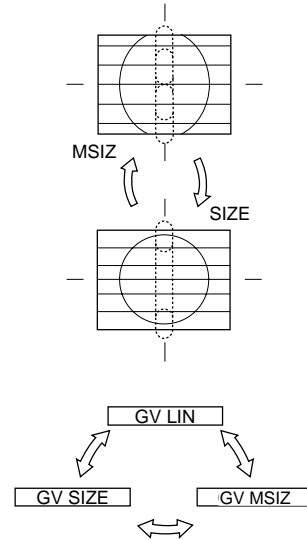
GREEN VERTICAL LINEARITY ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Adjust GV LIN so that the vertical lines at the top and bottom of the screen are symmetrical.



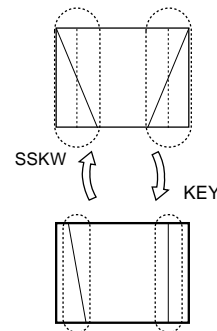
GREEN VERTICAL SIZE ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Adjust GV MSIZ so that the sizes at the top and bottom and centre are equal.
3. Set the vertical size to correct specification.
4. While tracking adjust GV MSIZ and GV SIZE so that the space intervals for the vertical line of the screen are equal, also the vertical size should be within space.
5. Adjust again if GV LIN has been altered after completing the above adjustments.



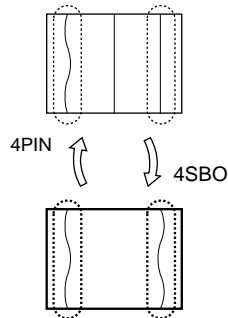
GREEN HORIZONTAL TRAPEZOIDAL DISTORTION ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Adjust GH SSKW so that the tilt of the vertical lines at both edges of the screen are symmetrical left and right.
3. Adjust GH KEY so that there is no tilt in the vertical lines at both edges of the screen.
4. While tracking adjust GH KEY and GH SSKW.



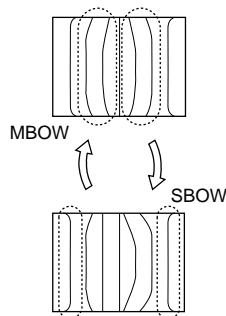
GREEN HORIZONTAL QUATERNARY ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Adjust GH 4PIN, to correct the 4th order distortion.
3. Adjust GH 4SBO to balance and correct the 4th order distortion at both edges of the screen.
4. While tracking adjust GH 4PIN and GH 4SBO.



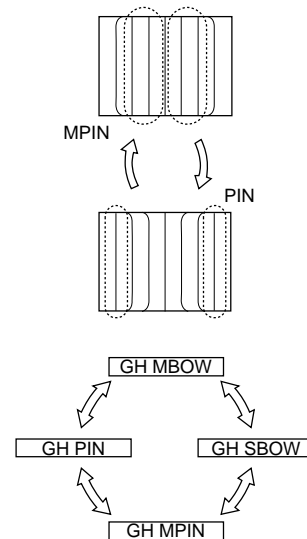
GREEN HORIZONTAL ASYMMETRICAL PIN DISTORTION ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Adjust GH MBOW, so that the pin asymmetry at both sides of the centre section are symmetrical left and right.
3. Adjust GH SBOW so that the bow at both edges of the screen is symmetrical left and right.
4. While tracking adjust GH MBOW and GH SBOW so that the bow of vertical lines over the entire screen is symmetrical.



GREEN HORIZONTAL SYMMETRICAL PIN DISTORTION ADJUSTMENT

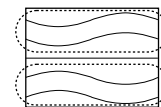
1. Receive the Internal pattern (crosshatch) signal.
2. Adjust GH MPIN to correct pin distortion at both edges of the centre section.
3. Use GH PIN to correct pin distortion at both edges of the screen.
4. While tracking adjust GH MPIN and GH PIN so that the PIN of vertical lines on the entire screen have no bowing.
5. If there is asymmetrical distortion after adjustments, readjust GH MBOW and GH SBOW while tracking.



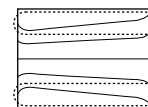
GREEN VERTICAL WAVE (3RD-ORDER) DISTORTION ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Check the screen at the top & bottom, and look for any 2nd or 3rd order waveform distortion of horizontal lines. Correct with GV WAVW.
3. While tracking adjust GV WAVW and GV KEY, if there are any KEY distortion.

GV WAVW



GV KEY

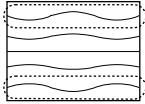


GREEN VERTICAL 4TH ORDER DISTORTION ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. By using GV 4PIN, 4th-Order distortion of the horizontal lines at the top & bottom can be corrected.

Since there is no 4SBO for vertical correction, there will be a slight imbalance, but adjust the registration to eliminate any distortion.

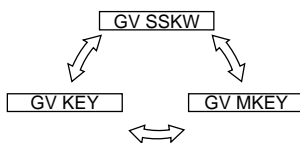
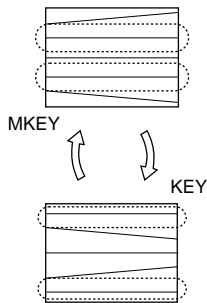
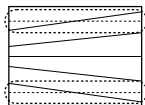
GV 4PIN



GREEN VERTICAL TRAPEZOIDAL DISTORTION ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Adjust GV SSKW so that the tilt of the horizontal lines at the top and bottom of the screen are symmetrical.
3. Adjust GV MKEY so that there is no tilt for the middle section.
4. Adjust GV KEY so that there is no tilt at the top and bottom of the screen.
5. While tracking adjust GV MKEY and GV KEY, so that there is no tilt over the entire screen.
6. If the tilt is unbalanced after GV MKEY and GV KEY have been adjusted, readjust GV SSKW.

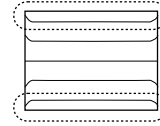
GV SSKW



GREEN VERTICAL ASYMMETRICAL PIN DISTORTION (2ND-ORDER DISTORTION) ADJUSTMENT

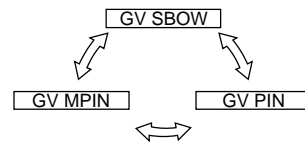
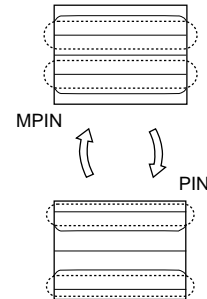
1. Receive the Internal pattern (crosshatch) signal.
2. Correct the asymmetrical pin distortion at the top and bottom of the screen with GV SBOW.

GV SBOW



GREEN VERTICAL ASYMMETRICAL PIN DISTORTION ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Using GV MPIN adjust the pin distortion at both edges of the screen and at the centre.
3. Using GV PIN, adjust, so that the horizontal lines at the top & bottom of the screen are straight lines.
4. Adjust GV MPIN & GV PIN so that there is no curve in the horizontal lines on the entire screen.
5. After adjusting the items above, using tracking with GV SBOW, GV MPIN, and GV PIN to correct the entire screen.



RED REGISTRATION ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
GH GSEL = "00" (Green + Red)
2. Adjust so that the red lines lay on the green lines.
Adjust, using the same procedure as the green sub item adjustment outline above.

Note : Main registration correction should not be while adjusting Red adjustment.

BEWARE : Not to change green sub items.
It' s easily done by mistake.

BLUE ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
BH BSEL = "00" (Blue + Green)
2. Adjust so that the blue lines lay on the green lines.
Adjust, using the same procedure as the green sub item adjustment outline above.

Note : Main registration correction should not be while adjusting Blue adjustment.

BEWARE : Not to change green and red sub items.
It' s easily done by mistake.

REGISTRATION DATA WRITE

1. After finish all PAL registration adjustments, write PAL registration data by pressing form the appropriate buttons.

DATA WRITE : Press "MUTE" + "0"

DATA COPY FROM PAL TO NTSC

1. Copy PAL data to NTSC data by pressing form the appropriate buttons.

DATA COPY : Press "ON SCREEN DISPLAY" + "0"

2. Press "ON SCREEN DISPLAY" + "0" to copy data from PAL to NTSC.
If you press "ON SCREEN DISPLAY", then it appears "Copy 5060" to display.

* Make sure input signal is PAL. If input signal is NTSC and do this process, NTSC data are copied to PAL data !

SMART AND ZOOM MODE ADJUSTMENT

1. Smart and Zoom mode adjustment are the same as Wide mode.

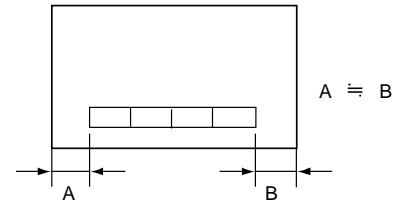
AUTO CONVERGENCE PRESET

1. Set in TT mode.
2. Press "AUTO CONVERGENCE" button on front panel.
3. Confirm convergence is the same condition as before.
4. Press "0" + "0" button on commander to exit from TT mode.

TT00 : Exit from TT mode

6-3. TEXT POSITION ADJUSTMENT

1. Receive RF signal with teletext.
2. Set in TT mode.
3. Press "1" + "4" button on commander.
TT14 : TEXT H POSITION adjustment
4. Adjust H position of text.
5. Push "TV MODE" to exit.



With the joystick :

◀ (Move the Left)

▶ (Move the Right)

6-4. WHITE BALANCE ADJUSTMENT

1. Receive the monoscope signal.
2. Set in service mode and select Picture Adjustment.
3. Adjust Sub Bright so that the signal 10 IRE section barely glows.
4. Receive the all-white pattern signal.
5. Adjust the white balance with Green Cutoff and Blue Cutoff.
6. Adjust Sub Bright so that the signal 100 IRE section barely glows.
7. Adjust the white balance with Green Drive and Blue Drive.
8. Repeatedly adjust the white balance for the minimum and maximum picture setting.

6-5. SUB BRIGHT ADJUSTMENT

1. Receive the monoscope signal.
2. Set in TT mode.
3. Press "1" + "3" button on commander.
TT13 : SUB BRIGHTNESS adjustment
4. Adjust sub brightness 10 IRE and 20 IRE border just appear point by "◀" or "▶" key of commander.

With the joystick :

▼ (Down)

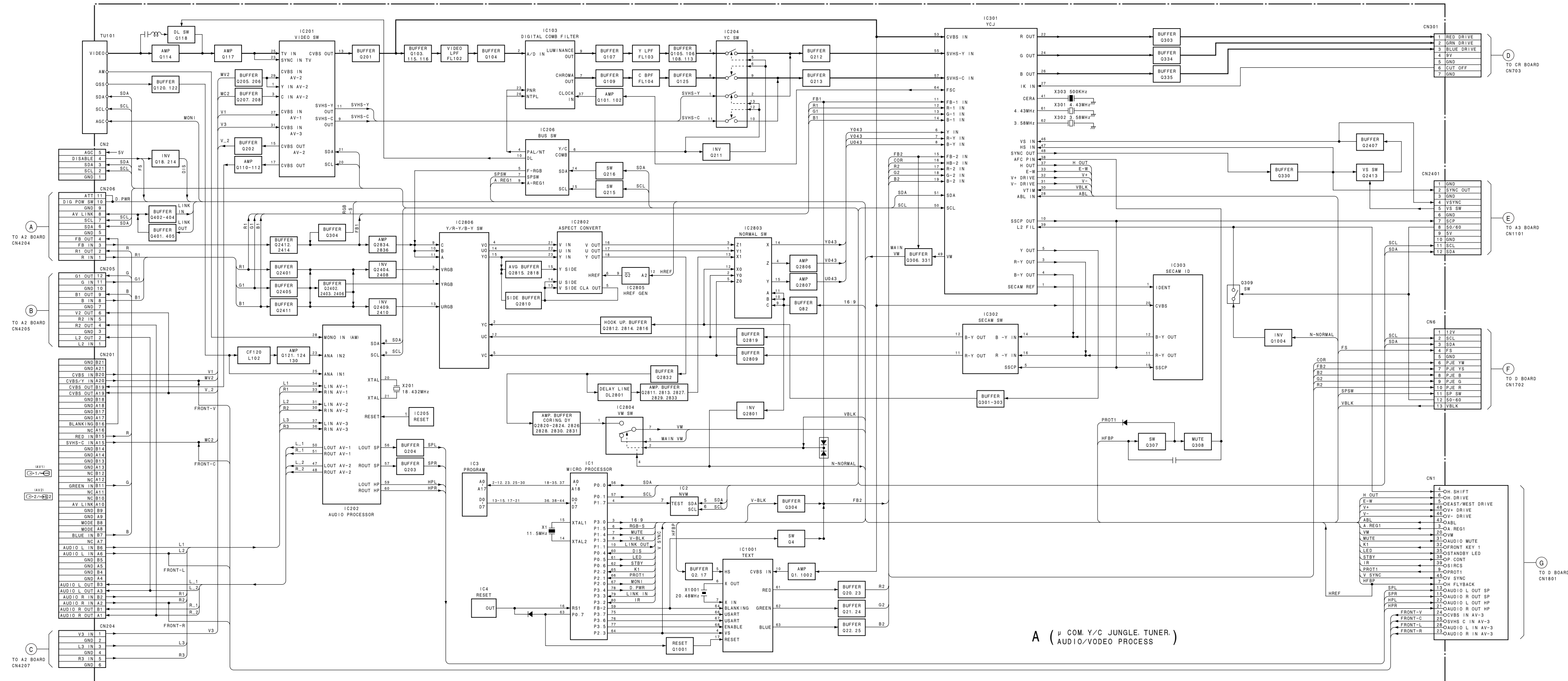
▲ (Up)

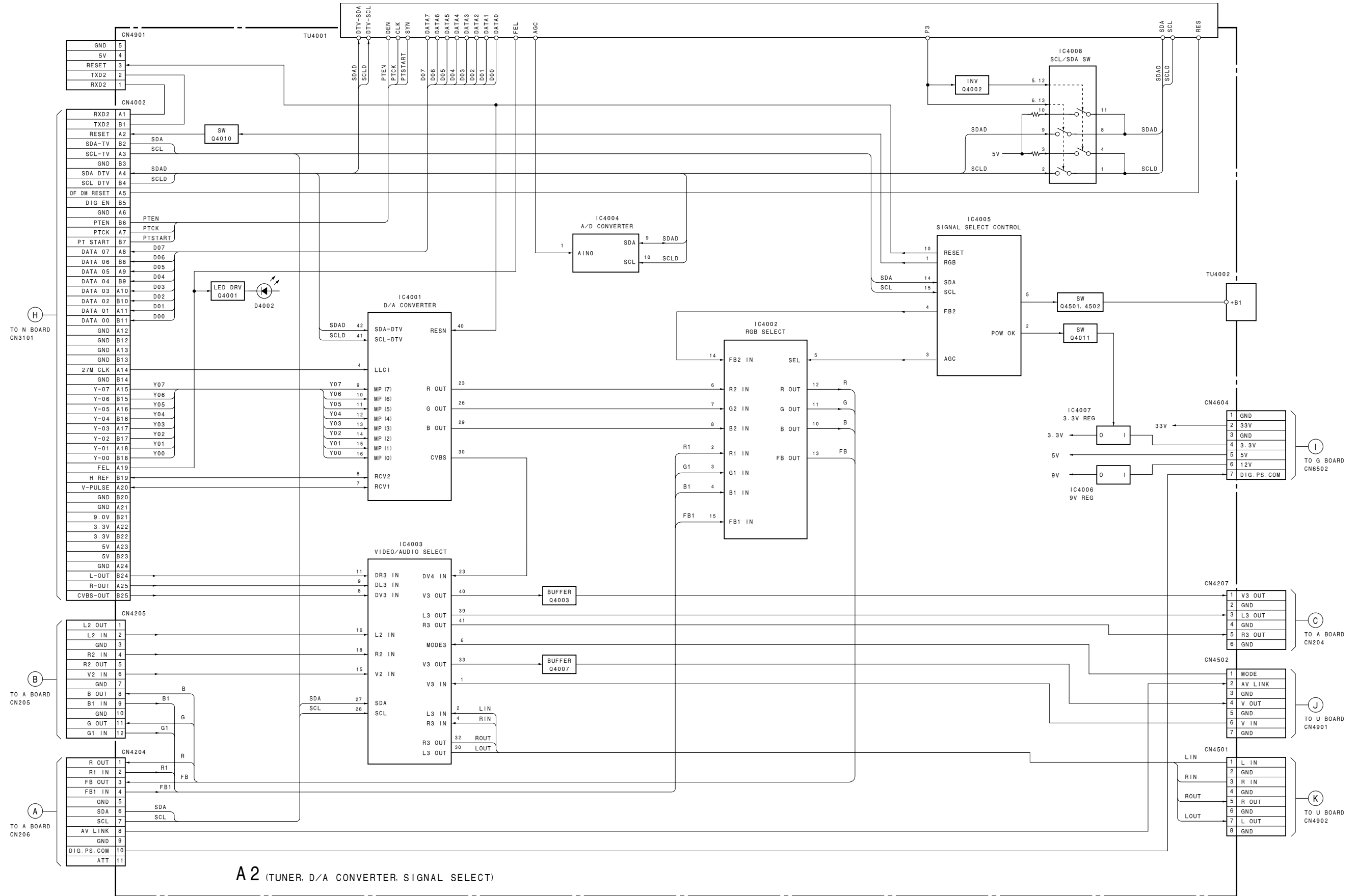
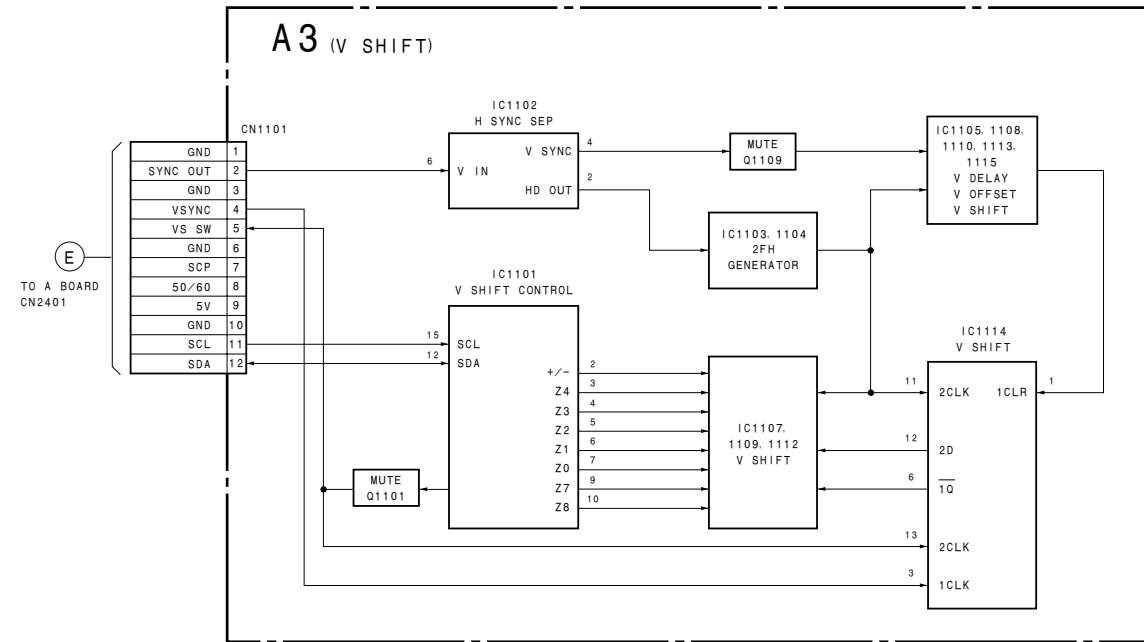
MEMO

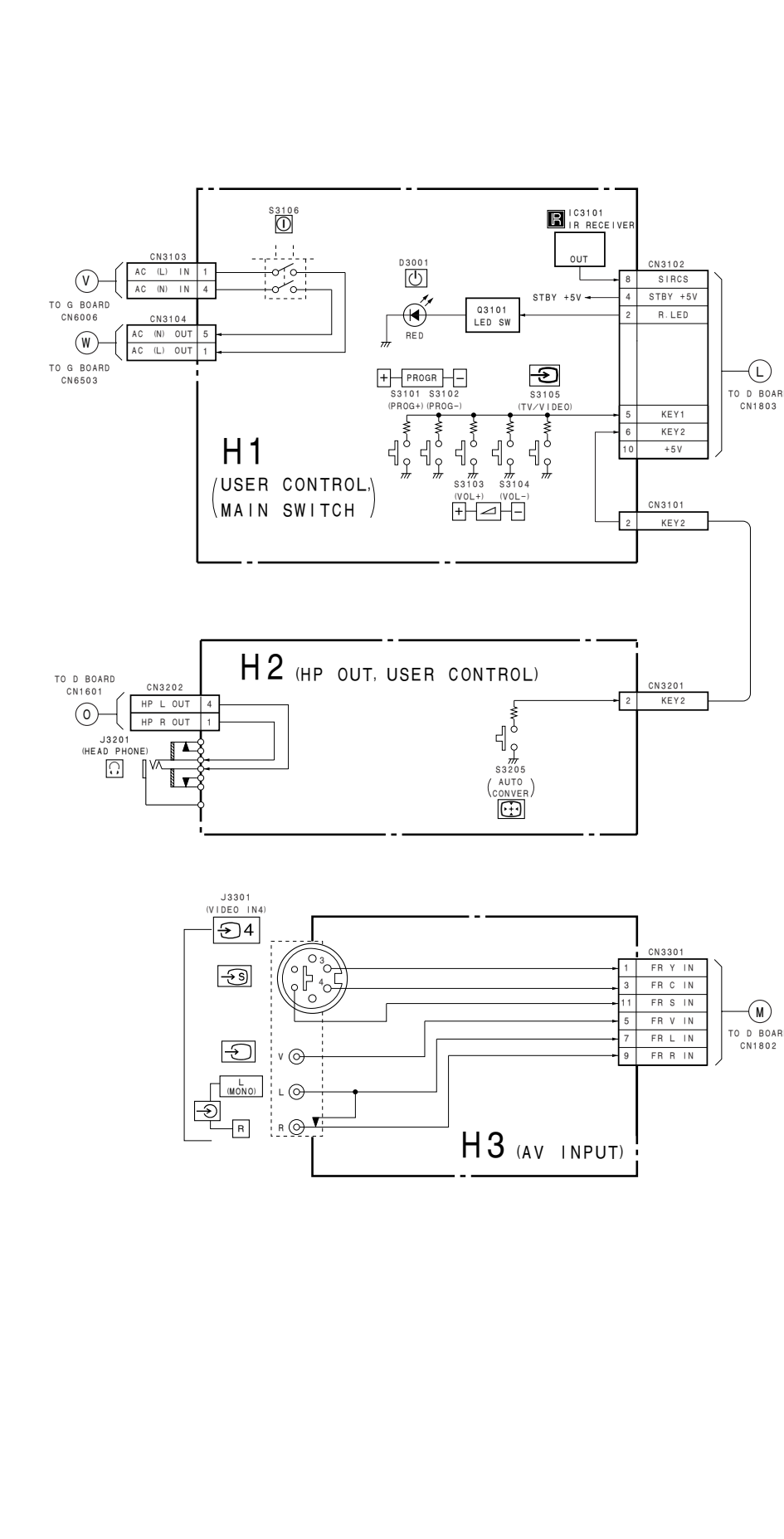
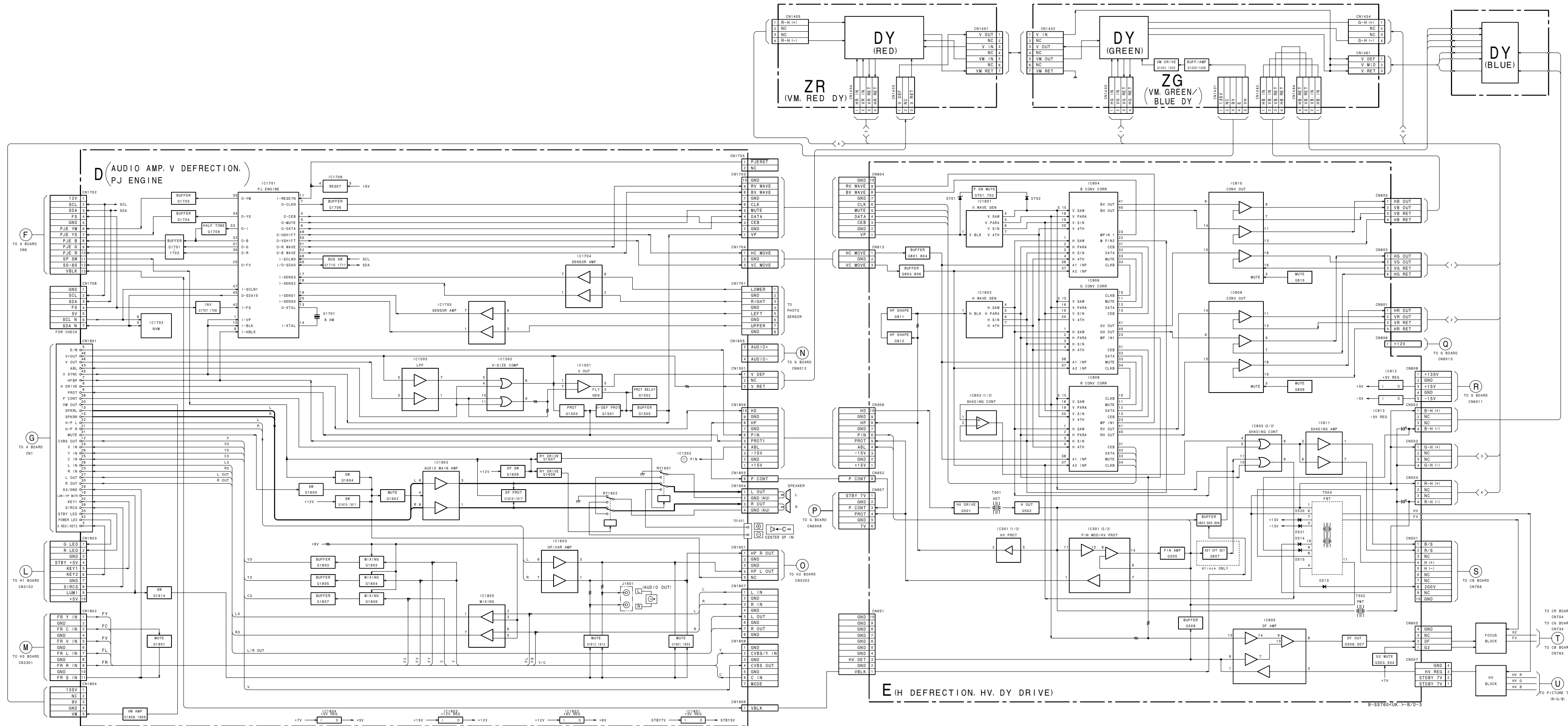
A series of horizontal dotted lines for writing.

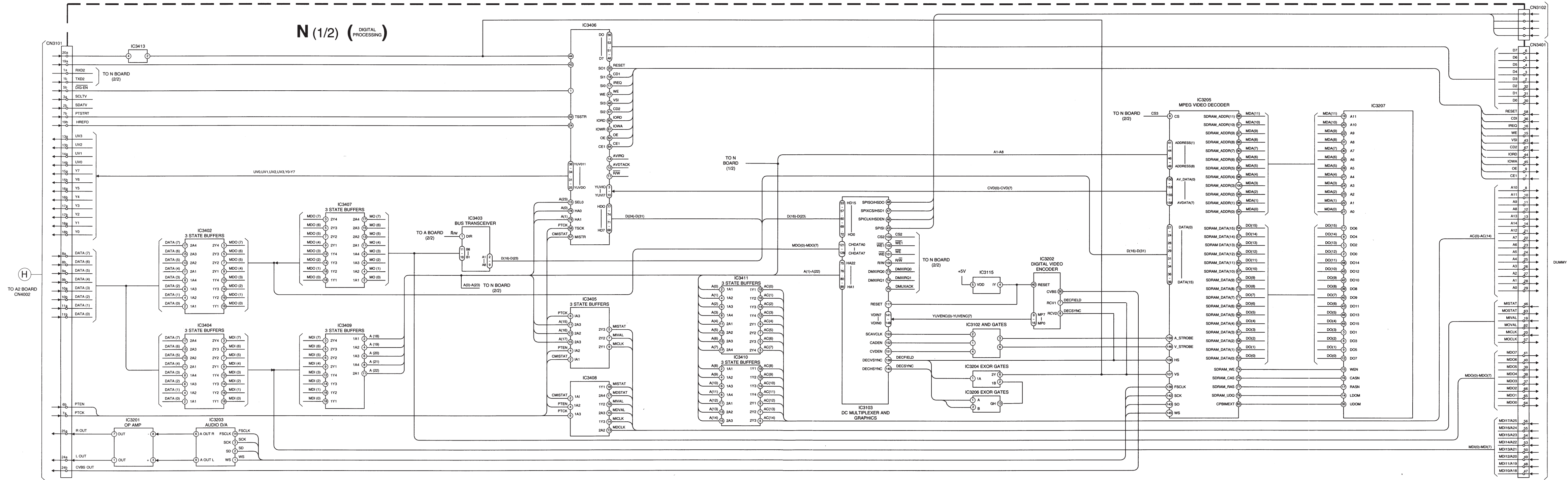
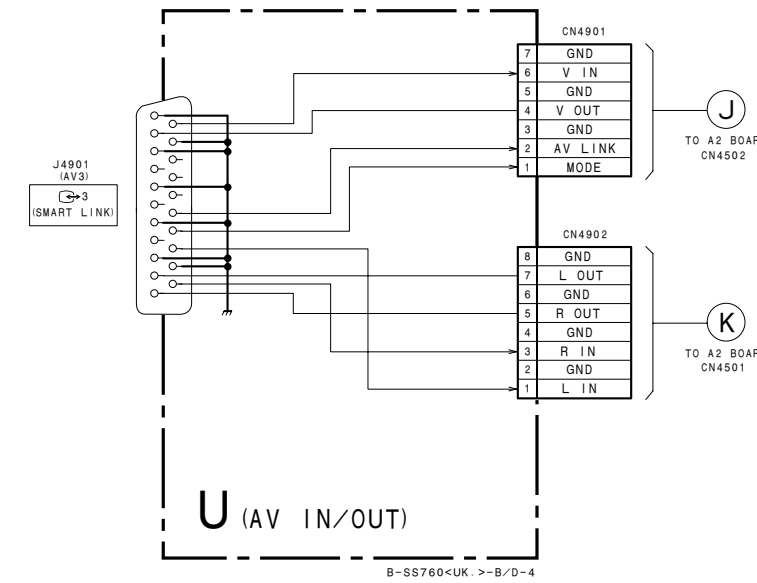
SECTION 7
DIAGRAMS

7-1. BLOCK DIAGRAMS

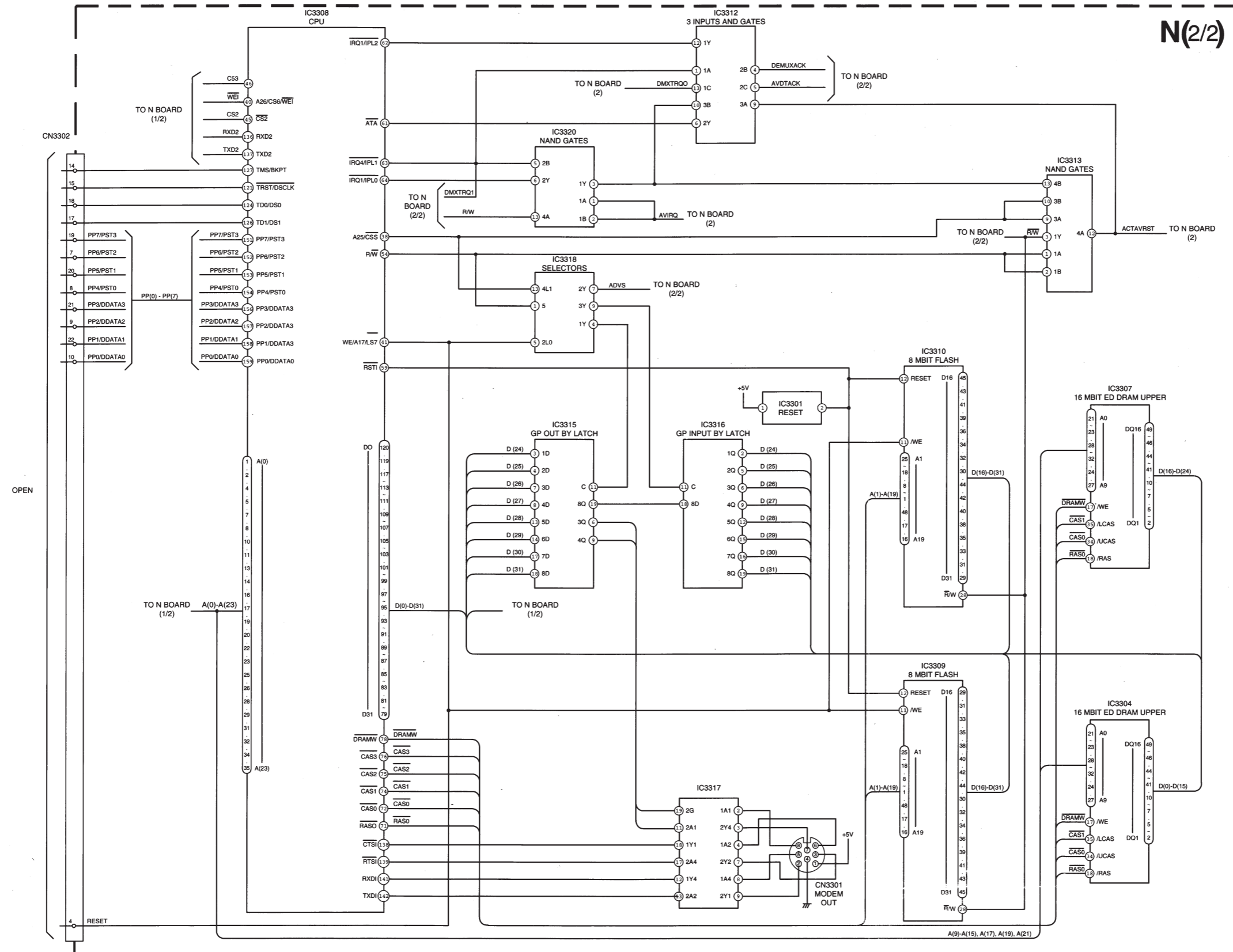








N(2/2)

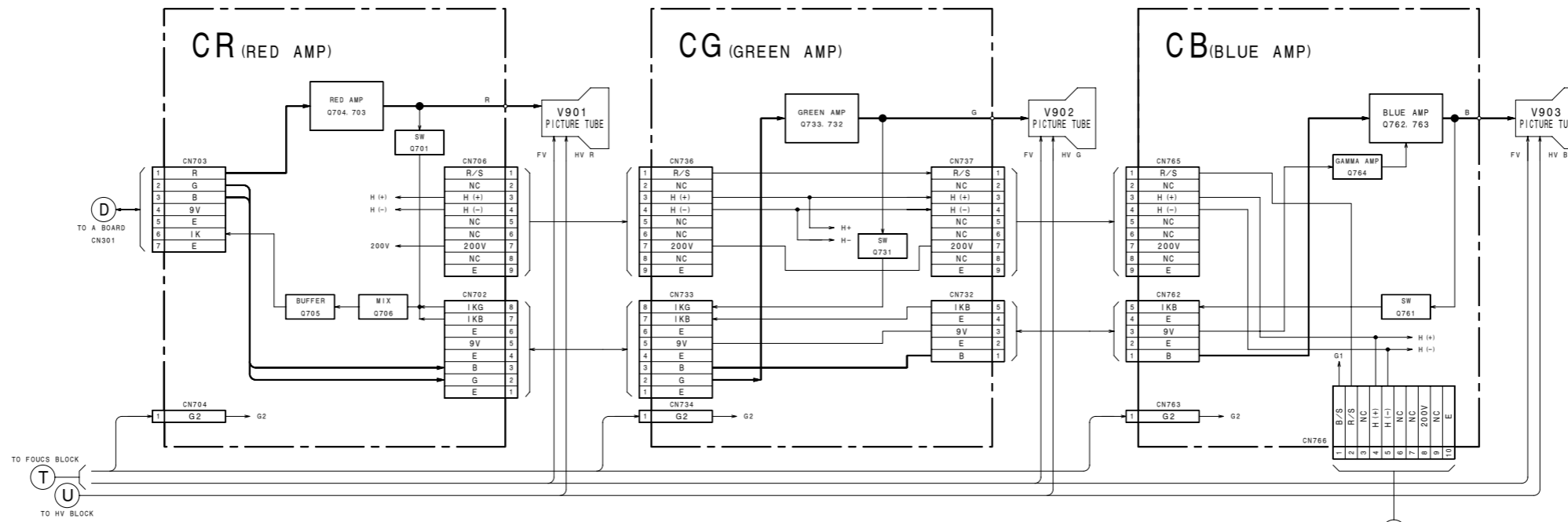


KP-51DS1U

RM-892

KP-51DS1U

RM-892

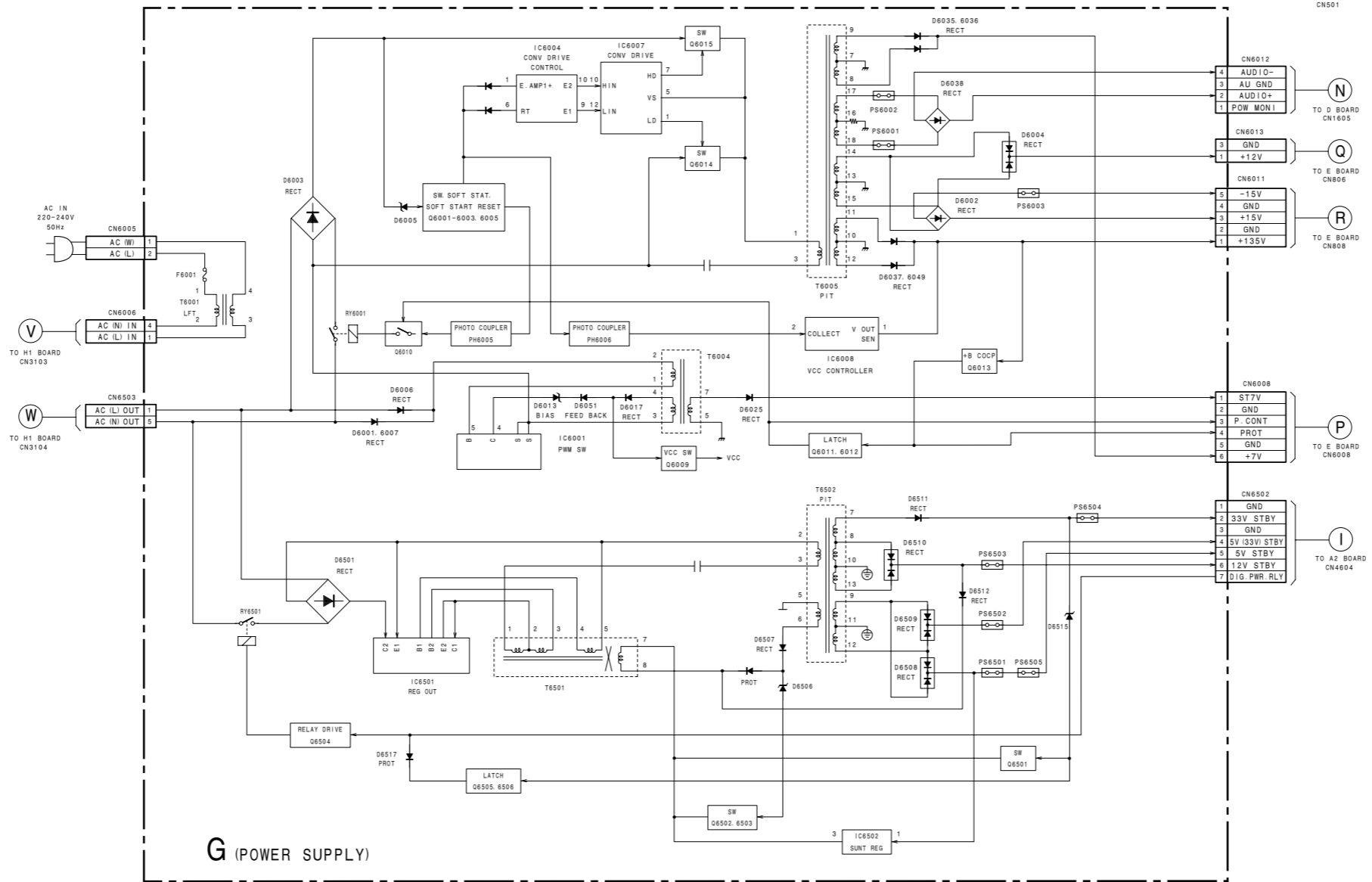


TO A BOARD
CN301

TO FOCUS BLOCK
T

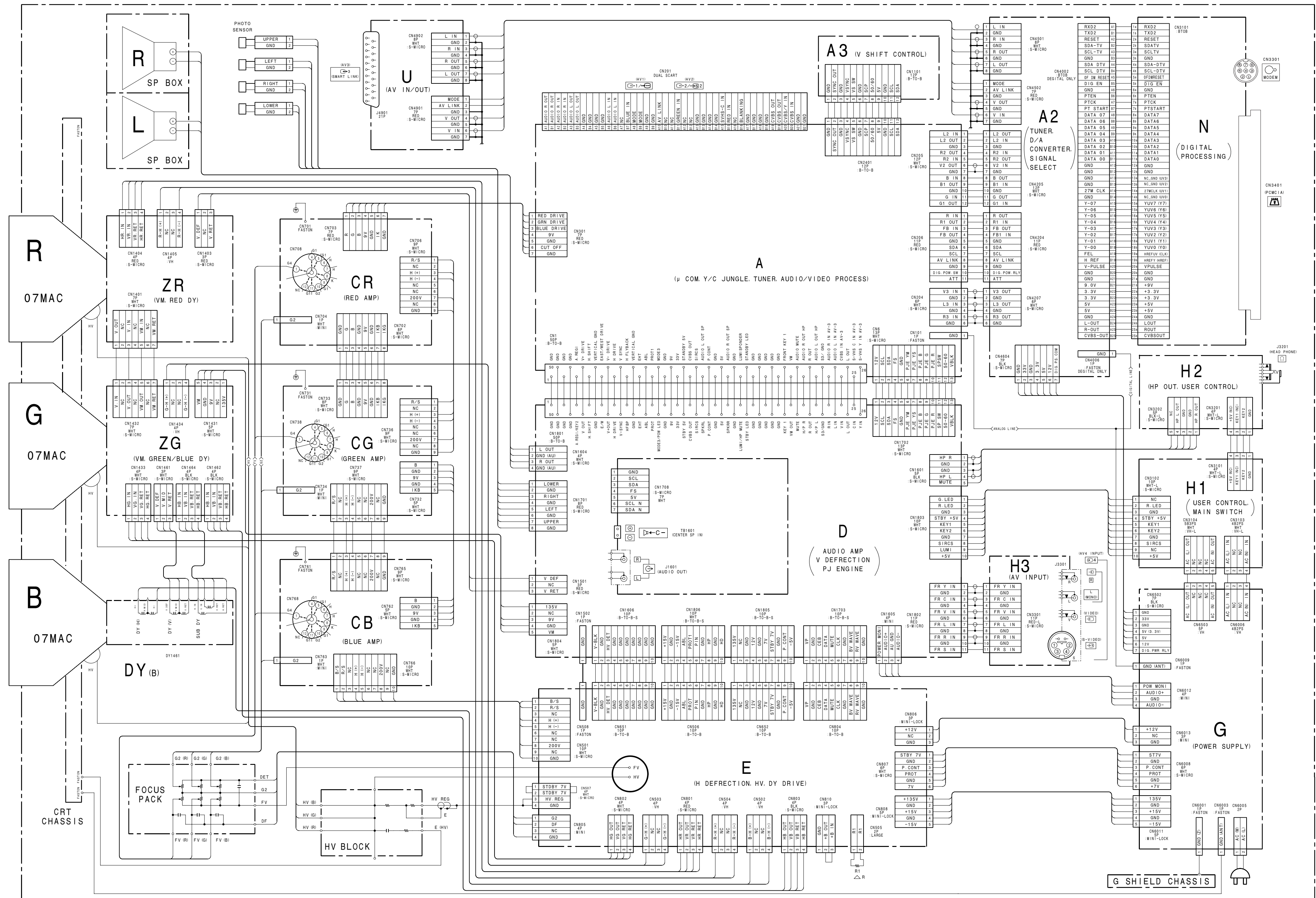
TO HV BLOCK
U

TO E BOARD
CN501

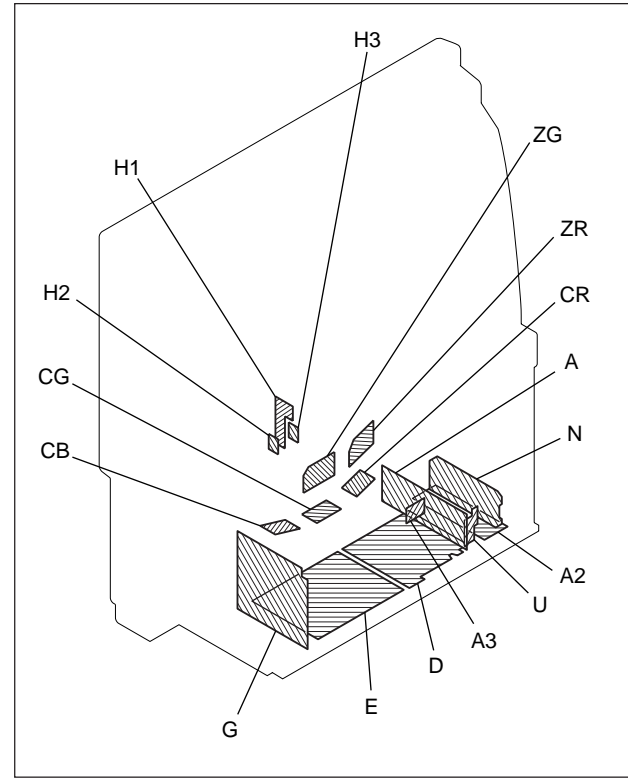


G (POWER SUPPLY)

7-2. FRAME SCHEMATIC DIAGRAM



7-3. CIRCUIT BOARDS LOCATION



7-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

- Note:**
- The parts marked "H" on schematic diagrams are not mounted.
 - All capacitors are in μF unless otherwise noted. (pF: μF)
 - Capacitors without voltage indication are all 50 V.
 - Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm
Rating electrical power 1/4 W (CHIP: 1/10 W)

- All resistors are in ohms.
- ⊞: nonflammable resistor.
- ⊞: fusible resistor.
- △: internal component.
- : panel designation, and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ⊥: earth-ground.
- ⊥: earth-chassis.
- All voltages are in V.
- Readings are taken with a 10 M digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- *: Can not be measured.
- NO MARK: Common
- (): NTSC 3.58 MHz
- Circled numbers are waveform references.
- B + bus.
- B - bus.
- Signal path.
- The components identified by H in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by H, make the necessary adjustments indicated. (See page 33)
- When replacing the part in below table, be sure to perform the related adjustment.

Reference information

RESISTOR	: RN METAL FILM	: RC SOLID	: FFRD NONFLAMMABLE CARBON	: FUSE NONFLAMMABLE FUSIBLE	: RW NONFLAMMABLE WIREWOUND	: RS NONFLAMMABLE METAL OXIDE	: RB NONFLAMMABLE CEMENT		
COIL	: LF-8L MICRO INDUCTOR								
CAPACITOR	: TA TANTALUM	: PS STYROL	: PP POLYPROPYLENE	: PT MYLAR	: MPS METALIZED POLYESTER	: MPP METALIZED POLYPROPYLENE	: ALB BIPOLAR	: ALT HIGH TEMPERATURE	: ALR HIGH RIPPLE

Note: The components identified by shading and mark △ are critical for safety. Replace only with part number specified.

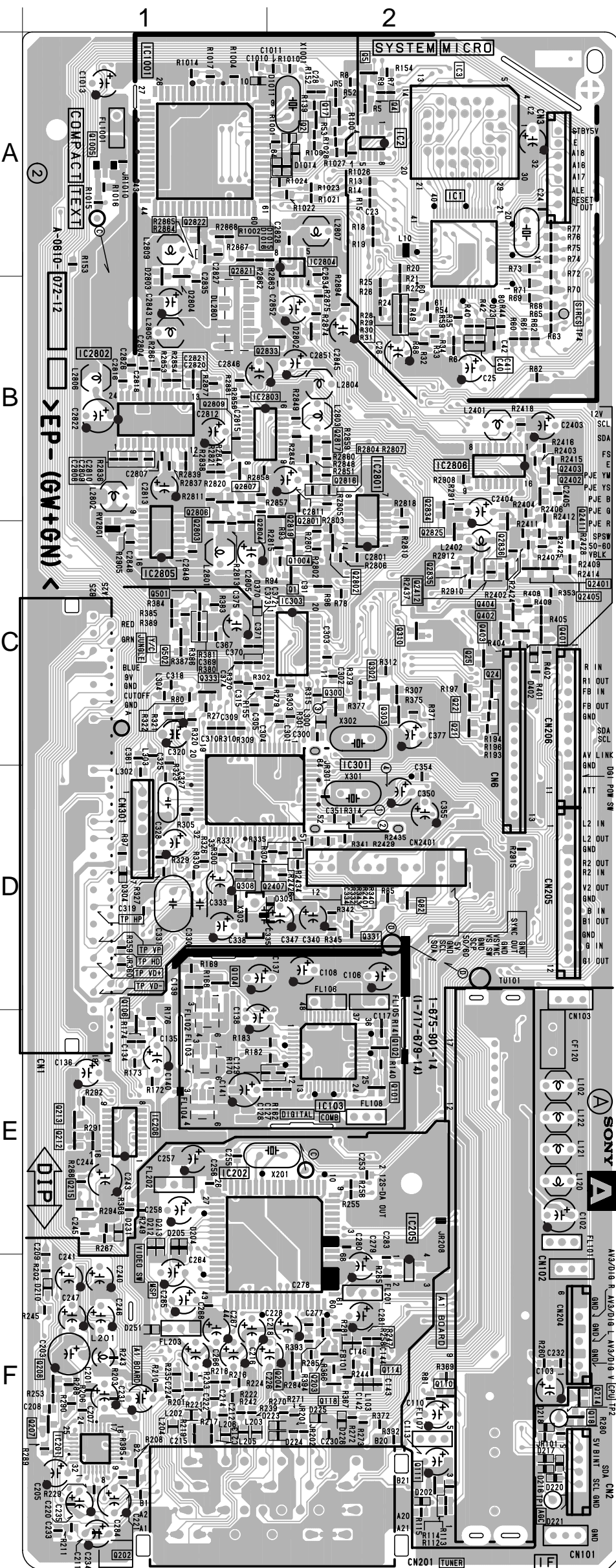
Part Replaced (H)	
R1	
Part Replaced (△)	
E Board	C515, C516, C554, D504, D507, L506, Q502, R1, R514, R516, R517, T502, T504 (FBT)
G Board	IC6008

Terminal name of semiconductors in silk screen printed circuit (*):

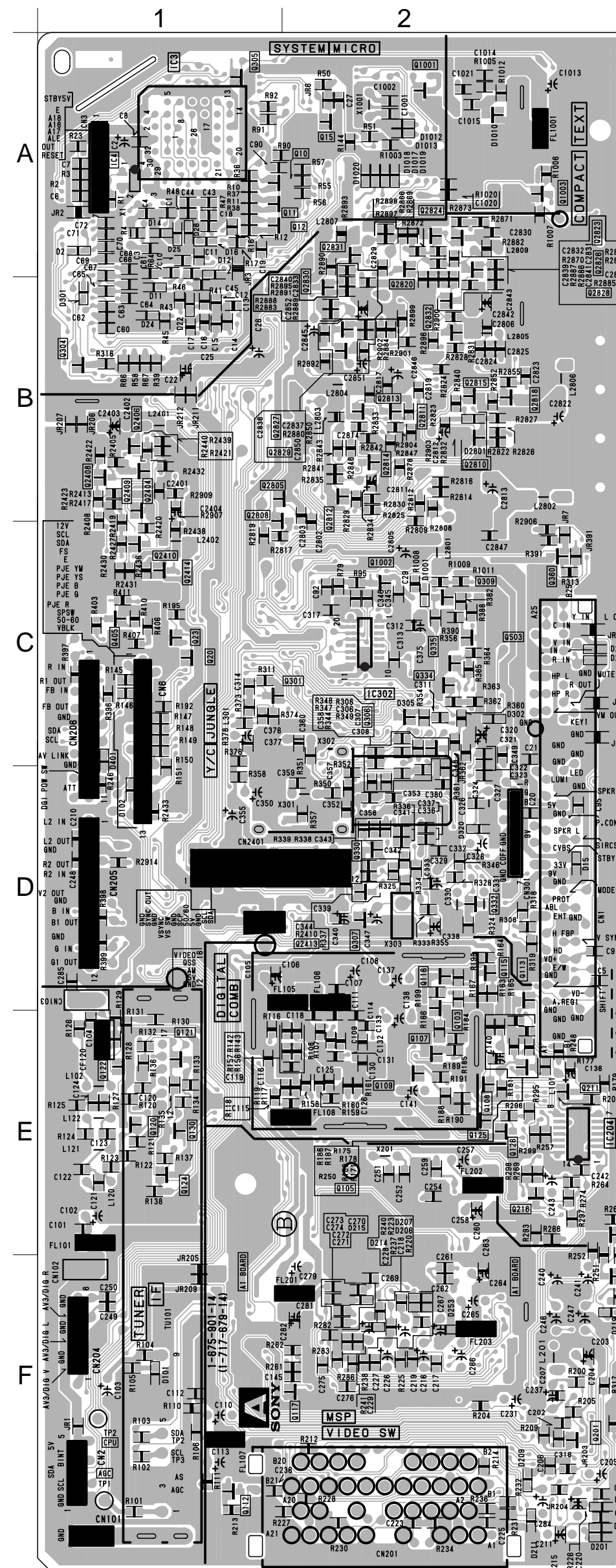
Device	Printed symbol	Terminal name	Circuit
① Transistor	[Symbol]	Collector Base Emitter	[Circuit]
② Transistor	[Symbol]	Collector Base Emitter	[Circuit]
③ Diode	[Symbol]	Cathode Anode	[Circuit]
④ Diode	[Symbol]	Cathode Anode (NC)	[Circuit]
⑤ Diode	[Symbol]	Cathode Anode (NC)	[Circuit]
⑥ Diode	[Symbol]	Common Anode Cathode	[Circuit]
⑦ Diode	[Symbol]	Common Anode Cathode	[Circuit]
⑧ Diode	[Symbol]	Common Anode Anode	[Circuit]
⑨ Diode	[Symbol]	Common Anode Anode	[Circuit]
⑩ Diode	[Symbol]	Common Cathode Cathode	[Circuit]
⑪ Diode	[Symbol]	Common Cathode Cathode	[Circuit]
⑫ Diode	[Symbol]	Anode Anode Cathode Cathode	[Circuit]
⑬ Transistor (FET)	[Symbol]	Drain Source Gate	[Circuit]
⑭ Transistor (FET)	[Symbol]	Drain Source Gate	[Circuit]
⑮ Transistor (FET)	[Symbol]	Source Drain Gate	[Circuit]
⑯ Transistor	[Symbol]	Emitter Collector Base	[Circuit]
⑰ Transistor	[Symbol]	C1B1E1 E2I2C1	[Circuit]
⑱ Transistor	[Symbol]	C1B1E2 E1B1C2	[Circuit]
⑲ Transistor	[Symbol]	C1B2E2 E1B1C2	[Circuit]
⑳ Transistor	[Symbol]	C1B2E2 E1B1C2	[Circuit]
㉑ Transistor	[Symbol]	E2B1E1 C2	[Circuit]
㉒ Transistor	[Symbol]	B1E1E2 C1	[Circuit]
㉓ Transistor	[Symbol]	(B2) E2E1B1 C2	[Circuit]
— Discrete semiconductor			

(Chip semiconductors that are not actually used are included.) Ver.1.2

— A BOARD (Component Side) —



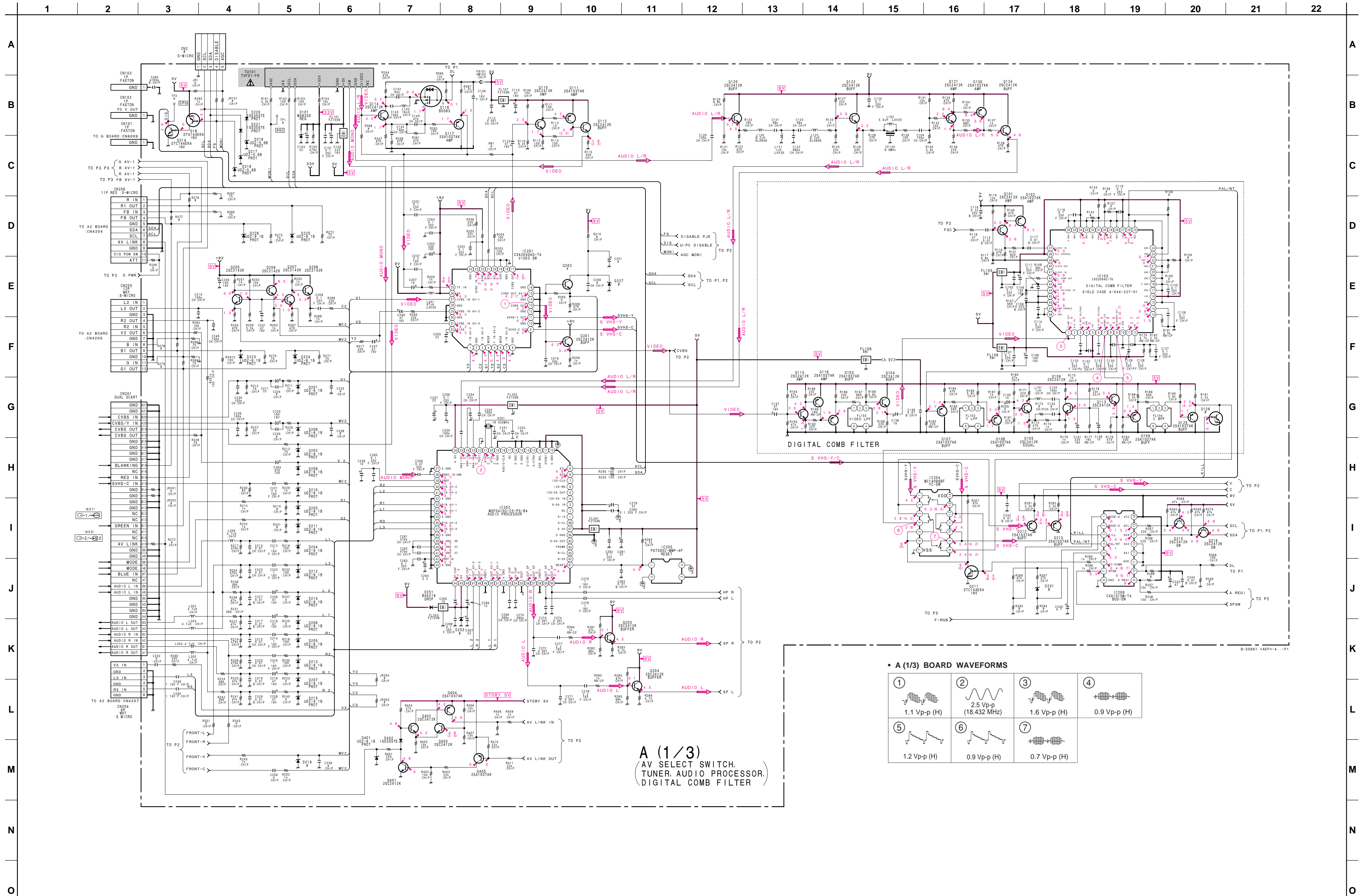
— A BOARD (Conductor Side) —



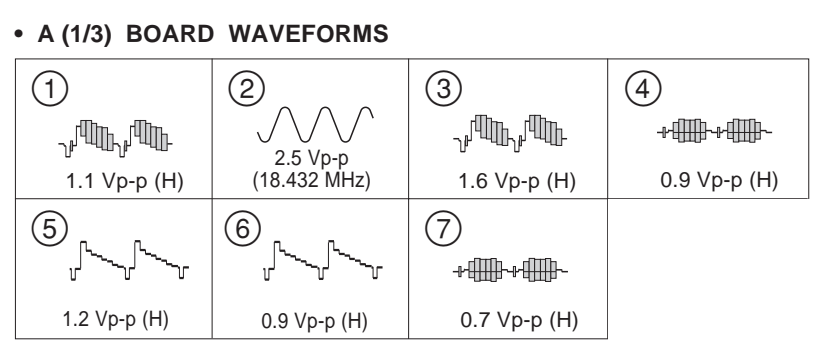
• A BOARD SEMICONDUCTOR LOCATION

IC		Q2403 B-2	Q2404 B-1
(Component Side)	(Conductor Side)		
IC1 A-2		Q2404 C-2	B-1
IC2 A-2		Q2406 B-1	B-1
IC3 A-2	A-1	Q2407 D-1	B-1
IC4 A-2		Q2408 B-1	B-1
IC103 E-2		Q2410 C-1	C-1
IC201 F-1		Q2411 C-2	B-2
IC202 E-2		Q2412 C-2	B-2
IC205 F-2	E-2	Q2413 C-1	C-1
IC206 E-1		Q2801 B-2	B-2
IC301 D-1		Q2806 B-1	B-1
IC302 C-2		Q2807 B-1	B-1
IC303 C-2		Q2809 B-1	B-1
IC1001 A-1		Q2810 B-2	B-2
IC2802 B-1		Q2811 B-2	B-2
IC2803 B-1		Q2812 B-2	B-2
IC2804 A-2		Q2813 B-2	B-2
IC2805 C-1		Q2814 B-2	B-2
IC2806 B-2		Q2815 B-2	B-2
		Q2816 B-2	B-2
		Q2818 B-2	B-2
		Q2819 B-2	B-2
		Q2820 A-1	A-2
		Q2822 A-1	A-2
		Q2823 A-2	A-2
		Q2824 C-2	A-2
		Q2826 A-2	A-2
		Q2827 B-2	B-2
		Q2828 B-2	B-2
		Q2829 B-2	B-2
		Q2830 B-2	B-2
		Q2831 A-2	A-2
		Q2832 B-2	B-2
		Q2833 B-2	B-2
		Q2834 B-2	B-2
		Q2835 C-2	B-2
		Q2836 C-2	B-2
		DIODE	
		(Component Side)	(Conductor Side)
Q1 C-2	*	D2 A-1	A-1
Q2 A-2		D11 B-1	B-1
Q4 A-2		D12 A-1	A-1
Q17 F-2		D16 A-1	A-1
Q18 F-2		D101 F-1	F-1
Q20 C-2	C-1	D102 D-1	D-1
Q21 C-2		D201 F-2	F-2
Q22 C-2		D202 F-2	F-2
Q23 C-1		D203 F-2	F-2
Q24 C-2		D204 E-1	E-1
Q25 C-2		D205 E-1	E-1
Q82 D-2		D207 F-2	F-2
Q101 E-2		D208 F-2	F-2
Q102 E-2		D209 F-2	F-2
Q103 D-1	D-2	D210 F-1	F-1
Q105 E-2		D211 F-2	F-2
Q106 E-1		D212 E-1	E-1
Q107 E-2		D213 F-2	F-2
Q108 E-2		D214 F-2	F-2
Q109 F-2		D215 F-2	F-2
Q110 F-2		D216 F-2	F-2
Q111 F-2		D217 F-2	F-2
Q112 F-1	F-1	D218 F-2	F-2
Q113 D-2		D219 F-2	F-2
Q114 F-2		D220 F-2	F-2
Q115 D-2		D221 F-2	F-2
Q116 D-2		D222 F-2	F-2
Q117 F-2		D223 F-2	F-2
Q118 F-2		D224 F-2	F-2
Q120 E-1		D225 F-2	F-2
Q121 E-1		D226 F-2	F-2
Q122 E-1		D227 F-2	F-2
Q124 E-1		D228 F-2	F-2
Q125 E-2		D229 F-2	F-2
Q130 E-1		D230 F-2	F-2
Q201 F-2		D304 D-2	D-2
Q203 F-2		D305 C-2	C-2
Q204 F-2		D370 C-1	C-1
Q205 F-2		D401 C-1	C-1
Q206 E-2		D402 C-2	C-2
Q207 F-1		D1001 C-2	C-2
Q208 F-1		D1010 C-2	C-2
Q211 E-2		D2801 B-2	B-2
Q212 E-1		D2802 B-1	B-1
Q213 E-1		D2803 B-1	B-1
Q214 F-2		D2804 B-1	B-1
Q215 E-1		CRYSTAL	
Q216 E-2		(Component Side)	(Conductor Side)
Q300 C-2		X1 A-2	A-2
Q301 C-1		X201 E-2	E-2
Q302 C-2		X301 D-2	D-2
Q303 C-2		X302 C-2	C-2
Q304 B-1		X303 D-1	D-2
Q305 A-1		X1001 A-2	A-2
Q306 C-2			
Q307 D-2			
Q308 D-1			
Q309 C-2			
Q330 D-2			
Q331 D-2			
Q333 C-1			
Q334 C-2			
Q335 C-2			
Q360 C-2			
Q401 C-2			
Q402 C-2			
Q403 C-2			
Q404 C-2			

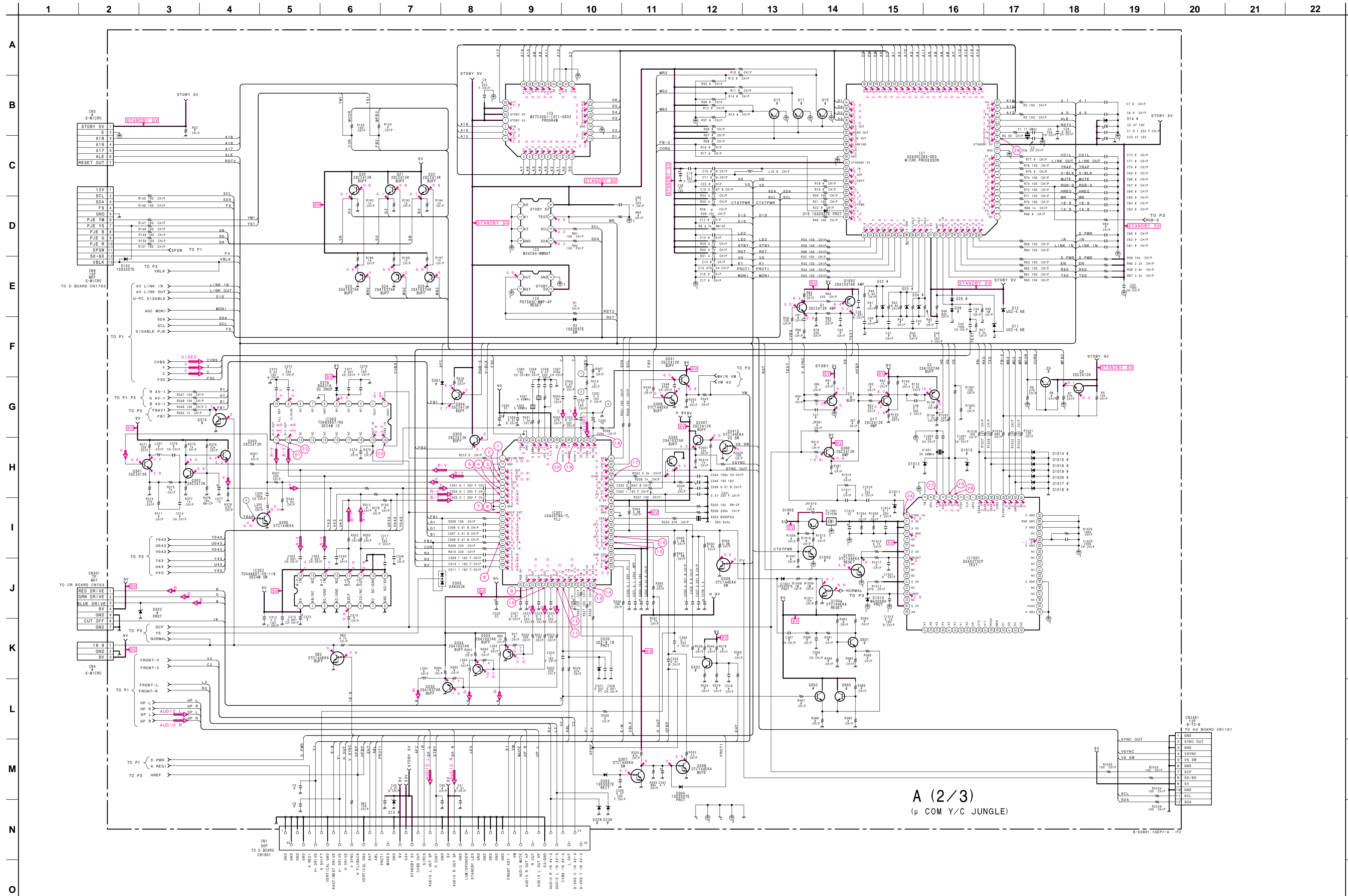
*: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 68)



A (1/3)
 (AV SELECT SWITCH,
 TUNER, AUDIO PROCESSOR,
 DIGITAL COMB FILTER)

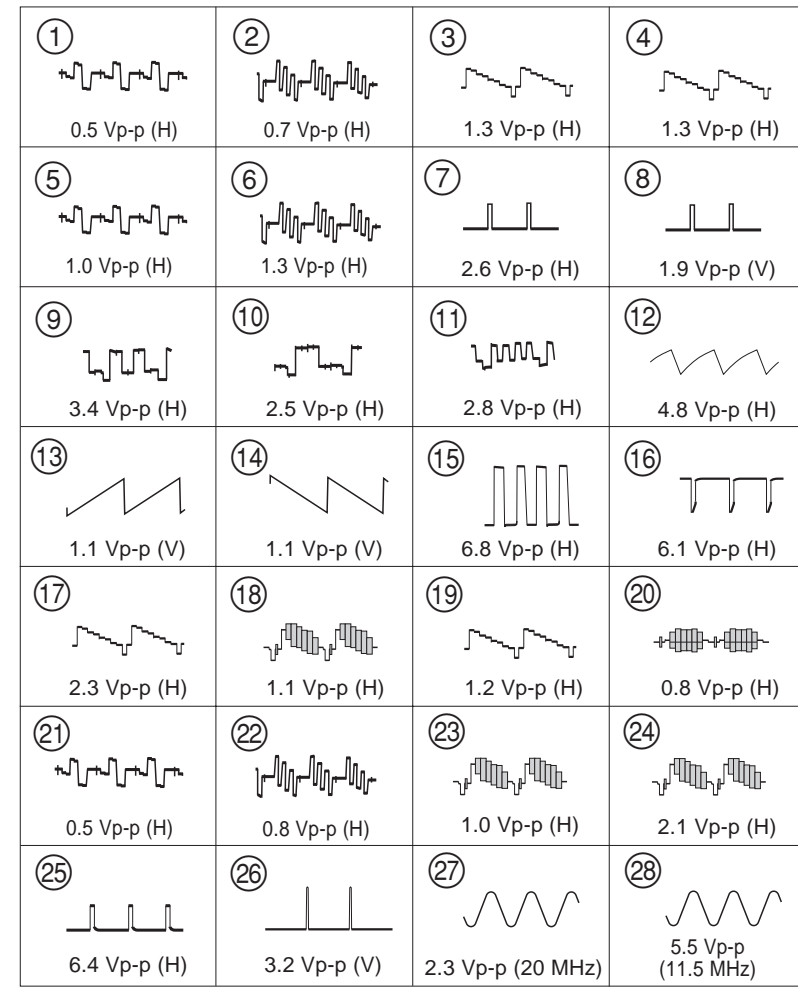


(2) Schematic Diagram of A (2/3) Board

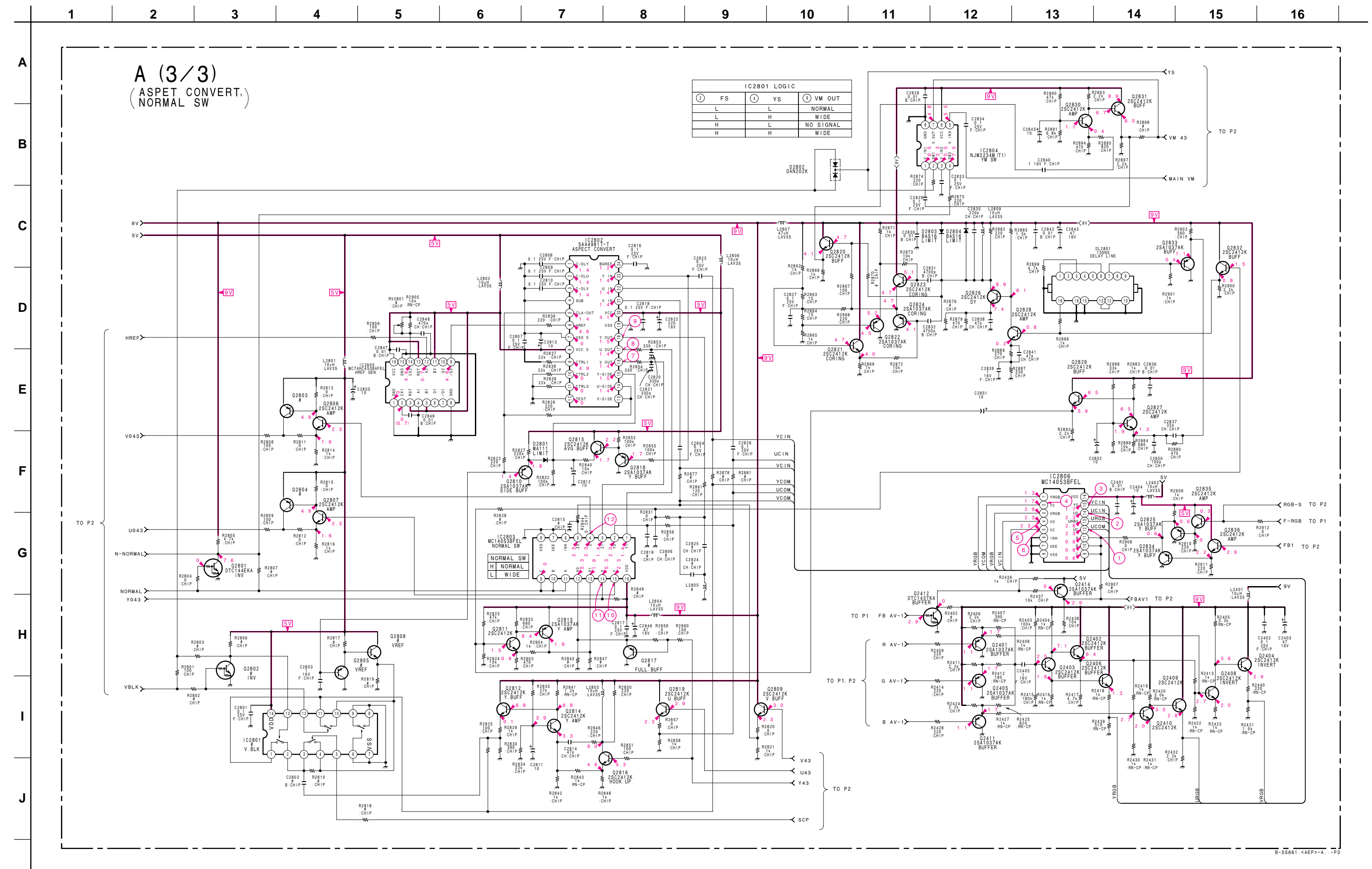


A (2/3)
(μ COM Y/C JUNGLE)

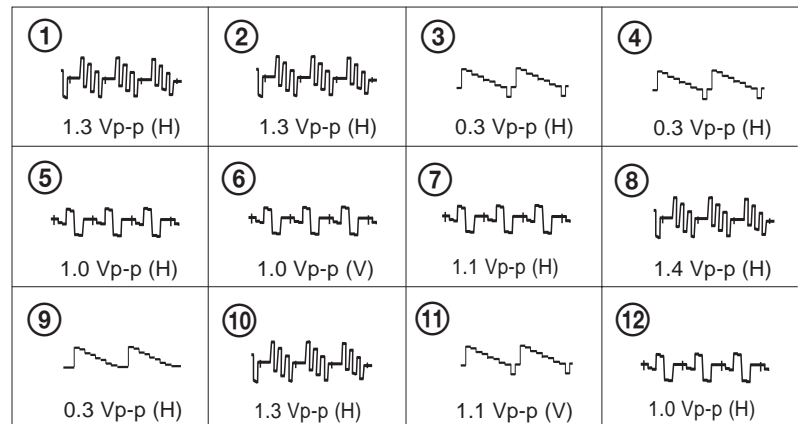
• A (2/3) BOARD WAVEFORMS



(3) Schematic Diagram of A (3/3) Board

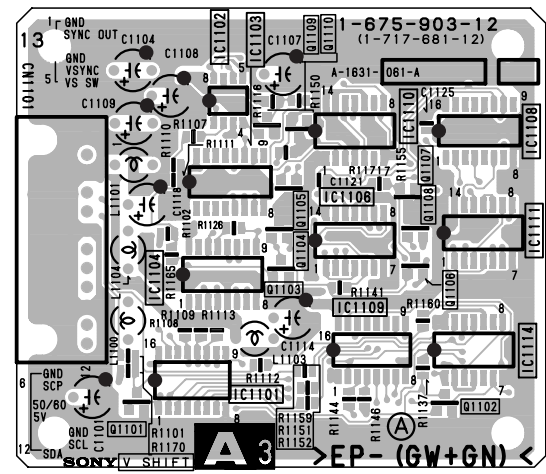


• A (3/3) BOARD WAVEFORMS

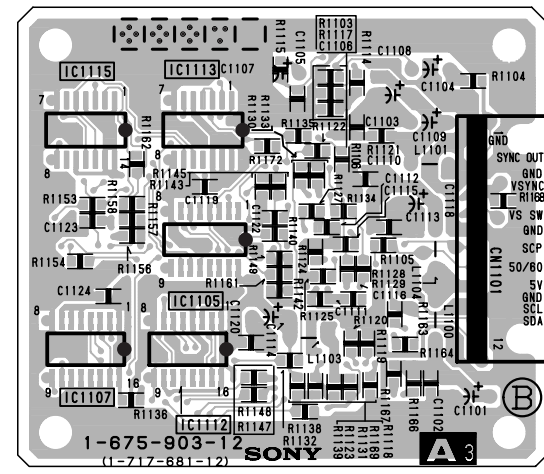


A3 [V SHIFT CONTROL]

— A3 BOARD (Component Side) —



— A3 BOARD (Conductor Side) —



A3 BOARD
Terminal name of semiconductors
in silk screen printed circuit (*)

Ref.	*
Q1101, Q1109, Q1110	②

※: Refer to Terminal name of
semiconductors in silk screen
printed circuit (see page 68)

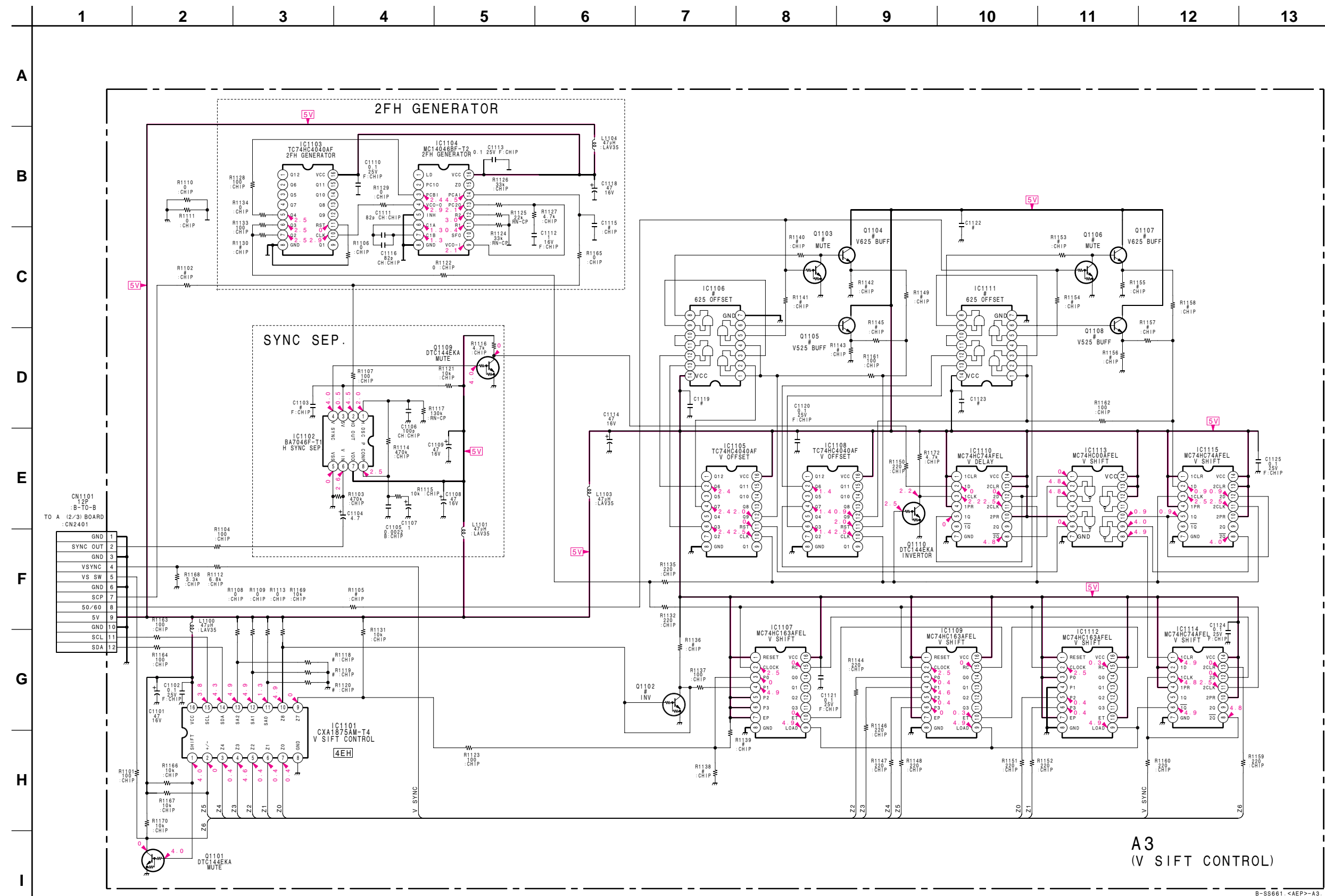
A2 [TUNER, D/A CONVERTER, SIGNAL SELECT]

• A2 BOARD SEMICONDUCTOR LOCATION

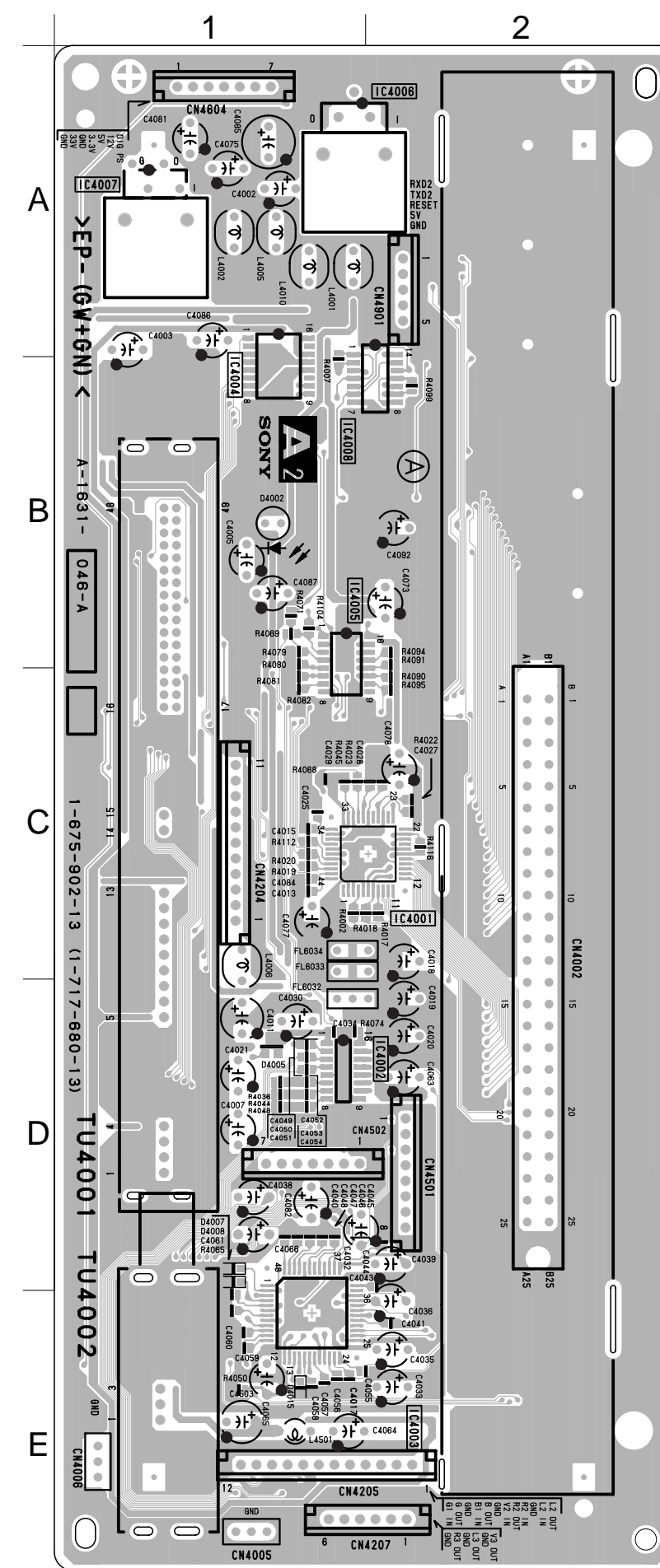
IC (Component Side)	(Conductor Side)	DIODE		*
		(Component Side)	(Conductor Side)	
IC4001	C-2	D4002	B-1	B-2
IC4002	D-1	D4003	D-2	D-2
IC4003	E-1	D4004	D-1	D-1
IC4004	B-1	D4005	D-1	D-1
IC4005	B-1	D4006	D-2	D-2
IC4006	A-1	D4007	D-1	D-1
IC4007	A-1	D4008	D-1	D-1
IC4008	B-2	D4009	E-1	E-1
		D4010	D-2	D-2
		D4011	D-1	D-1
		D4012	A-1	A-1
		D4014	B-1	B-1
		D4015	E-1	E-1
		D4016	C-2	C-2
		D4017	C-2	C-2
		D4018	C-1	C-1
		D4019	C-1	C-1
		D4020	C-1	C-1
		D4021	C-1	C-1
TRANSISTOR				
(Component Side)	(Conductor Side)			*
Q4001	B-2	D4016	C-2	C-2
Q4002	B-1	D4017	C-2	C-2
Q4003	D-2	D4018	C-1	C-1
Q4004	B-2	D4019	C-1	C-1
Q4007	D-2	D4020	C-1	C-1
Q4010	A-1	D4021	C-1	C-1
Q4011	A-2			
Q4501	C-2			
Q4502	E-2			

※: Refer to Terminal name of semiconductors in silk
screen printed circuit (see page 68)

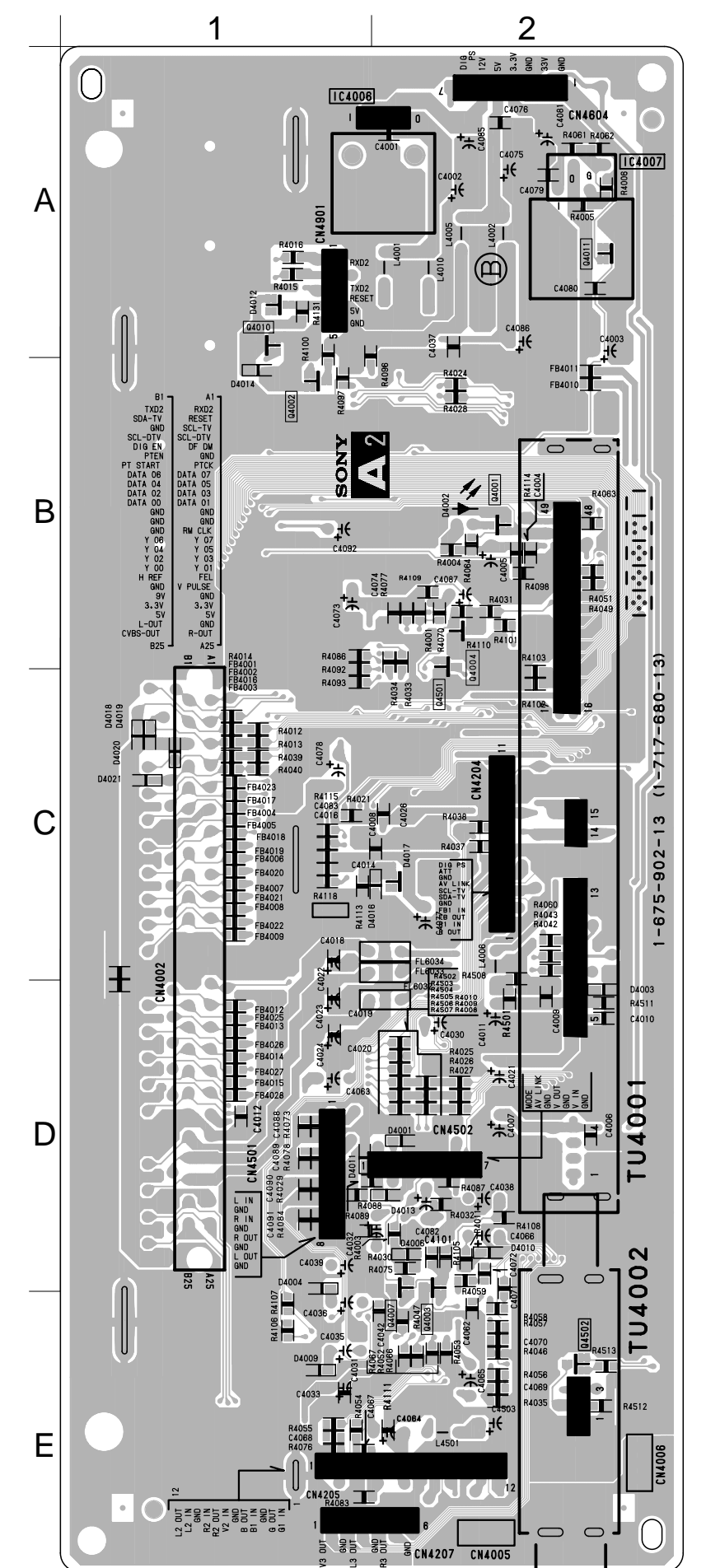
(4) Schematic Diagram of A3 Board

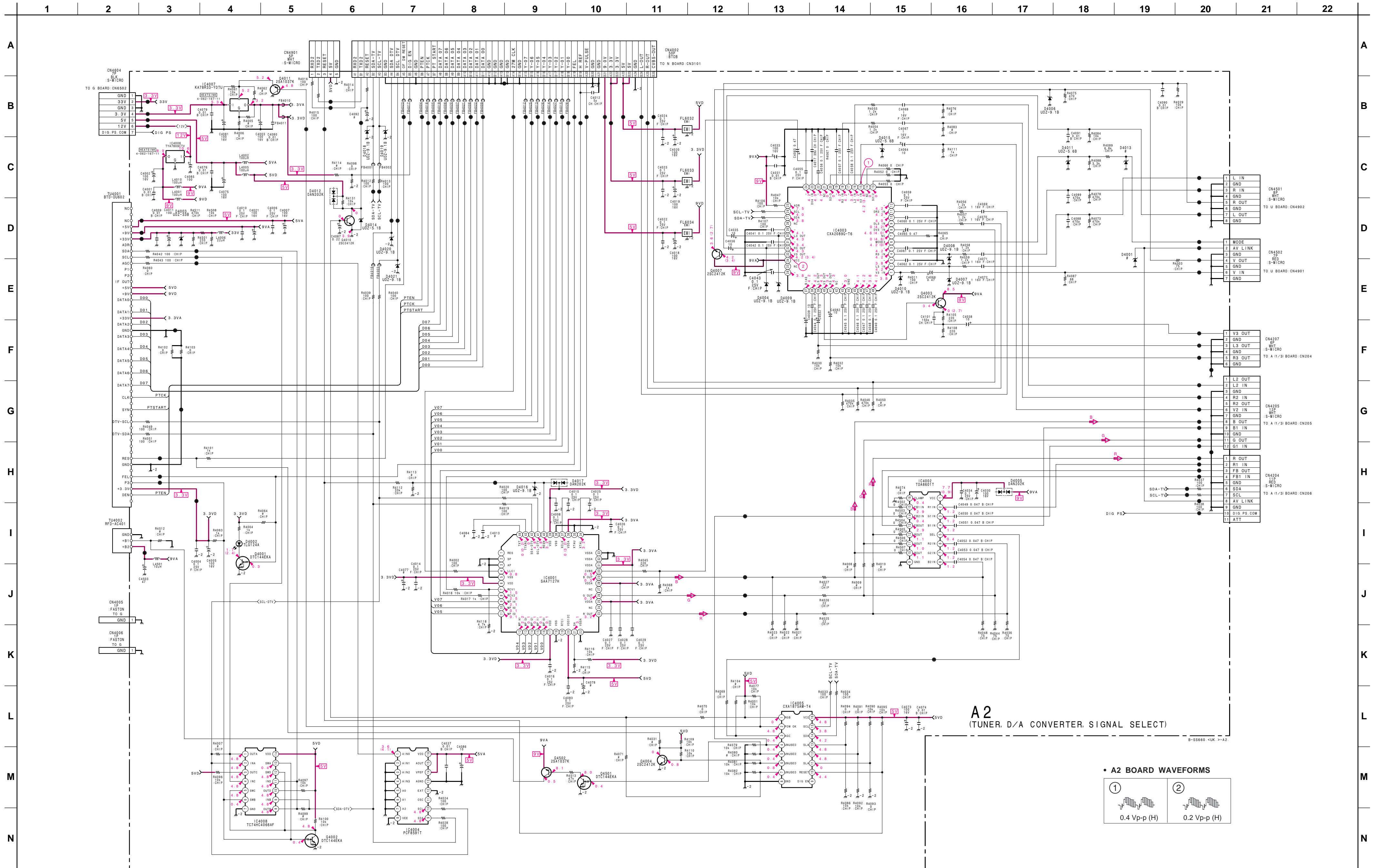


— A2 BOARD (Component Side) —

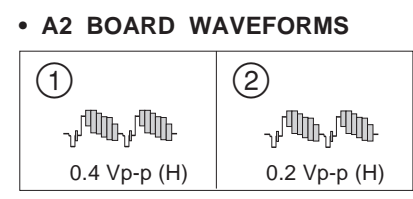


— A2 BOARD (Conductor Side) —





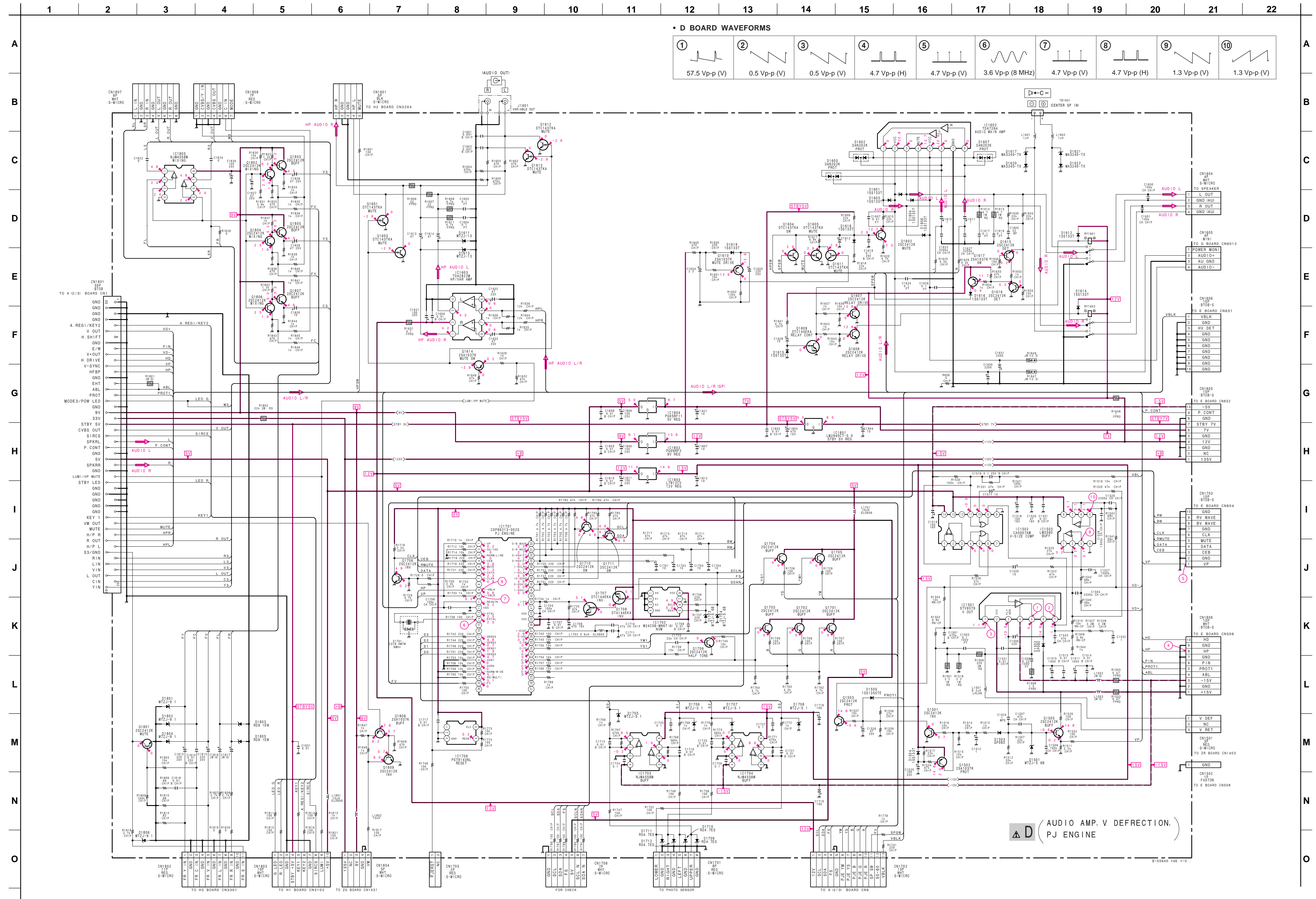
A2
(TUNER, D/A CONVERTER, SIGNAL SELECT)



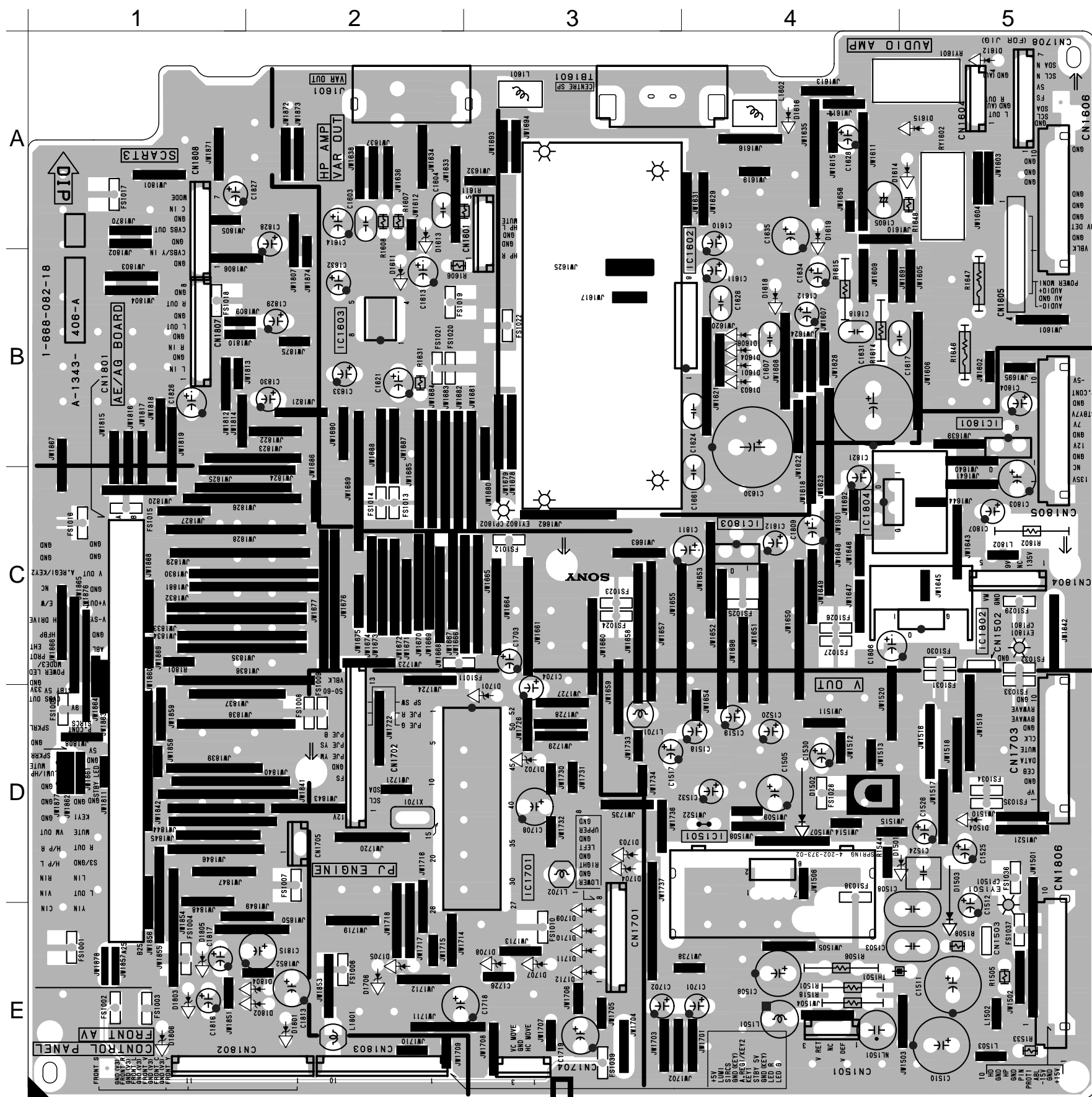
Schematic diagram
← **A2** board

Schematic diagram
D board →

(6) Schematic Diagram of D Board



— D BOARD (Component Side) —



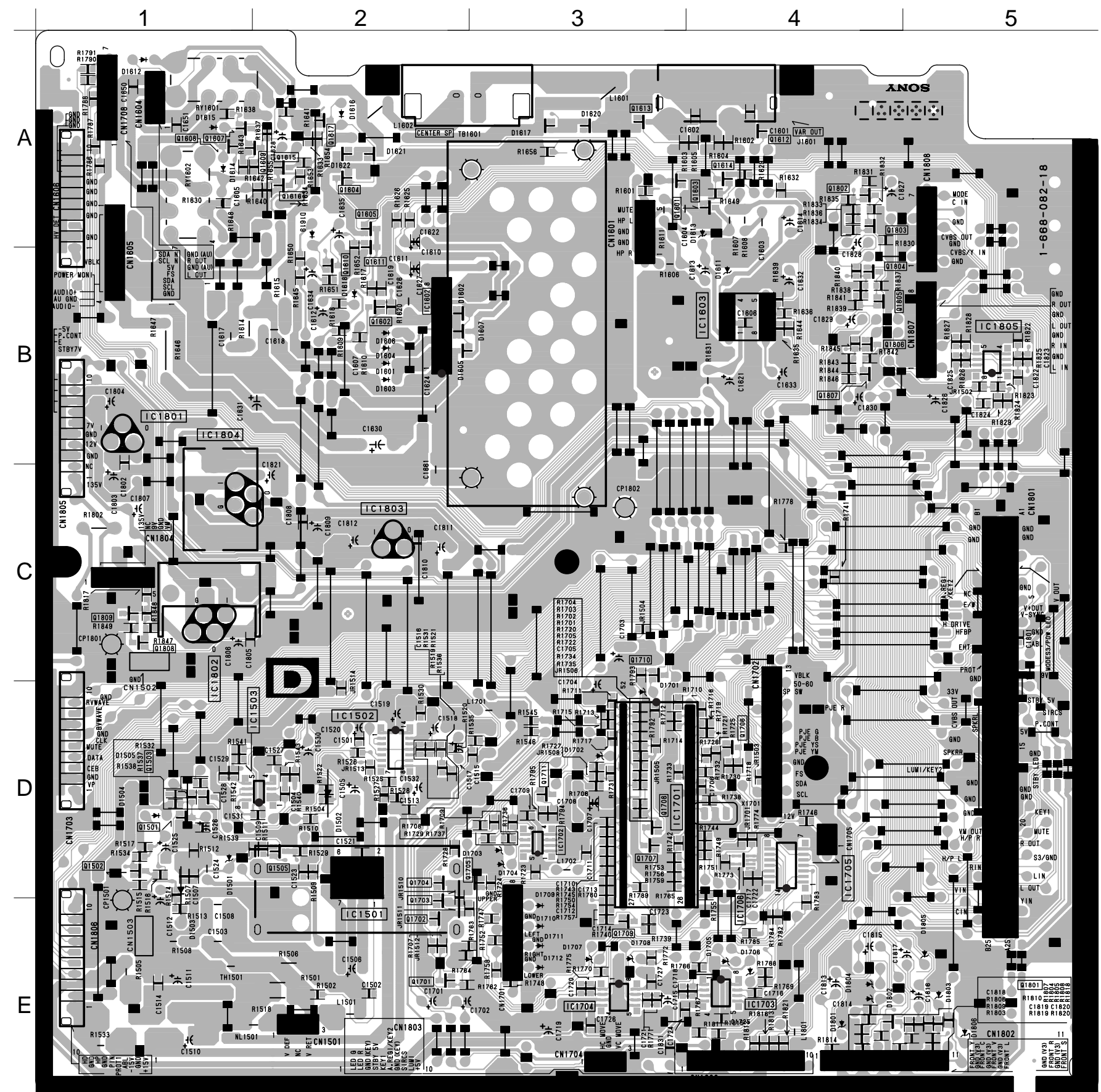
• D BOARD SEMICONDUCTOR LOCATION

IC		DIODE	
(Component Side)	(Conductor Side)	(Component Side)	(Conductor Side)
IC1501	D-4	D1501	D-4
IC1502	D-2	D1502	D-4
IC1503	D-2	D1503	D-5
IC1602	B-4	D1601	B-4
IC1603	B-2	D1602	B-2
IC1701	D-3	D1603	B-4
IC1702	D-3	D1604	B-4
IC1703	E-4	D1605	B-2
IC1704	E-3	D1606	B-2
IC1706	D-4	D1607	B-2
IC1801	B-5	D1611	B-2
IC1802	C-5	D1612	A-5
IC1803	C-4	D1613	A-2
IC1804	C-4	D1614	A-4
IC1805	B-5	D1615	A-5
		D1616	A-4
		D1617	A-3
		D1618	B-4
		D1619	A-4
		D1620	A-3
		D1621	A-2
		D1622	A-2
		D1703	D-3
		D1704	D-3
		D1705	E-2
		D1706	E-4
		D1707	E-3
		D1708	E-3
		D1709	E-3
		D1710	E-3
		D1711	E-3
		D1712	E-3
		D1801	E-2
		D1802	E-4
		D1803	E-1
		D1804	E-2
		D1805	E-1
		D1806	E-1

TRANSISTOR	
(Component Side)	(Conductor Side)
Q1501	D-1
Q1502	D-1
Q1503	D-1
Q1505	D-2
Q1601	A-4
Q1602	B-2
Q1603	A-4
Q1604	A-2
Q1605	A-2
Q1607	A-1
Q1608	A-1
Q1609	A-2
Q1610	B-2
Q1611	B-2
Q1612	A-4
Q1613	A-3
Q1614	A-4
Q1615	A-2
Q1616	A-2
Q1617	A-2
Q1701	E-2
Q1702	E-2
Q1703	E-2
Q1704	D-2
Q1705	D-2
Q1706	D-4
Q1707	D-3
Q1708	D-3
Q1709	E-3
Q1710	C-3
Q1711	D-3

*: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 68)

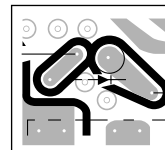
— D BOARD (Conductor Side) —



• E BOARD SEMICONDUCTOR LOCATION

IC	DIODE
IC501	B-3
IC801	B-1
IC802	B-2
IC803	B-1
IC804	D-4
IC805	B-3
IC806	D-2
IC807	A-3
IC808	D-1
IC809	E-2
IC810	E-3
IC811	A-3
IC812	A-2
IC813	A-2
IC814	A-3
D501	B-3
D502	C-3
D503	A-5
D504	B-3
D507	B-3
D508	C-5
D509	C-5
D510	E-4
D511	B-5
D512	A-6
D513	C-6
D514	E-7
D515	C-7
D517	B-6
D519	E-2
D524	C-4
D527	B-4
D560	C-3
D701	B-1
D702	C-2
D820	C-1
D828	B-1
D829	A-1
D835	C-3
D840	A-3
D842	A-3
D845	A-3
D846	A-3
D850	B-1
TRANSISTOR	
Q501	E-5
Q502	D-5
Q503	A-6
Q504	A-6
Q505	B-5
Q506	A-6
Q507	A-6
Q508	B-3
Q701	C-2
Q702	C-2
Q801	A-1
Q802	B-1
Q803	A-1
Q804	A-1
Q805	B-1
Q806	A-1
Q808	A-1
Q809	E-2
Q810	E-4

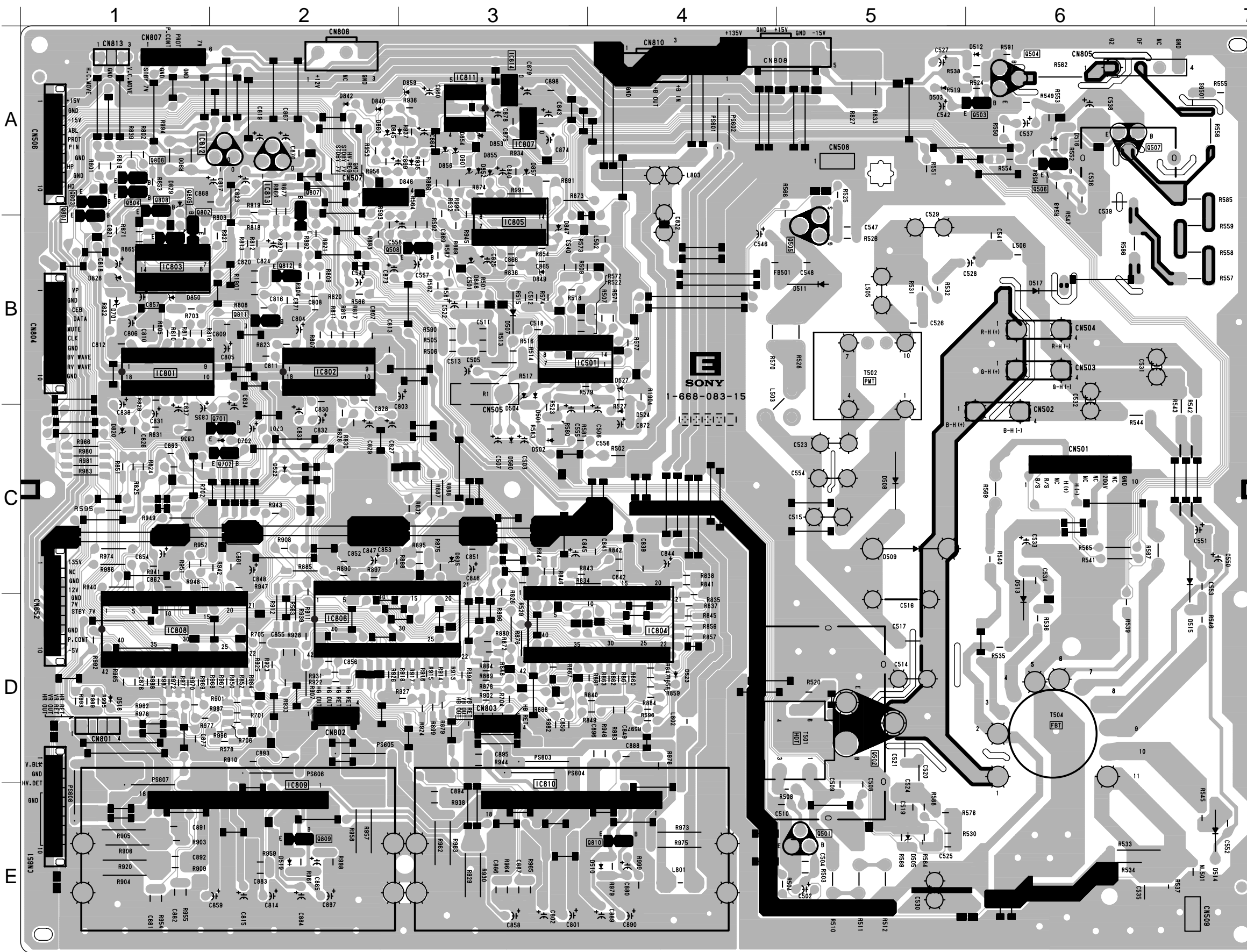
*: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 68)



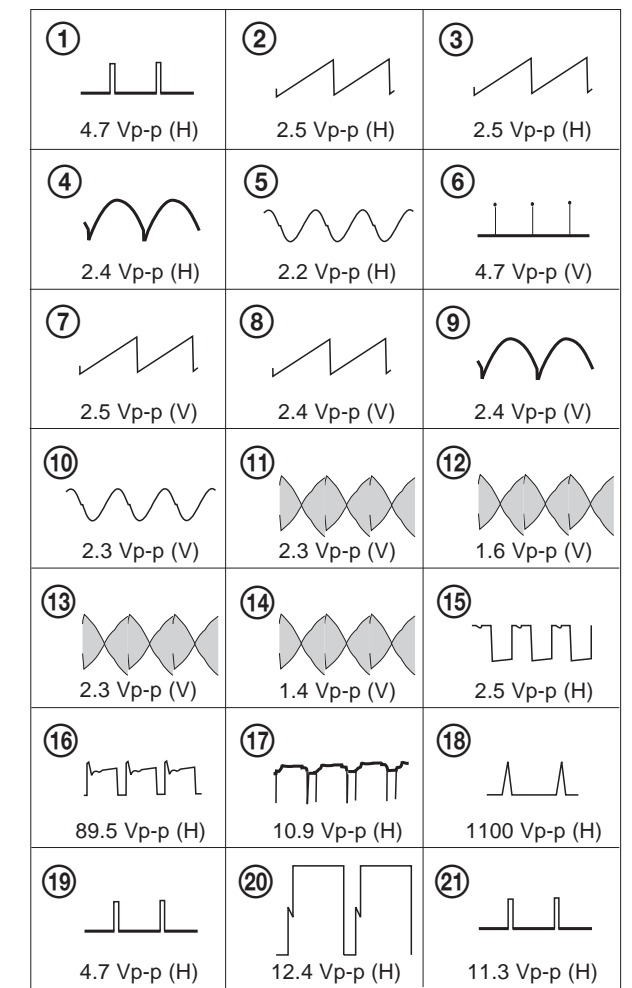
NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

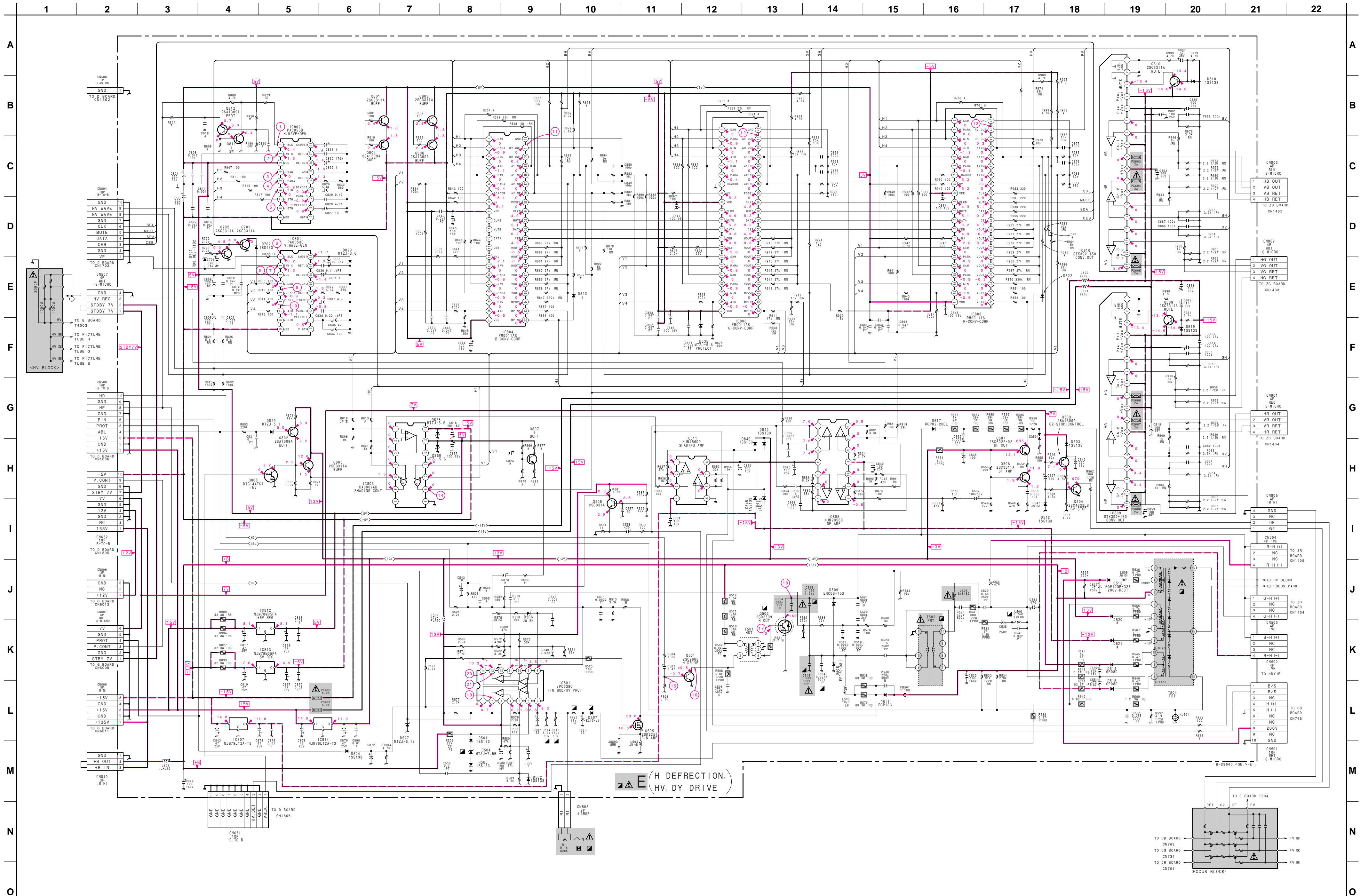
E [H DEFLECTION,
HV, DY DRIVE]

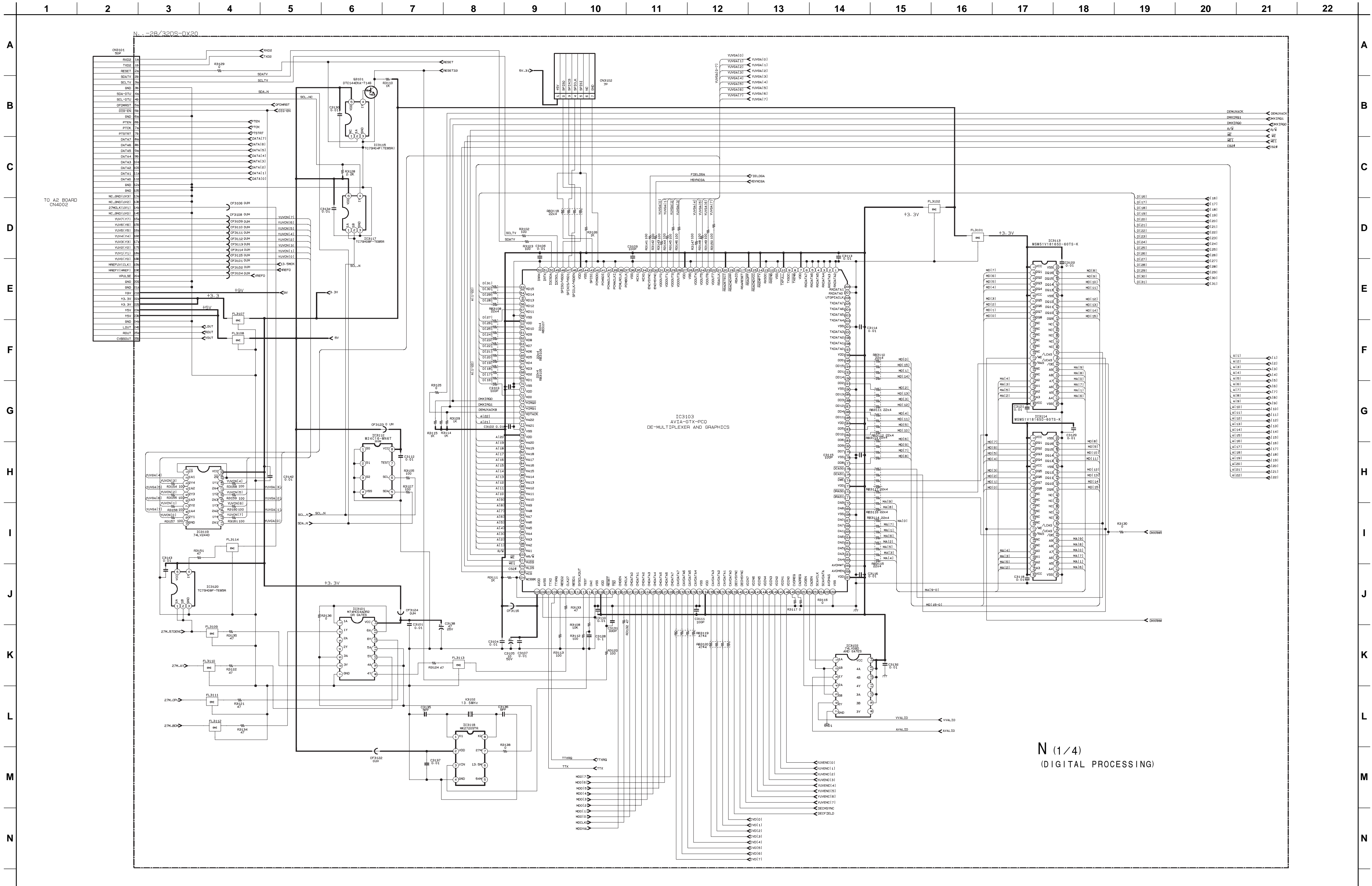
— E BOARD —



• E BOARD WAVEFORMS

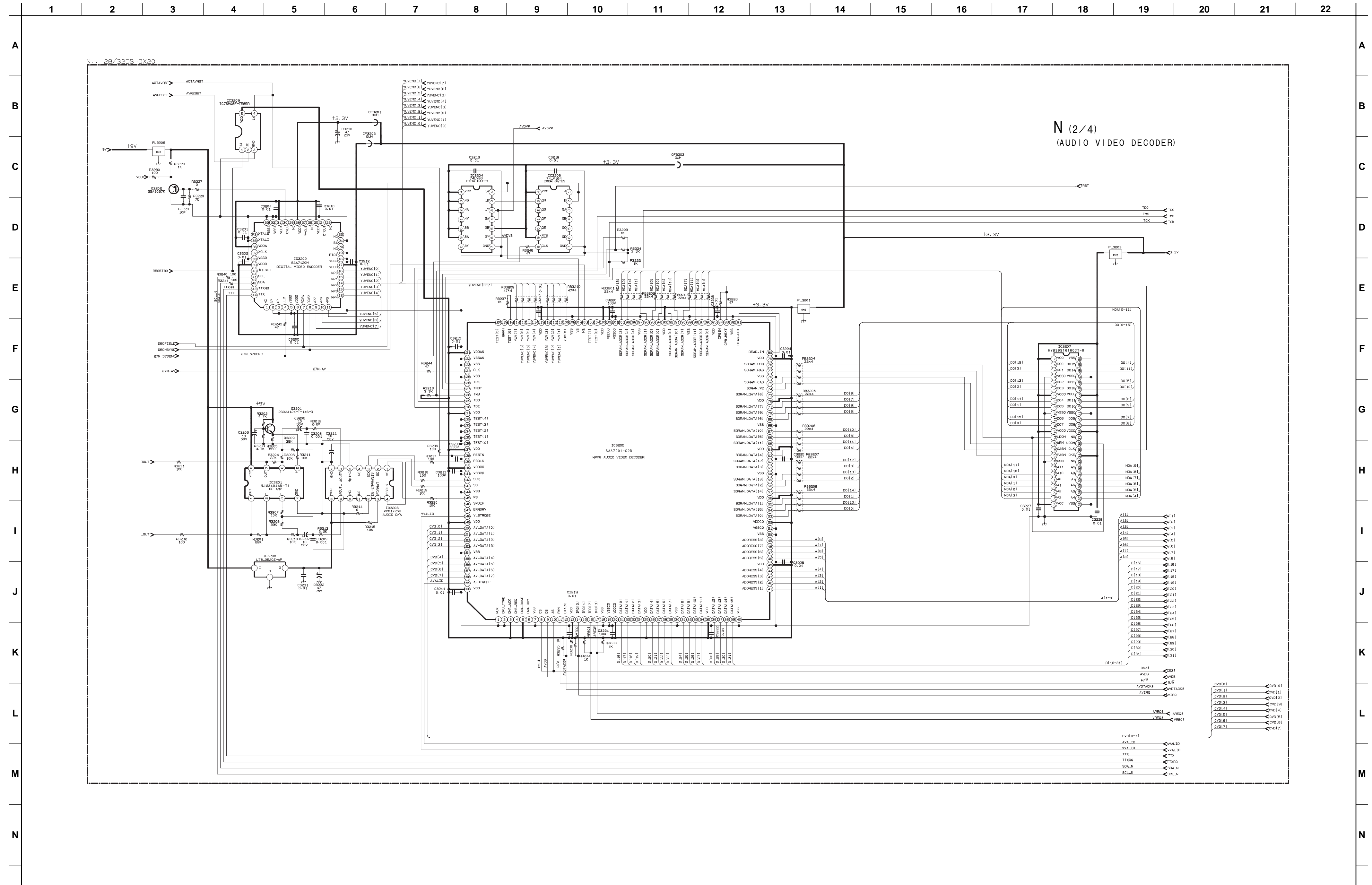






N (1/4)
(DIGITAL PROCESSING)

(10) Schematic Diagram of N (2/4) Board



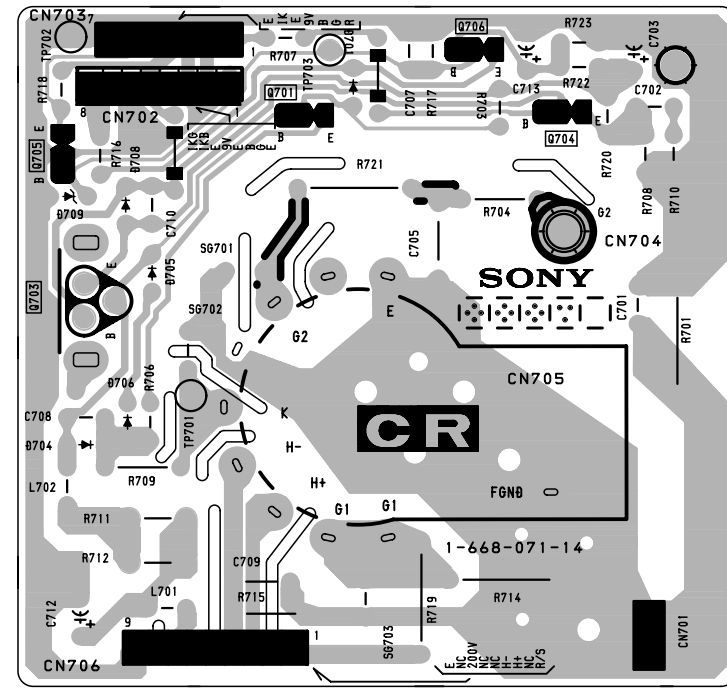
CR [RED AMP]

CG [GREEN AMP]

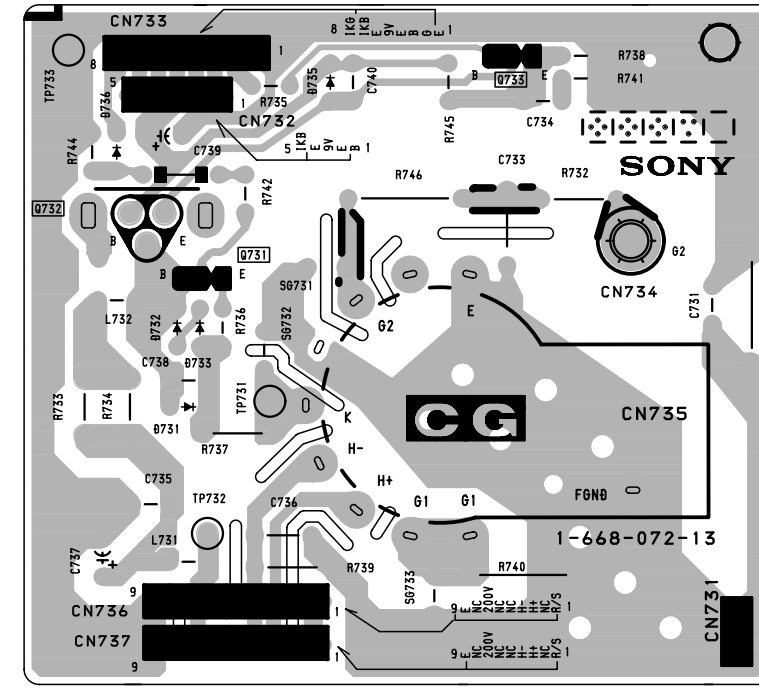
CB [BLUE AMP]

NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

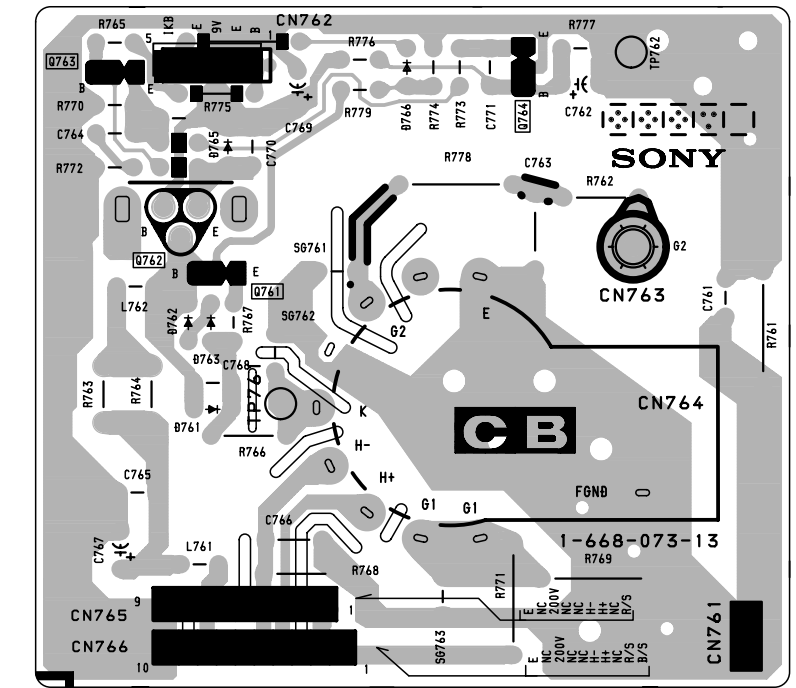
— CR BOARD —



— CG BOARD —

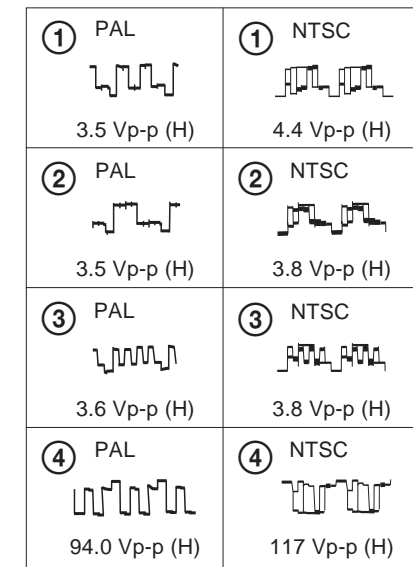


— CB BOARD —

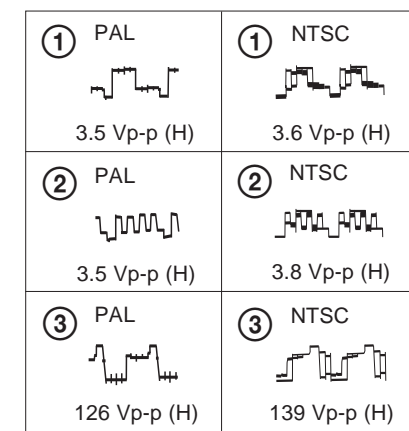


(13) Schematic Diagrams of CB, CG and CR Boards

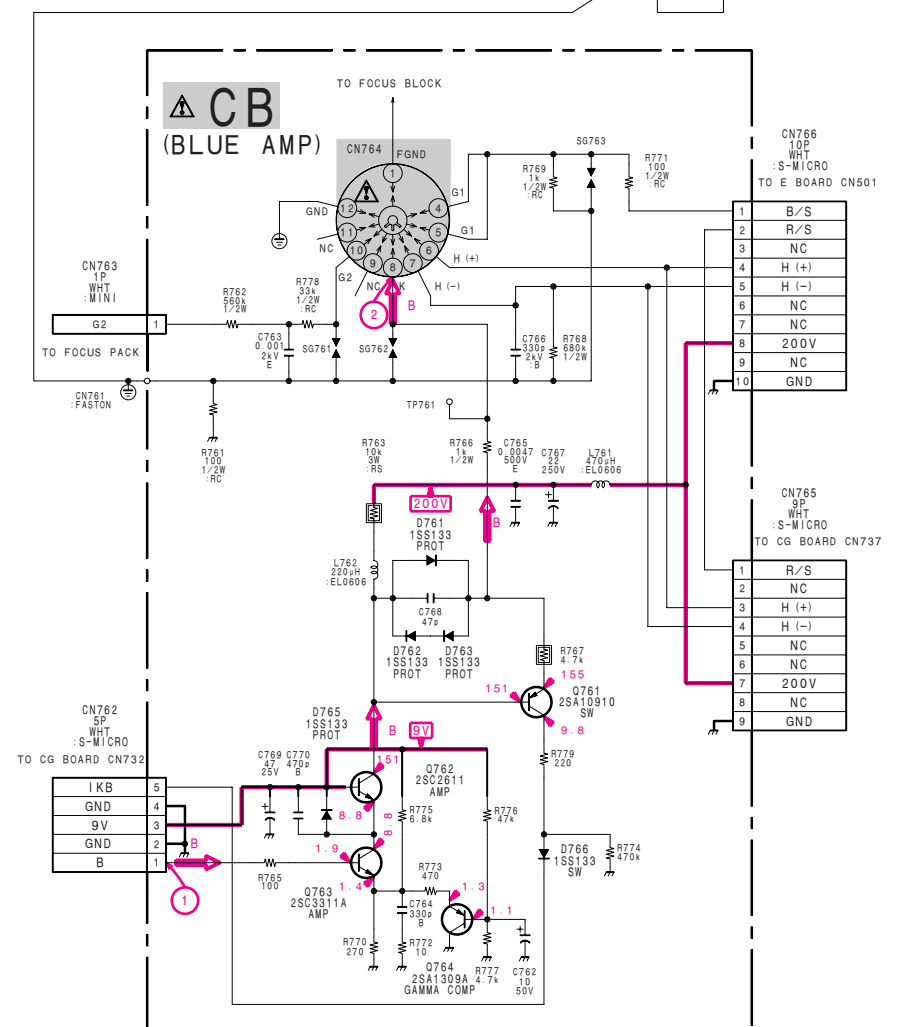
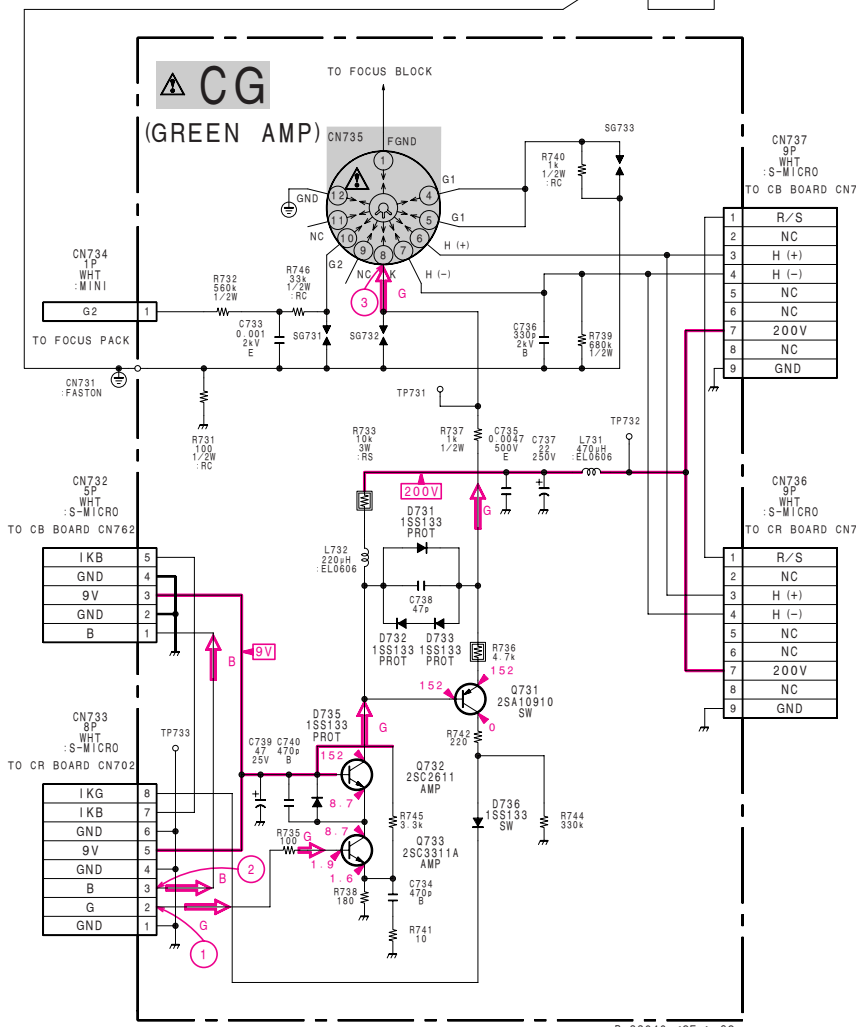
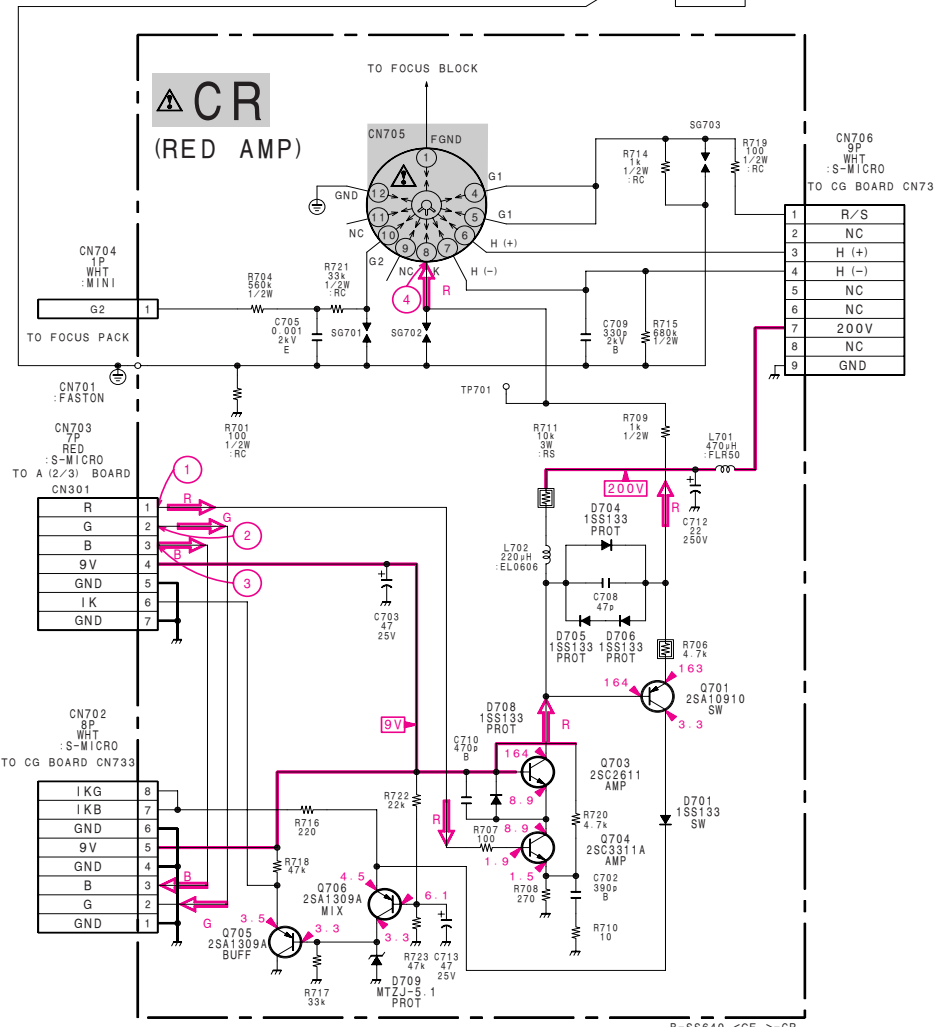
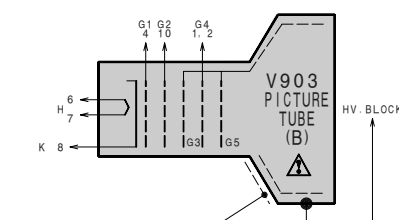
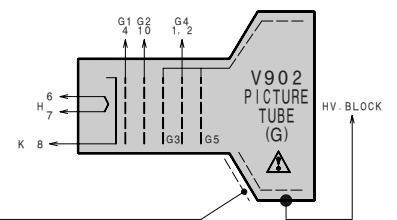
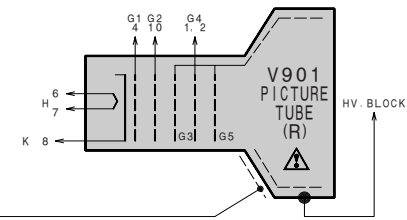
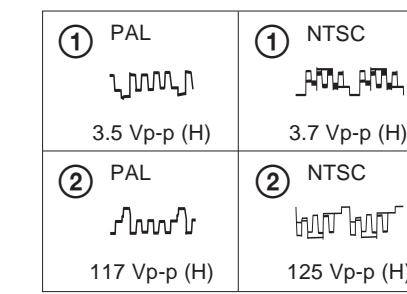
• CR BOARD WAVEFORMS

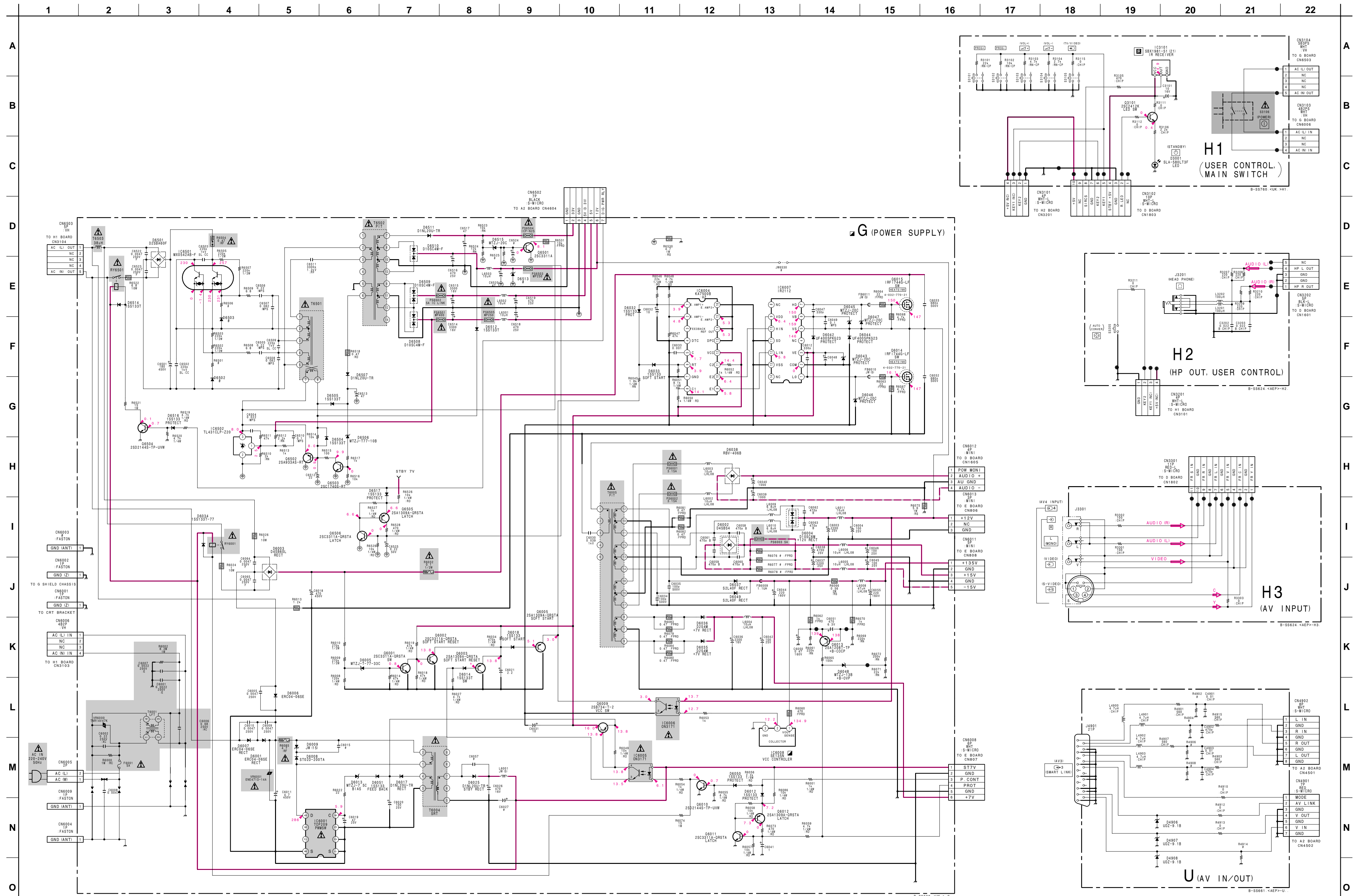


• CG BOARD WAVEFORMS



• CB BOARD WAVEFORMS



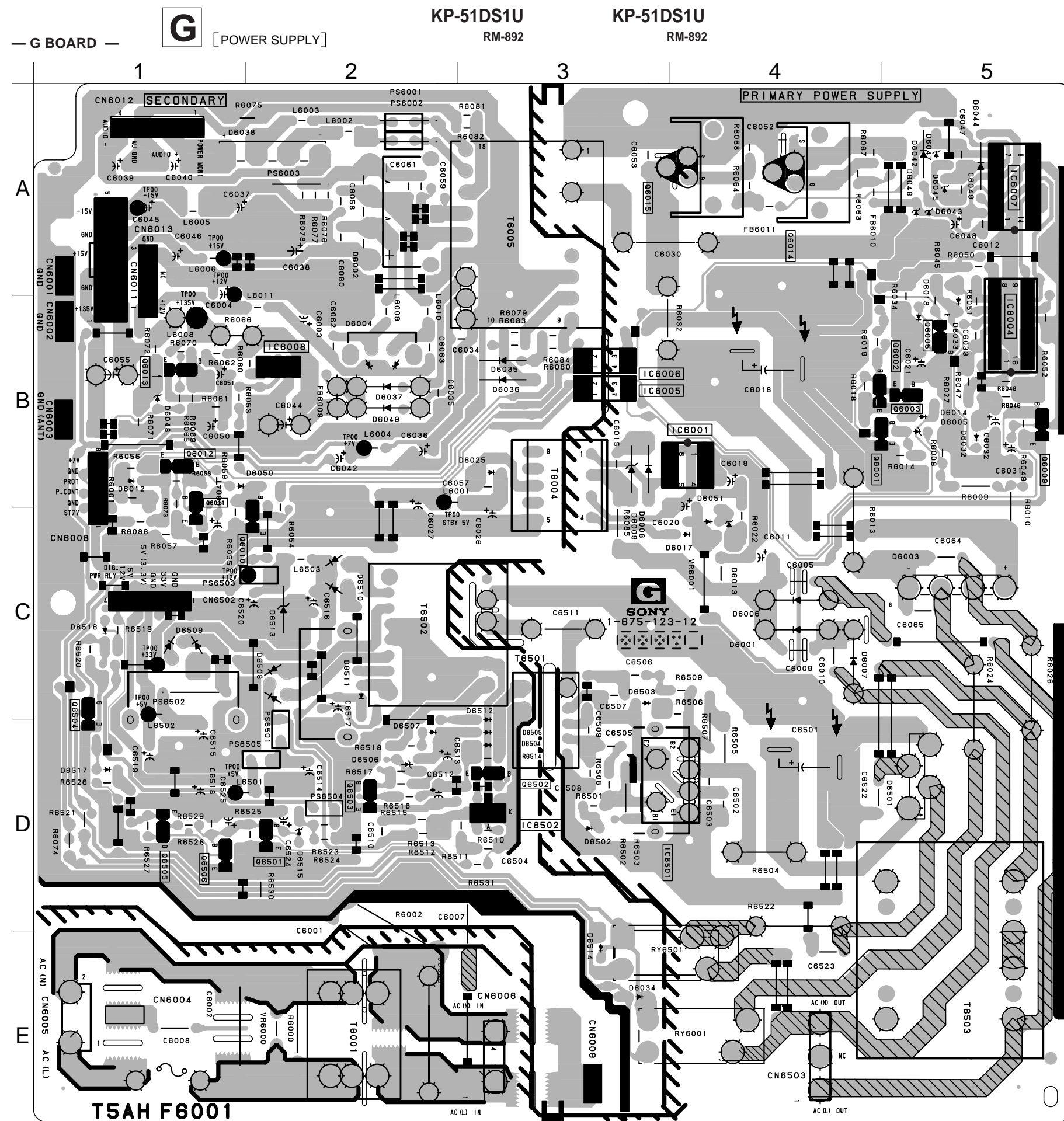


• G BOARD SEMICONDUCTOR LOCATION

IC	
IC6001	B-4
IC6004	B-5
IC6005	B-3
IC6006	B-3
IC6007	A-5
IC6008	B-2
IC6501	D-3
IC6502	D-3

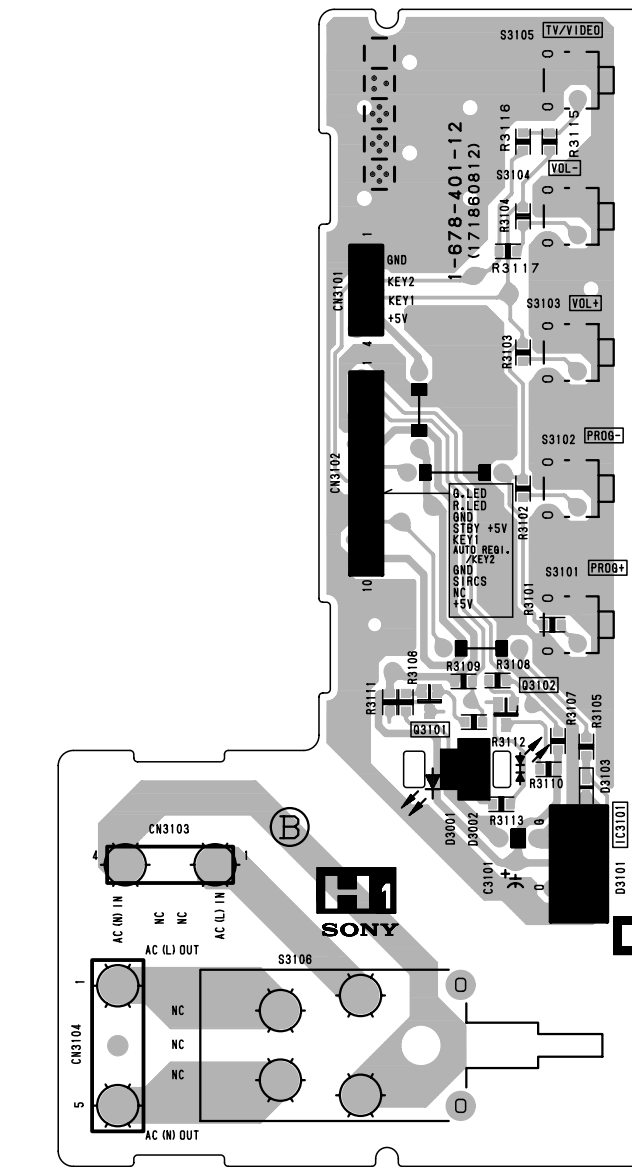
TRANSISTOR	
Q6001	B-4
Q6002	B-4
Q6003	B-5
Q6005	B-5
Q6009	B-5
Q6010	C-2
Q6011	B-1
Q6012	B-1
Q6013	B-1
Q6014	A-4
Q6015	A-4
Q6501	D-2
Q6502	D-3
Q6503	D-2
Q6504	C-1
Q6505	D-1
Q6506	D-1

DIODE	
D6001	C-4
D6002	A-2
D6003	C-5
D6004	B-2
D6005	B-5
D6006	C-4
D6007	C-4
D6008	B-3
D6012	B-1
D6013	C-4
D6014	B-5
D6017	C-4
D6018	B-5
D6025	B-3
D6032	B-5
D6033	B-5
D6034	E-3
D6035	B-3
D6036	B-3
D6037	B-2
D6038	A-2
D6042	A-5
D6043	A-5
D6044	A-5
D6045	A-5
D6046	A-5
D6047	A-5
D6048	B-1
D6049	B-2
D6050	B-1
D6051	C-4
D6501	D-5
D6504	D-3
D6505	D-3
D6506	D-2
D6507	D-2
D6508	C-2
D6509	C-1
D6510	C-2
D6511	C-2
D6512	D-3
D6514	E-3
D6515	D-2
D6516	C-1
D6517	D-1



H1 [USER CONTROL, MAIN SWITCH]

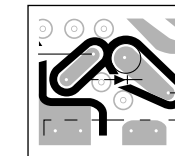
- H1 BOARD -



H1 BOARD
Terminal name of semiconductors in silk screen printed circuit (*):

Ref.	*
Q3101	①

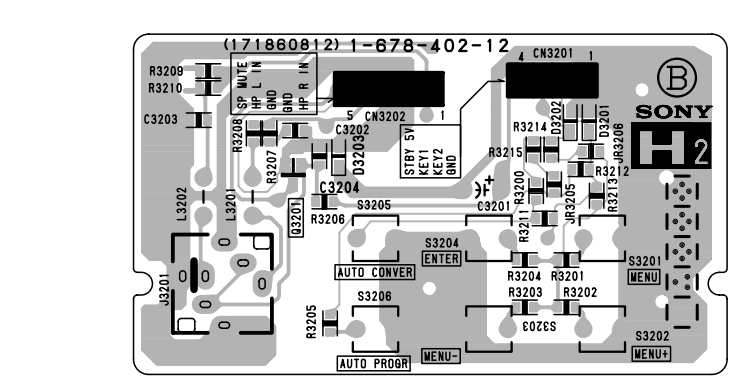
*: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 68)



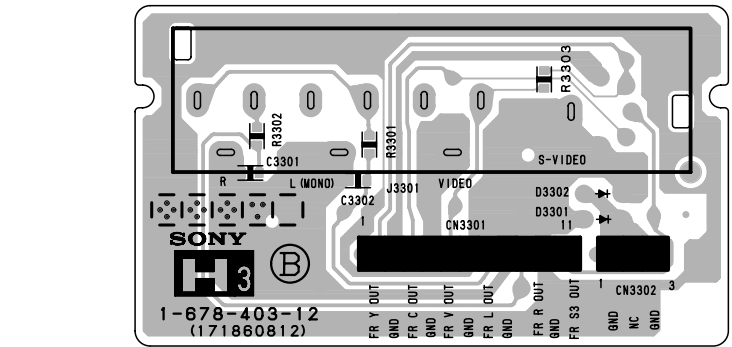
NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

H2 [HP OUT, USER CONTROL]

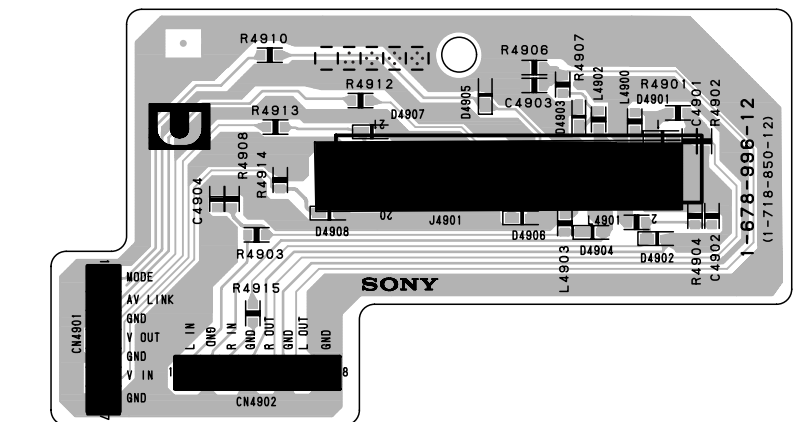
- H2 BOARD -



- H3 BOARD -



- U BOARD -



U BOARD
Terminal name of semiconductors in silk screen printed circuit (*):

Ref.	*
D4906 - D4908	③

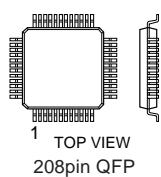
*: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 68)

7-5. SEMICONDUCTORS

AN77L12-TA
NJM78L12A-T3
NJM79L12A
NJM79L12A-T3

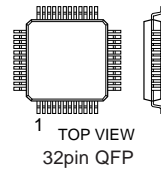


AVIA-GTX-PCO

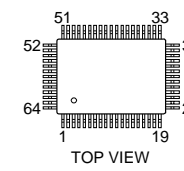


BA7046BF-T1
BA7046F
LM358D
LM358DR
M24C08-MN6T(A)
M24C64-WMN6T
M24C64-WMN6T(A)
MK2720STR
NJM2234M(T1)
NJM3404AM-TE1
NJM4558M-TE2
µPC4558G2

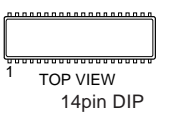
CXA2040AQ-T4



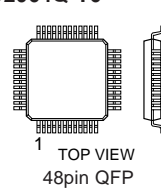
CXA2076Q-TL



CA0007AD
IR2112
NJM2058D

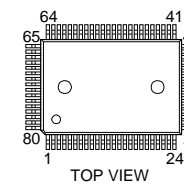


CXA2089Q-T6

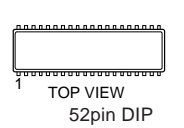


CA0007AM
MC14066BF
MC14066BFEL
MC74HC00AFEL
MC74HC04ADR2
MC74HC74AFEL
PCM1725U
TC74HC4066AF
74LV00D-118
74LV08D-118
74LV11D-118
74LV164D-118
74LV86D-118

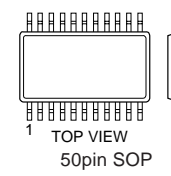
CXD1957AQ-TL



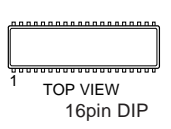
CXP86213-003S



HYB39S16160CT-8



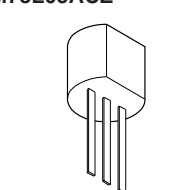
KA7500B



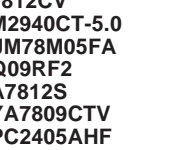
KA78R33-YDTU



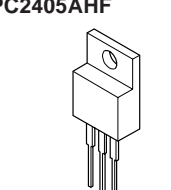
L78L05ACZ-AP



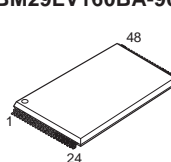
L7809CV/LSY



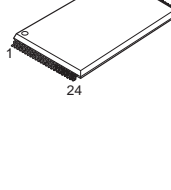
L7812CV



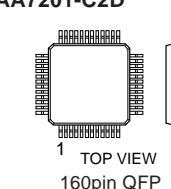
MBM29LV160B-90PFTN



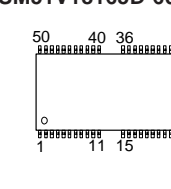
MBM29LV160BA-90PFTNBE-02



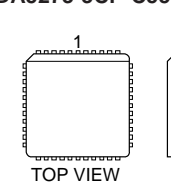
MCF5206EFT25



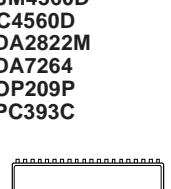
MSM51V18165D-60TS-K



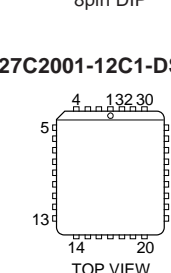
MSP3410D-C5-PS-B4



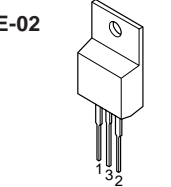
M24C16-MN6T



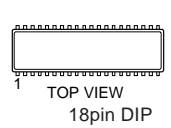
M27C2001-12C1-DS02



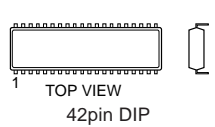
NJM79M05FA



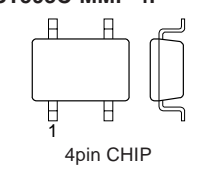
PA0053B



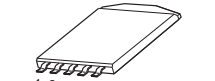
PM0011AS



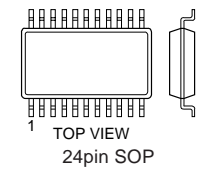
PST575DMT-T1



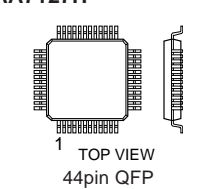
PST9143NL



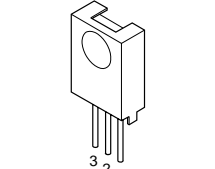
SAA4981T-T



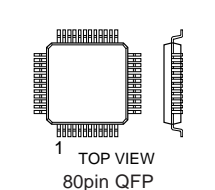
SAA7120H/V1



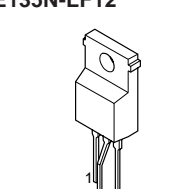
SBX1981-51(21)



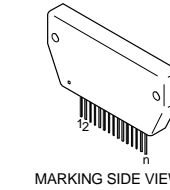
SDA30C263-GEG



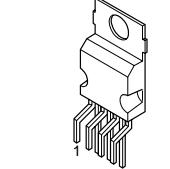
SE-135N



STK392-150



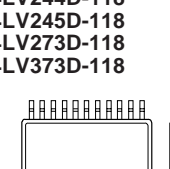
STV9379



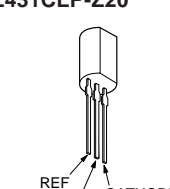
TC4S66F



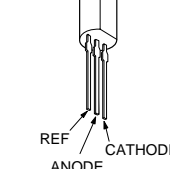
TDA8395T/N3



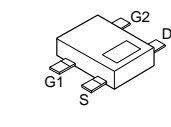
TL431CLP



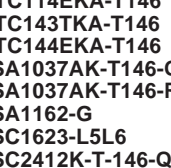
TL431CLP-Z20



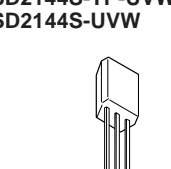
BSS83



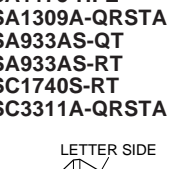
DTA144EKA-T146



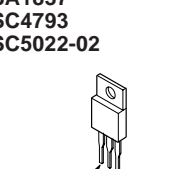
DTC144ESA-TP



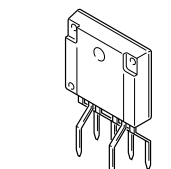
DTC144ESA



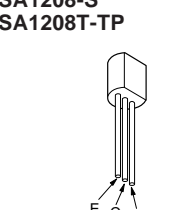
IRF1744G-LF



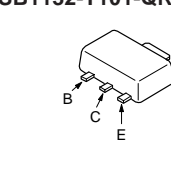
MX0542AB-F



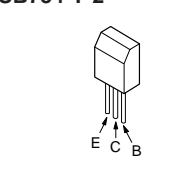
2SA1091O-TPE2



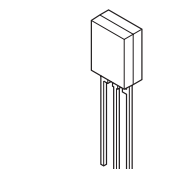
2SB1115A-YQ



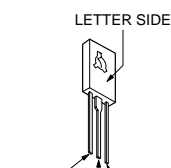
2SB734-34



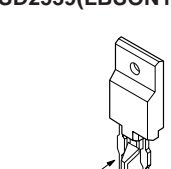
2SC2611-15



2SC2688-LK



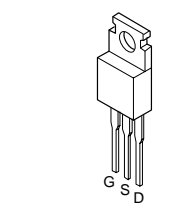
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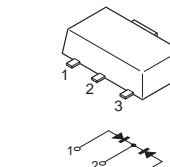
2SC4793



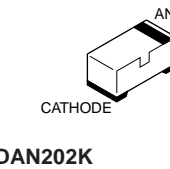
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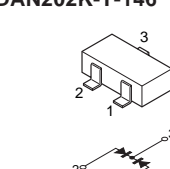
BAS16



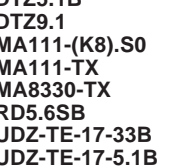
BAS216



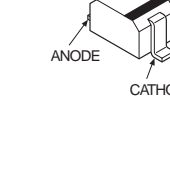
DAN202K



DTZ33B



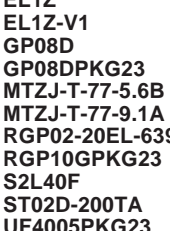
D2S4M



D4SB60L



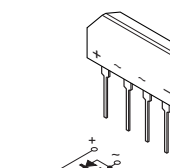
D1NL20U-TR



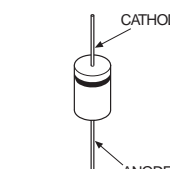
D10SC4M



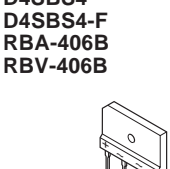
D2SBA60F



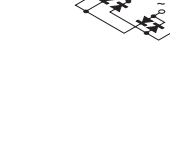
D2S4M



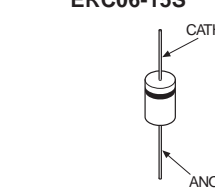
D4SB60L



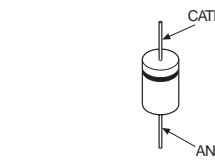
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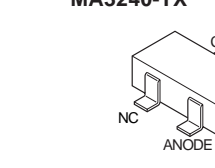
ERC04-06SE



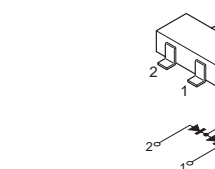
ERC06-15S



MA3030-H(TX)



MA3130WA-TX



ON3171-R



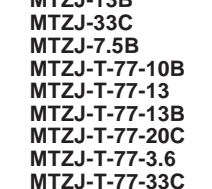
RD9.1EW



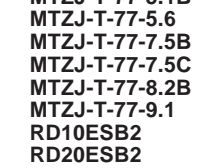
SLA-580LT3F



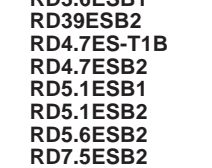
MTZJ-13



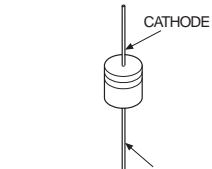
MTZJ-13B



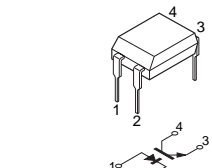
MA3030-H(TX)



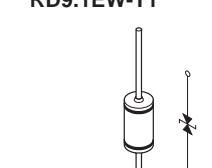
MA3130WA-TX



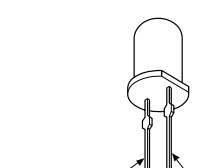
ON3171-R



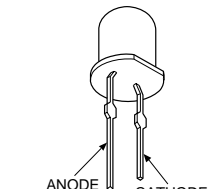
RD9.1EW



SLA-580LT3F



TLG124A



SECTION 8 EXPLODED VIEWS

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

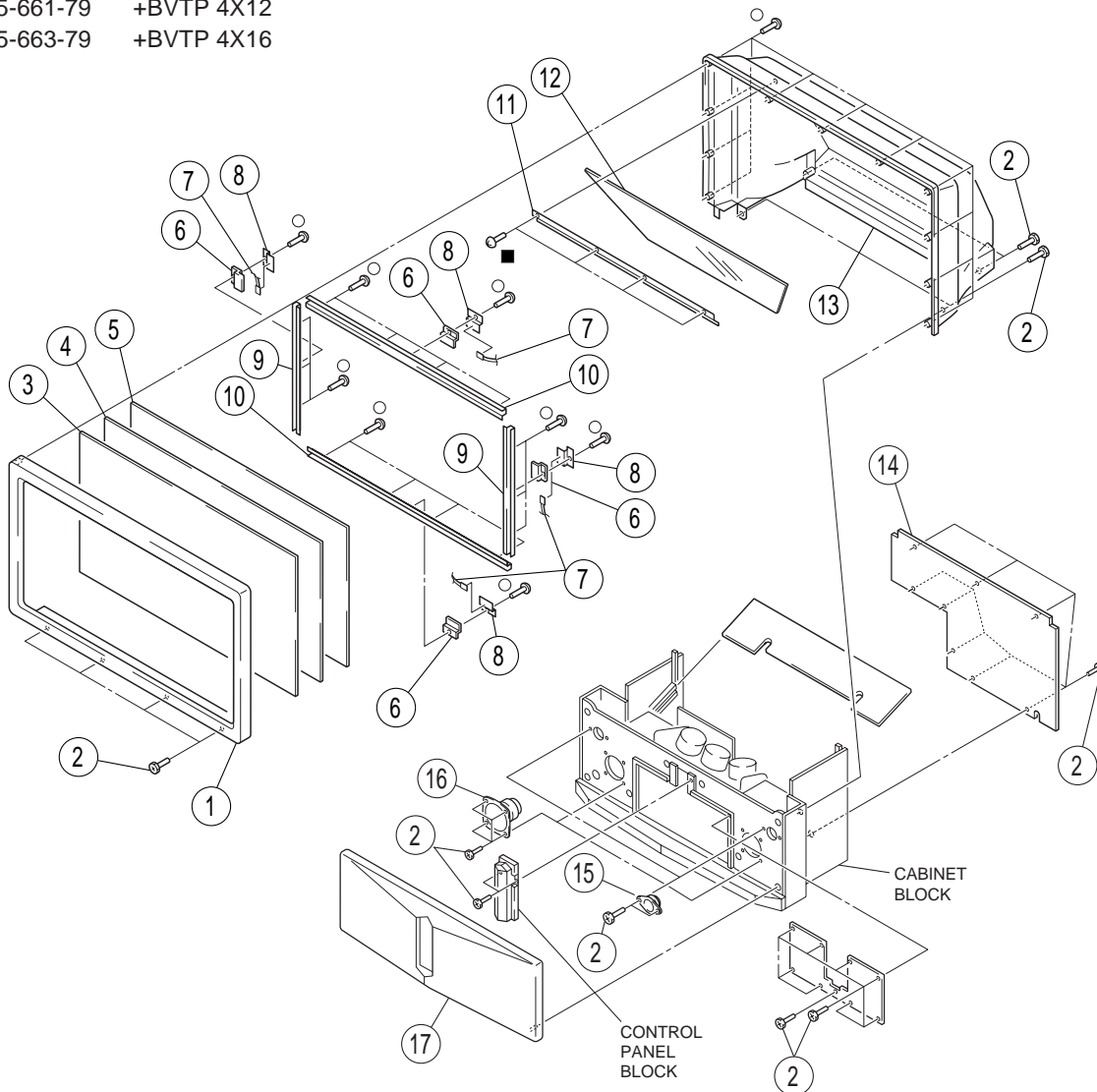
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

8-1. SCREEN AND COVER BLOCK

■ : 7-685-661-79 +BVTP 4X12

○ : 7-685-663-79 +BVTP 4X16

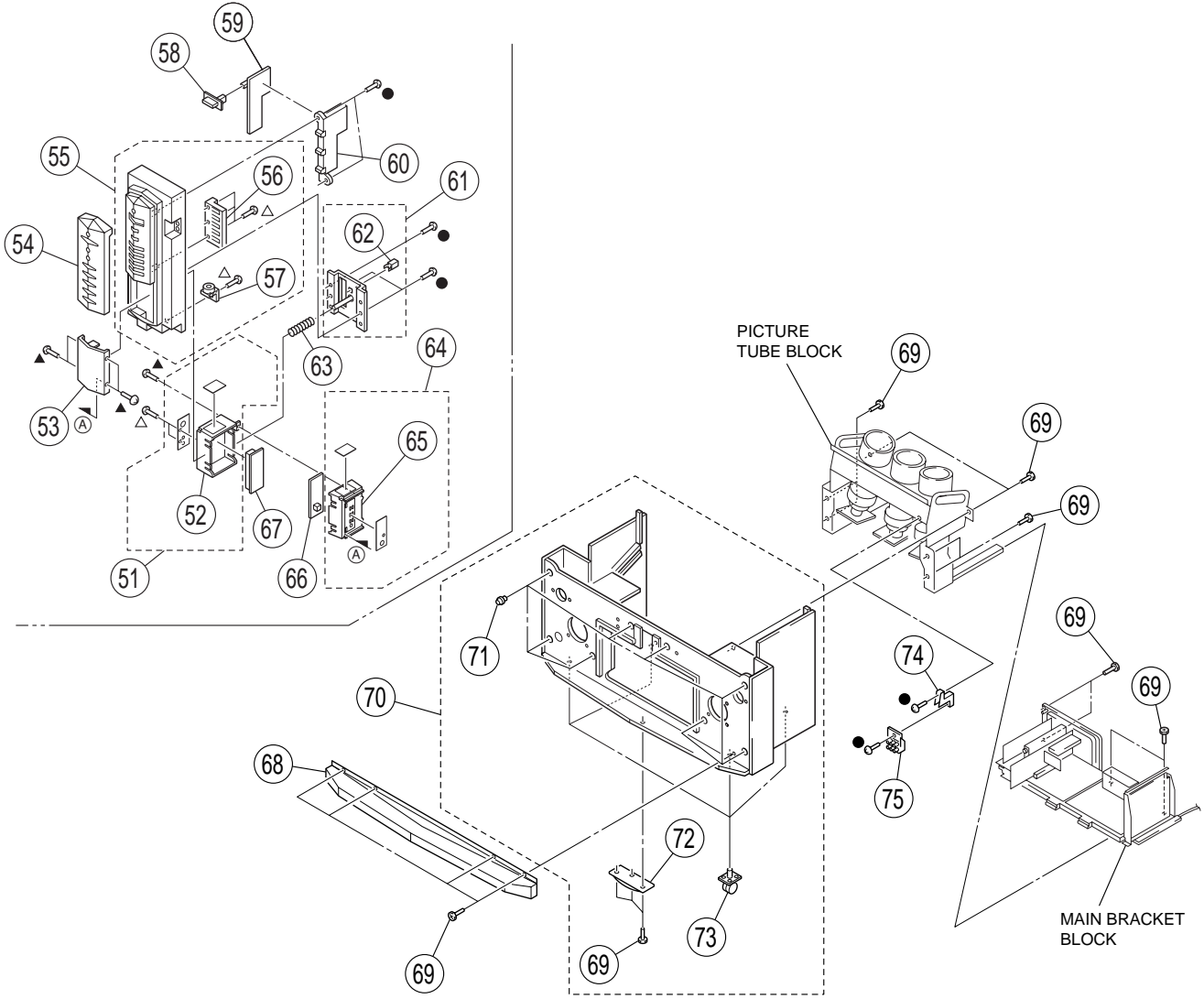


REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
1	X-4200-647-1	BEZNET (51) ASSY		10	* 4-075-269-01	HOLDER (53) L, SCREEN	
2	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD		11	* 4-075-234-01	HOLDER (TOP), MIRROR	
3	4-076-575-11	SCREEN (51W), CONTRAST		12	4-075-872-01	MIRROR (51)	
4	4-076-573-11	PLATE (51WL), DIFFUSION		13	* 4-075-866-01	COVER (51), MIRROR	
5	4-076-574-11	PLATE (51WF), DIFFUSION		14	* 4-075-868-01	BOARD (51), REAR	
6	* 4-205-155-01	COVER, SENSOR		15	1-529-403-11	SPEAKER (6.6 CM)	
7	1-528-864-11	BATTERY, SOLAR		16	1-529-643-11	SPEAKER (13 CM)	
8	* 4-066-132-01	HOLDER, SENSOR		17	X-4037-604-1	GRILLE ASSY, SPEAKER	
9	* 4-076-698-31	HOLDER, SCREEN					

8-2. CONTROL PANEL AND CABINET BLOCK

- ▲ : 7-685-534-19 +BTP 2.6X8
- △ : 7-685-648-79 +BTP 3X12
- : 7-685-663-71 +BVTP 4X16

The components identified by shading and mark △ are critical for safety. Replace only with part number specified.

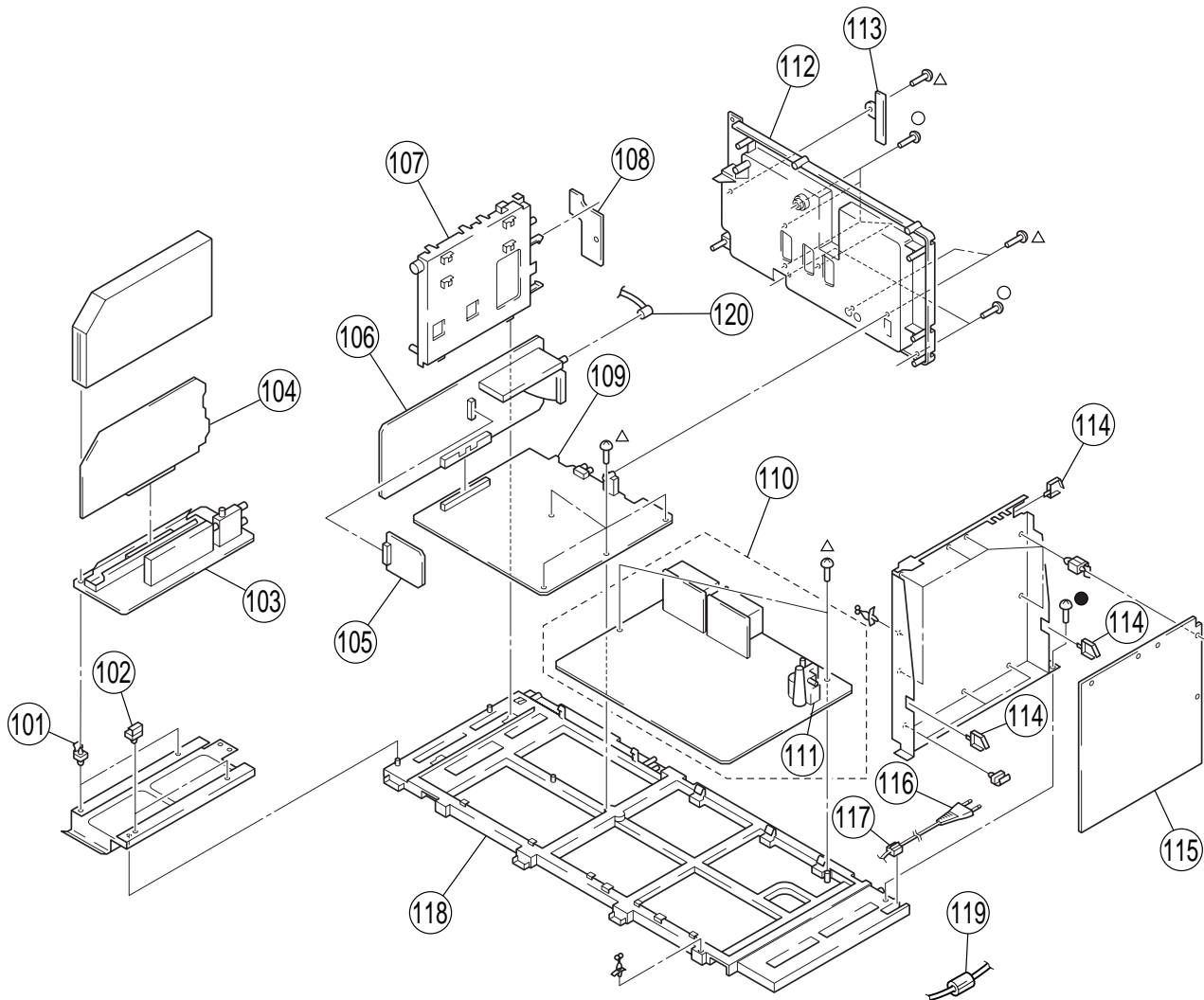


REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
51	X-4200-645-1	TRAY (L) ASSY	52	64	X-4037-625-2	TRAY (R) ASSY	65
52	4-072-001-03	TRAY (L)		65	4-072-000-12	TRAY (R)	
53	4-071-999-21	PANEL (T)		66	* A-1372-758-A	H2 BOARD, COMPLETE	
54	4-072-007-11	PANEL (C)		67	* A-1646-226-A	H3 BOARD, COMPLETE	
55	X-4037-024-6	PANEL ASSY, CONTROL	56, 57	68	* 4-074-349-01	SKIRT (53), FRONT	
56	4-071-997-01	BUTTON, MULTI		69	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD	
57	4-919-393-01	DAMPER		70	X-4200-646-1	CABINET (51) ASSY, BOTTOM 69, 71-73	
58	4-071-995-01	BUTTON, POWER		71	4-063-421-02	LATCH (K)	
59	* A-1646-225-A	H1 BOARD, COMPLETE		72	4-075-874-01	FOOT, PLASTIC	
60	* 4-071-998-01	BRACKET (HA)		73	* 4-075-244-01	CASTER (DIA. 30)	
61	X-4037-221-2	HOLDER ASSY, TRAY	62	74	* 4-054-825-01	BRACKET, FOCUS PACK	
62	4-047-464-01	CATCHER, PUSH		75	△ 1-223-925-41	RESISTOR ASSY (HIGH-VOLTAGE) (FOCUS PACK)	
63	4-075-242-01	SPRING (T)					

8-3. MAIN BRACKET BLOCK

- △ : 7-685-648-79 +BVTP 3X12
- : 7-685-663-79 +BVTP 4X16
- : 7-685-663-71 +BVTP 4X16

The components identified by shading and mark △ are critical for safety. Replace only with part number specified.

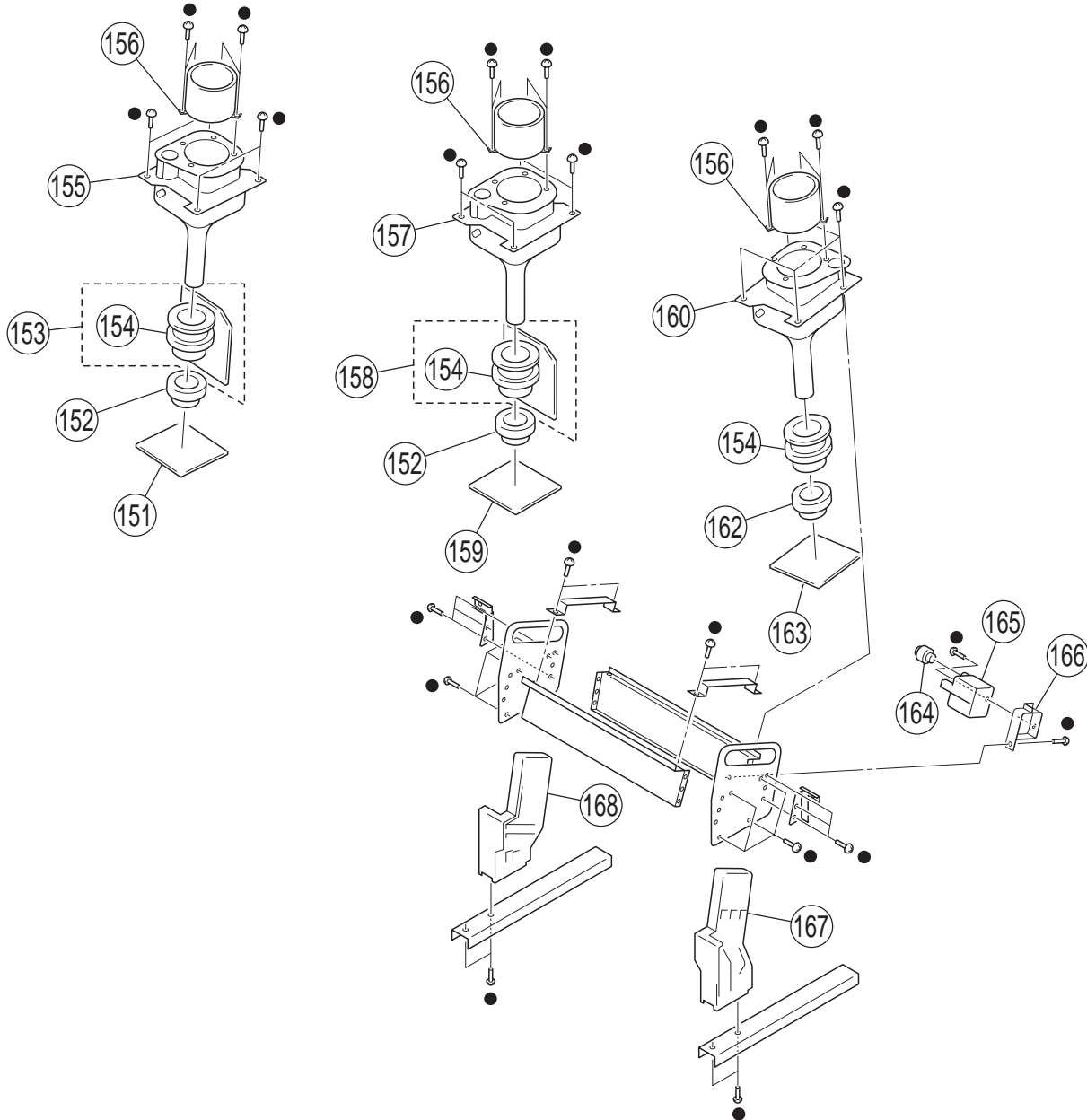


REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
101	* 3-703-141-00	HOLDER, PRINTED CIRCUIT BOARD		111	△ 1-453-331-11	TRANSFORMER ASSY, FLYBACK NX-4012//M	
102	* 3-659-682-11	HOLDER, PRINTED CIRCUIT BOARD		112	4-205-136-01	BOARD, TERMINAL	
103	* A-1631-046-A	A2 BOARD, COMPLETE		113	4-204-656-11	COVER, PCMCIA	
104	* A-1654-043-A	N BOARD, COMPLETE		114	* 4-316-015-00	HOLDER, WIRE	
105	* A-1631-061-A	A3 BOARD, COMPLETE		115	* A-1636-047-A	G BOARD, COMPLETE	
106	* A-1632-862-A	A BOARD, COMPLETE		116	△ 1-776-860-12	POWER CORD, FILTER (UK)	
107	* 4-062-536-01	BRACKET (A)		117	4-022-115-00	HOLDER, AC CORD	
108	* A-1648-032-A	U BOARD, COMPLETE		118	* 4-062-537-01	BRACKET, MAIN	
109	* A-1640-375-A	D BOARD, COMPLETE		119	1-543-653-11	CORE ASSY, BEAD (DIVISION TYPE)	
110	* A-1640-374-A	E BOARD, COMPLETE	111	120	* 1-555-400-00	CABLE, PIN	

8-4. PICTURE TUBE BLOCK

● : 7-685-663-71 +BVTP 4X16

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
151	* A-1638-133-A	CR BOARD, COMPLETE		160	Δ 8-733-575-15	PICTURE TUBE 07MAC3 (B) (C/D CPL)	
152	Δ 1-452-790-31	NECK ASSY		162	Δ 1-452-909-41	MAGNET ASSY, 4 POLE	
153	* A-1628-002-A	ZR BOARD, COMPLETE	154	163	* A-1638-135-A	CB BOARD, COMPLETE	
154	Δ 1-451-517-21	DEFLECTION YOKE		164	4-373-137-01	CAP (Z), RUBBER	
155	Δ 8-733-572-15	PICTURE TUBE 07MXC3 (R) (C/D CPL)		165	Δ 8-598-955-13	BLOCK ASSY, HV HVB-1030	
156	4-040-131-21	LENS (LINNIT POINT 6)		166	* 4-063-176-01	HOLHDER, HVR	
157	Δ A-1501-273-A	SEAL (G) ASSY, MECHANICAL		167	* 4-066-135-01	STAY (R), SIDE	
158	* A-1652-068-A	ZG BOARD, COMPLETE	154	168	* 4-066-134-01	STAY (L), SIDE	
159	* A-1638-134-A	CG BOARD, COMPLETE					

SECTION 9 ELECTRICAL PARTS LIST



NOTE:

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

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

The components identified by \square in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

• Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

• CAPACITORS
PF : $\mu\mu\text{F}$

• There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

RESISTORS

• All resistors are in ohms
• F : nonflammable

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
		* A-1646-225-AH1 BOARD, COMPLETE *****		S3102	1-571-532-21	SWITCH, TACTIL (PROG -)	
				S3103	1-571-532-21	SWITCH, TACTIL (VOL +)	
				S3104	1-571-532-21	SWITCH, TACTIL (VOL -)	
		* 4-072-004-01 HOLDER, LED (D3001)		S3105	1-571-532-21	SWITCH, TACTIL (TV/VIDEO)	
		<CAPACITOR>		S3106	Δ 1-571-433-31	SWITCH, PUSH (AC POWER) (POWER)	

C3101	1-126-157-11	ELECT	10 μF 20% 16V			* A-1372-758-AH2 BOARD, COMPLETE *****	
		<CONNECTOR>				<CAPACITOR>	
CN3101	* 1-564-519-11	PLUG, CONNECTOR 4P		C3202	1-163-037-11	CERAMIC CHIP 0.022 μF	10% 50V
CN3102	* 1-564-525-11	PLUG, CONNECTOR 10P		C3203	1-163-037-11	CERAMIC CHIP 0.022 μF	10% 50V
CN3103	* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P				<CONNECTOR>	
CN3104	* 1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P		CN3201	* 1-564-519-11	PLUG, CONNECTOR 4P	
		<DIODE>		CN3202	* 1-564-520-11	PLUG, CONNECTOR 5P	
D3001	8-719-992-06	DIODE SLA-580LT3F (STANDBY)				<JACK>	
		<IC>		J3201	1-691-293-11	JACK (HEAD PHONE)	
IC3101	8-742-014-21	HYB IC SBX1981-51 (21)				<COIL>	
		<TRANSISTOR>		L3201	1-414-189-31	INDUCTOR	100 μH
Q3101	8-729-120-28	TRANSISTOR 2SC1623-L5L6		L3202	1-414-189-31	INDUCTOR	100 μH
		<RESISTOR>				<RESISTOR>	
R3101	1-208-814-91	METAL CHIP	22K 0.5% 1/10W	R3207	1-216-033-00	RES-CHIP	220 5% 1/10W
R3102	1-208-806-11	METAL CHIP	10K 0.5% 1/10W	R3208	1-216-033-00	RES-CHIP	220 5% 1/10W
R3103	1-208-798-11	METAL CHIP	4.7K 0.5% 1/10W	R3209	1-216-033-00	RES-CHIP	220 5% 1/10W
R3104	1-208-792-11	METAL CHIP	2.7K 0.5% 1/10W	R3210	1-216-033-00	RES-CHIP	220 5% 1/10W
R3105	1-216-041-00	RES-CHIP	470 5% 1/10W	R3211	1-216-295-11	SHORT	0
R3106	1-216-057-00	RES-CHIP	2.2K 5% 1/10W			<SWITCH>	
R3111	1-216-295-11	SHORT	0	S3205	1-572-198-11	SWITCH, KEYBOARD (AUTO CONVER)	
R3112	1-216-295-11	SHORT	0	*****			
R3115	1-216-295-11	SHORT	0				
		<SWITCH>					
S3101	1-571-532-21	SWITCH, TACTIL (PROG +)					

KP-51DS1U

RM-892



The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
	* A-1646-226-AH3 BOARD, COMPLETE *****			C4009	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
				C4010	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
	<CONNECTOR>			C4011	1-126-968-11	ELECT 100 μ F	20% 50V
				C4012	1-163-222-11	CERAMIC CHIP 5pF	0.25pF 50V
				C4014	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
CN3301	* 1-564-526-31	PLUG, CONNECTOR 11P		C4015	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
				C4016	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
	<JACK>			C4017	1-163-241-11	CERAMIC CHIP 39pF	5% 50V
				C4018	1-126-933-11	ELECT 100 μ F	20% 16V
J3301	1-568-807-21	TERMINAL BLOCK, (S) 4P (AV 4)		C4019	1-126-933-11	ELECT 100 μ F	20% 16V
				C4020	1-126-933-11	ELECT 100 μ F	20% 16V
				C4021	1-126-933-11	ELECT 100 μ F	20% 16V
	<RESISTOR>			C4022	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
R3301	1-216-025-00	RES-CHIP 100	5% 1/10W	C4023	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
R3302	1-216-025-00	RES-CHIP 100	5% 1/10W	C4024	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
R3303	1-216-295-11	SHORT 0		C4025	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
				C4026	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
*****				C4027	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
	* A-1628-002-AZR BOARD, COMPLETE *****			C4028	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
				C4029	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
				C4030	1-126-933-11	ELECT 100 μ F	20% 16V
				C4031	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
	<CONNECTOR>			C4032	1-126-964-11	ELECT 10 μ F	20% 50V
				C4033	1-126-933-11	ELECT 100 μ F	20% 16V
CN1401	* 1-564-510-11	PLUG, CONNECTOR 7P		C4034	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
CN1403	* 1-564-506-11	PLUG, CONNECTOR 3P		C4035	1-126-964-11	ELECT 10 μ F	20% 50V
CN1404	* 1-564-507-11	PLUG, CONNECTOR 4P		C4036	1-126-964-11	ELECT 10 μ F	20% 50V
CN1405	* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P		C4037	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
				C4038	1-126-964-11	ELECT 10 μ F	20% 50V
				C4039	1-126-964-11	ELECT 10 μ F	20% 50V
				C4040	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
				C4041	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
	<CONNECTOR>			C4042	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
DY1401	Δ 1-451-517-21	DEFLECTION YOKE (R)		C4043	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
				C4044	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
				C4045	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
				C4046	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
				C4047	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
				C4048	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
				C4049	1-104-760-11	CERAMIC CHIP 0.047 μ F	10% 50V
				C4050	1-104-760-11	CERAMIC CHIP 0.047 μ F	10% 50V
				C4051	1-104-760-11	CERAMIC CHIP 0.047 μ F	10% 50V
*****				C4052	1-104-760-11	CERAMIC CHIP 0.047 μ F	10% 50V
	* A-1631-046-AA2 BOARD, COMPLETE *****			C4053	1-104-760-11	CERAMIC CHIP 0.047 μ F	10% 50V
				C4054	1-104-760-11	CERAMIC CHIP 0.047 μ F	10% 50V
	4-382-854-11	SCREW (M3X10), P, SW (+)		C4055	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
				C4056	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
	<CAPACITOR>			C4057	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
C4001	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V	C4058	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
C4002	1-126-933-11	ELECT 100 μ F	20% 16V	C4059	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
C4003	1-126-933-11	ELECT 100 μ F	20% 16V	C4060	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
C4004	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V	C4061	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
C4005	1-126-933-11	ELECT 100 μ F	20% 16V	C4062	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V
C4006	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V	C4063	1-126-959-11	ELECT 0.47 μ F	20% 50V
C4007	1-126-933-11	ELECT 100 μ F	20% 16V	C4064	1-126-964-11	ELECT 10 μ F	20% 50V
C4008	1-163-038-00	CERAMIC CHIP 0.1 μ F	25V	C4065	1-126-959-11	ELECT 0.47 μ F	20% 50V



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C4066	1-126-959-11	ELECT	0.47μF 20% 50V	D4018	8-719-977-22	ZENER DIODE DTZ9.1	
C4067	1-164-346-11	CERAMIC CHIP 1μF	16V	D4019	8-719-977-22	ZENER DIODE DTZ9.1	
C4068	1-164-346-11	CERAMIC CHIP 1μF	16V	D4020	8-719-977-22	ZENER DIODE DTZ9.1	
C4069	1-164-346-11	CERAMIC CHIP 1μF	16V	D4021	8-719-977-22	ZENER DIODE DTZ9.1	
C4070	1-164-346-11	CERAMIC CHIP 1μF	16V				
C4071	1-164-346-11	CERAMIC CHIP 1μF	16V			<FERRITE BEAD>	
C4072	1-164-346-11	CERAMIC CHIP 1μF	16V	FB4001	1-414-234-22	INDUCTOR CHIP	
C4073	1-126-933-11	ELECT	100μF 20% 16V	FB4002	1-414-234-22	INDUCTOR CHIP	
C4074	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	FB4003	1-414-234-22	INDUCTOR CHIP	
C4075	1-126-933-11	ELECT	100μF 20% 16V	FB4004	1-414-234-22	INDUCTOR CHIP	
C4076	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	FB4005	1-414-234-22	INDUCTOR CHIP	
C4079	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	FB4006	1-414-234-22	INDUCTOR CHIP	
C4080	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	FB4007	1-414-234-22	INDUCTOR CHIP	
C4081	1-126-933-11	ELECT	100μF 20% 16V	FB4008	1-414-234-22	INDUCTOR CHIP	
C4082	1-126-964-11	ELECT	10μF 20% 50V	FB4009	1-414-234-22	INDUCTOR CHIP	
C4083	1-163-038-00	CERAMIC CHIP 0.1μF	25V	FB4010	1-414-234-22	INDUCTOR CHIP	
C4085	1-126-968-11	ELECT	100μF 20% 50V	FB4011	1-414-234-22	INDUCTOR CHIP	
C4086	1-126-964-11	ELECT	10μF 20% 50V	FB4012	1-414-234-22	INDUCTOR CHIP	
C4087	1-136-169-00	FILM	0.22μF 5% 50V	FB4013	1-414-234-22	INDUCTOR CHIP	
C4088	1-163-133-00	CERAMIC CHIP 470pF	5% 50V	FB4014	1-414-234-22	INDUCTOR CHIP	
C4089	1-163-133-00	CERAMIC CHIP 470pF	5% 50V	FB4015	1-414-234-22	INDUCTOR CHIP	
C4090	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	FB4016	1-414-234-22	INDUCTOR CHIP	
C4091	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	FB4017	1-414-234-22	INDUCTOR CHIP	
C4101	1-163-255-11	CERAMIC CHIP 150pF	5% 50V	FB4018	1-414-234-22	INDUCTOR CHIP	
C4503	1-126-967-11	ELECT	47μF 20% 50V	FB4019	1-414-234-22	INDUCTOR CHIP	
		<CONNECTOR>		FB4020	1-414-234-22	INDUCTOR CHIP	
CN4002	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P		FB4021	1-414-234-22	INDUCTOR CHIP	
CN4005	1-695-915-11	TAB (CONTACT)		FB4022	1-414-234-22	INDUCTOR CHIP	
CN4006	1-695-915-11	TAB (CONTACT)		FB4023	1-414-234-22	INDUCTOR CHIP	
CN4204	*1-764-334-11	PLUG, CONNECTOR 11P		FB4025	1-414-234-22	INDUCTOR CHIP	
CN4205	*1-564-515-11	PLUG, CONNECTOR 12P		FB4026	1-414-234-22	INDUCTOR CHIP	
CN4207	*1-564-509-11	PLUG, CONNECTOR 6P		FB4027	1-414-234-22	INDUCTOR CHIP	
CN4501	*1-564-511-11	PLUG, CONNECTOR 8P		FB4028	1-414-234-22	INDUCTOR CHIP	
CN4502	*1-564-510-11	PLUG, CONNECTOR 7P				<FILTER>	
CN4604	*1-564-510-11	PLUG, CONNECTOR 7P		FL6032	1-236-071-11	ENCAPSULATED COMPONENT	
CN4901	*1-564-508-11	PLUG, CONNECTOR 5P		FL6033	1-236-071-11	ENCAPSULATED COMPONENT	
		<DIODE>		FL6034	1-236-071-11	ENCAPSULATED COMPONENT	
D4002	8-719-812-43	DIODE TLG124A				<IC>	
D4003	8-719-977-81	ZENER DIODE DTZ33B		IC4001	8-759-587-04	IC SAA7127H	
D4004	8-719-977-22	ZENER DIODE DTZ9.1		IC4002	8-759-587-03	IC TDA8601T	
D4005	8-719-914-43	DIODE DAN202K		IC4003	8-752-087-76	IC CXA2089Q-T6	
D4006	8-719-977-22	ZENER DIODE DTZ9.1		IC4004	8-759-669-71	IC PCF8591T	
D4007	8-719-977-22	ZENER DIODE DTZ9.1		IC4005	8-752-072-94	IC CXA1875AM-T4	
D4008	8-719-977-22	ZENER DIODE DTZ9.1		IC4006	8-759-648-19	IC L7809CV/LSY	
D4009	8-719-977-22	ZENER DIODE DTZ9.1		IC4007	8-759-574-75	IC KA78R33-YDTU	
D4010	8-719-977-22	ZENER DIODE DTZ9.1		IC4008	8-759-239-25	IC TC74HC4066AF	
D4011	8-719-158-15	ZENER DIODE RD5.6SB				<COIL>	
D4012	8-719-914-43	DIODE DAN202K		L4001	1-410-645-31	INDUCTOR 100μH	
D4014	8-719-976-99	ZENER DIODE DTZ5.1B		L4002	1-410-645-31	INDUCTOR 100μH	
D4015	8-719-158-15	ZENER DIODE RD5.6SB		L4005	1-410-645-31	INDUCTOR 100μH	
D4016	8-719-977-22	ZENER DIODE DTZ9.1					
D4017	8-719-914-43	DIODE DAN202K					

KP-51DS1U

RM-892



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
L4006	1-410-667-31	INDUCTOR	22μH	R4049	1-216-025-11	RES-CHIP	100 5% 1/10W
L4010	1-410-645-31	INDUCTOR	100μH	R4051	1-216-025-11	RES-CHIP	100 5% 1/10W
L4501	1-414-856-11	INDUCTOR	10μH	R4052	1-216-295-11	SHORT	0
	<TRANSISTOR>			R4053	1-216-295-11	SHORT	0
Q4001	1-801-806-11	TRANSISTOR DTC144EKA-T146		R4054	1-216-051-00	RES-CHIP	1.2K 5% 1/10W
Q4002	1-801-806-11	TRANSISTOR DTC144EKA-T146		R4055	1-216-051-00	RES-CHIP	1.2K 5% 1/10W
Q4003	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R4056	1-216-051-00	RES-CHIP	1.2K 5% 1/10W
Q4004	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R4057	1-216-051-00	RES-CHIP	1.2K 5% 1/10W
Q4007	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R4058	1-216-051-00	RES-CHIP	1.2K 5% 1/10W
Q4010	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R4059	1-216-051-00	RES-CHIP	1.2K 5% 1/10W
Q4011	8-729-216-22	TRANSISTOR 2SA1162-G		R4060	1-216-295-11	SHORT	0
Q4501	1-801-806-11	TRANSISTOR DTC144EKA-T146		R4061	1-216-073-00	RES-CHIP	10K 5% 1/10W
Q4502	8-729-216-22	TRANSISTOR 2SA1162-G		R4063	1-216-049-11	RES-CHIP	1K 5% 1/10W
	<RESISTOR>			R4065	1-216-295-11	SHORT	0
R4001	1-216-073-00	RES-CHIP	10K 5% 1/10W	R4066	1-216-295-11	SHORT	0
R4002	1-216-025-11	RES-CHIP	100 5% 1/10W	R4067	1-216-295-11	SHORT	0
R4003	1-216-022-00	RES-CHIP	75 5% 1/10W	R4068	1-216-049-11	RES-CHIP	1K 5% 1/10W
R4004	1-216-049-11	RES-CHIP	1K 5% 1/10W	R4069	1-216-295-11	SHORT	0
R4006	1-216-295-11	SHORT	0	R4070	1-216-295-11	SHORT	0
R4011	1-216-025-11	RES-CHIP	100 5% 1/10W	R4073	1-216-113-00	RES-CHIP	470K 5% 1/10W
R4012	1-216-025-11	RES-CHIP	100 5% 1/10W	R4075	1-216-041-00	RES-CHIP	470 5% 1/10W
R4013	1-216-025-11	RES-CHIP	100 5% 1/10W	R4077	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4014	1-216-295-11	SHORT	0	R4078	1-216-113-00	RES-CHIP	470K 5% 1/10W
R4015	1-216-025-11	RES-CHIP	100 5% 1/10W	R4079	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4016	1-216-025-11	RES-CHIP	100 5% 1/10W	R4081	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4017	1-216-049-11	RES-CHIP	1K 5% 1/10W	R4082	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4018	1-216-073-00	RES-CHIP	10K 5% 1/10W	R4084	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4019	1-216-025-11	RES-CHIP	100 5% 1/10W	R4086	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4020	1-216-025-11	RES-CHIP	100 5% 1/10W	R4087	1-216-021-00	RES-CHIP	68 5% 1/10W
R4024	1-216-025-11	RES-CHIP	100 5% 1/10W	R4088	1-216-061-00	RES-CHIP	3.3K 5% 1/10W
R4025	1-216-009-91	RES-CHIP	22 5% 1/10W	R4089	1-216-069-00	RES-CHIP	6.8K 5% 1/10W
R4026	1-216-009-91	RES-CHIP	22 5% 1/10W	R4090	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4027	1-216-009-91	RES-CHIP	22 5% 1/10W	R4091	1-216-295-11	SHORT	0
R4028	1-216-025-11	RES-CHIP	100 5% 1/10W	R4092	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4029	1-216-073-00	RES-CHIP	10K 5% 1/10W	R4093	1-216-295-11	SHORT	0
R4030	1-216-073-00	RES-CHIP	10K 5% 1/10W	R4094	1-216-295-11	SHORT	0
R4032	1-216-073-00	RES-CHIP	10K 5% 1/10W	R4095	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4033	1-216-025-11	RES-CHIP	100 5% 1/10W	R4096	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4034	1-216-025-11	RES-CHIP	100 5% 1/10W	R4097	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4035	1-216-113-00	RES-CHIP	470K 5% 1/10W	R4098	1-216-295-11	SHORT	0
R4036	1-216-022-00	RES-CHIP	75 5% 1/10W	R4100	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4037	1-216-025-11	RES-CHIP	100 5% 1/10W	R4101	1-216-049-11	RES-CHIP	1K 5% 1/10W
R4038	1-216-025-11	RES-CHIP	100 5% 1/10W	R4102	1-216-295-11	SHORT	0
R4039	1-216-025-11	RES-CHIP	100 5% 1/10W	R4103	1-216-295-11	SHORT	0
R4040	1-216-025-11	RES-CHIP	100 5% 1/10W	R4105	1-216-033-00	RES-CHIP	220 5% 1/10W
R4042	1-216-025-11	RES-CHIP	100 5% 1/10W	R4106	1-216-025-11	RES-CHIP	100 5% 1/10W
R4043	1-216-025-11	RES-CHIP	100 5% 1/10W	R4107	1-216-025-11	RES-CHIP	100 5% 1/10W
R4044	1-216-022-00	RES-CHIP	75 5% 1/10W	R4108	1-216-033-00	RES-CHIP	220 5% 1/10W
R4045	1-216-033-00	RES-CHIP	220 5% 1/10W	R4109	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4046	1-216-113-00	RES-CHIP	470K 5% 1/10W	R4110	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4047	1-216-073-00	RES-CHIP	10K 5% 1/10W	R4111	1-216-049-11	RES-CHIP	1K 5% 1/10W
R4048	1-216-022-00	RES-CHIP	75 5% 1/10W	R4112	1-216-085-00	RES-CHIP	33K 5% 1/10W
				R4116	1-216-073-00	RES-CHIP	10K 5% 1/10W
				R4118	1-216-065-11	RES-CHIP	4.7K 5% 1/10W
				R4131	1-216-073-00	RES-CHIP	10K 5% 1/10W
				R4501	1-216-033-00	RES-CHIP	220 5% 1/10W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R4502	1-216-295-11	SHORT	0	IC1110	8-759-367-69	IC MC74HC74AFEL	
R4503	1-216-295-11	SHORT	0	IC1112	8-759-424-27	IC MC74HC163AFEL	
R4504	1-216-295-11	SHORT	0	IC1113	8-759-424-13	IC MC74HC00AFEL	
R4505	1-216-295-11	SHORT	0	IC1114	8-759-367-69	IC MC74HC74AFEL	
R4506	1-216-295-11	SHORT	0	IC1115	8-759-367-69	IC MC74HC74AFEL	
R4507	1-216-295-11	SHORT	0				
R4508	1-216-073-00	RES-CHIP	10K			<COIL>	
R4511	1-216-113-00	RES-CHIP	470K				
R4513	1-216-089-11	RES-CHIP	47K				
		<TUNER>		L1100	1-414-187-11	INDUCTOR	47μH
TU4001	8-598-502-00	FRONTEND BTD-DU602		L1101	1-414-187-11	INDUCTOR	47μH
TU4002	8-598-515-00	RF SPLITTER RFD-AC401		L1103	1-414-187-11	INDUCTOR	47μH
				L1104	1-414-187-11	INDUCTOR	47μH
						<TRANSISTOR>	
*****				Q1101	1-801-806-11	TRANSISTOR DTC144EKA-T146	
				Q1109	1-801-806-11	TRANSISTOR DTC144EKA-T146	
				Q1110	1-801-806-11	TRANSISTOR DTC144EKA-T146	
						<RESISTOR>	
				R1101	1-216-025-11	RES-CHIP	100 5% 1/10W
				R1103	1-216-113-00	RES-CHIP	470K 5% 1/10W
				R1104	1-216-025-11	RES-CHIP	100 5% 1/10W
				R1106	1-216-295-11	SHORT	0
				R1107	1-216-025-11	RES-CHIP	100 5% 1/10W
				R1108	1-216-295-11	SHORT	0
				R1109	1-216-295-11	SHORT	0
				R1110	1-216-295-11	SHORT	0
				R1111	1-216-295-11	SHORT	0
				R1112	1-216-069-00	RES-CHIP	6.8K 5% 1/10W
				R1113	1-216-295-11	SHORT	0
				R1114	1-216-113-00	RES-CHIP	470K 5% 1/10W
				R1115	1-216-073-00	RES-CHIP	10K 5% 1/10W
				R1116	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
				R1117	1-208-833-11	METAL CHIP	130K 0.5% 1/10W
				R1121	1-216-073-00	RES-CHIP	10K 5% 1/10W
				R1122	1-216-295-11	SHORT	0
				R1123	1-216-025-11	RES-CHIP	100 5% 1/10W
				R1124	1-208-818-11	METAL CHIP	33K 0.5% 1/10W
				R1125	1-208-814-91	METAL CHIP	22K 0.5% 1/10W
				R1126	1-216-085-00	RES-CHIP	33K 5% 1/10W
				R1127	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
				R1128	1-216-025-11	RES-CHIP	100 5% 1/10W
				R1129	1-216-295-11	SHORT	0
				R1131	1-216-073-00	RES-CHIP	10K 5% 1/10W
				R1132	1-216-033-00	RES-CHIP	220 5% 1/10W
				R1133	1-216-025-11	RES-CHIP	100 5% 1/10W
				R1134	1-216-295-11	SHORT	0
				R1135	1-216-033-00	RES-CHIP	220 5% 1/10W
				R1137	1-216-025-11	RES-CHIP	100 5% 1/10W
				R1144	1-216-033-00	RES-CHIP	220 5% 1/10W
				R1146	1-216-033-00	RES-CHIP	220 5% 1/10W
				R1147	1-216-033-00	RES-CHIP	220 5% 1/10W
				R1148	1-216-033-00	RES-CHIP	220 5% 1/10W
				R1150	1-216-033-00	RES-CHIP	220 5% 1/10W
IC1101	8-752-072-94	IC CXA1875AM-T4					
IC1102	8-759-514-57	IC BA7046F					
IC1103	8-759-926-98	IC SN74HC4040ANS					
IC1104	8-759-009-02	IC MC14046BF					
IC1105	8-759-926-98	IC SN74HC4040ANS					
IC1107	8-759-424-27	IC MC74HC163AFEL					
IC1108	8-759-926-98	IC SN74HC4040ANS					
IC1109	8-759-424-27	IC MC74HC163AFEL					
		<CONNECTOR>					
CN1101	* 1-770-748-11	CONNECTOR, BOARD TO BOARD 12P					
		<IC>					

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R1151	1-216-033-00	RES-CHIP 220	5% 1/10W	C116	1-115-340-11	CERAMIC CHIP 0.22μF	10% 25V
R1152	1-216-033-00	RES-CHIP 220	5% 1/10W	C117	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
R1159	1-216-033-00	RES-CHIP 220	5% 1/10W	C118	1-163-038-11	CERAMIC CHIP 0.1μF	25V
R1160	1-216-033-00	RES-CHIP 220	5% 1/10W	C119	1-163-038-11	CERAMIC CHIP 0.1μF	25V
R1161	1-216-025-11	RES-CHIP 100	5% 1/10W	C120	1-163-251-11	CERAMIC CHIP 100pF	5% 50V
R1162	1-216-025-11	RES-CHIP 100	5% 1/10W	C121	1-163-113-00	CERAMIC CHIP 68pF	5% 50V
R1163	1-216-025-11	RES-CHIP 100	5% 1/10W	C122	1-163-137-00	CERAMIC CHIP 680pF	5% 50V
R1164	1-216-025-11	RES-CHIP 100	5% 1/10W	C123	1-163-113-00	CERAMIC CHIP 68pF	5% 50V
R1165	1-216-295-11	SHORT 0		C124	1-163-038-11	CERAMIC CHIP 0.1μF	25V
R1166	1-216-073-00	RES-CHIP 10K	5% 1/10W	C125	1-163-038-11	CERAMIC CHIP 0.1μF	25V
R1167	1-216-073-00	RES-CHIP 10K	5% 1/10W	C126	1-163-038-11	CERAMIC CHIP 0.1μF	25V
R1168	1-216-061-00	RES-CHIP 3.3K	5% 1/10W	C127	1-163-038-11	CERAMIC CHIP 0.1μF	25V
R1169	1-216-073-00	RES-CHIP 10K	5% 1/10W	C128	1-163-038-11	CERAMIC CHIP 0.1μF	25V
R1170	1-216-073-00	RES-CHIP 10K	5% 1/10W	C129	1-163-038-11	CERAMIC CHIP 0.1μF	25V
R1172	1-216-065-91	RES-CHIP 4.7K	5% 1/10W	C130	1-163-038-11	CERAMIC CHIP 0.1μF	25V
*****				C131	1-163-038-11	CERAMIC CHIP 0.1μF	25V
* A-1632-862-AA BOARD, COMPLETE				C132	1-163-038-11	CERAMIC CHIP 0.1μF	25V
*****				C133	1-163-038-11	CERAMIC CHIP 0.1μF	25V
1-750-797-11 SOCKET, PLCC (IC3)				C134	1-163-251-11	CERAMIC CHIP 100pF	5% 50V
<CAPACITOR>				C136	1-126-964-11	ELECT 10μF	20% 50V
C1	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C137	1-104-664-11	ELECT 47μF	20% 16V
C2	1-104-664-11	ELECT 47μF	20% 16V	C138	1-126-964-11	ELECT 10μF	20% 50V
C3	1-163-239-11	CERAMIC CHIP 33pF	5% 50V	C139	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C4	1-163-239-11	CERAMIC CHIP 33pF	5% 50V	C140	1-126-964-11	ELECT 10μF	20% 50V
C8	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C141	1-126-934-11	ELECT 220pF	20% 16V
C15	1-163-133-00	CERAMIC CHIP 470pF	5% 50V	C142	1-163-249-11	CERAMIC CHIP 82pF	5% 50V
C18	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C143	1-163-251-11	CERAMIC CHIP 100pF	5% 50V
C19	1-163-017-00	CERAMIC CHIP 0.0047μF	10% 50V	C144	1-163-255-11	CERAMIC CHIP 150pF	5% 50V
C20	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	C145	1-163-243-11	CERAMIC CHIP 47pF	0.5pF 50V
C21	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	C146	1-164-346-11	CERAMIC CHIP 1μF	16V
C22	1-163-251-11	CERAMIC CHIP 100pF	5% 50V	C201	1-163-038-11	CERAMIC CHIP 0.1μF	25V
C24	1-163-275-11	CERAMIC CHIP 0.001μF	5% 50V	C202	1-163-038-11	CERAMIC CHIP 0.1μF	25V
C25	1-104-664-11	ELECT 47μF	20% 16V	C203	1-104-661-91	ELECT 330μF	20% 16V
C26	1-104-664-11	ELECT 47μF	20% 16V	C204	1-163-038-11	CERAMIC CHIP 0.1μF	25V
C28	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C205	1-126-965-11	ELECT 22μF	20% 50V
C29	1-163-009-11	CERAMIC CHIP 0.001μF	10% 50V	C207	1-126-964-11	ELECT 10μF	20% 50V
C43	1-163-255-11	CERAMIC CHIP 150pF	5% 50V	C208	1-163-038-11	CERAMIC CHIP 0.1μF	25V
C45	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C209	1-216-295-11	SHORT 0	
C90	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C210	1-163-251-11	CERAMIC CHIP 100pF	5% 50V
C101	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C211	1-126-965-11	ELECT 22μF	20% 50V
C102	1-126-934-11	ELECT 220μF	20% 16V	C212	1-164-346-11	CERAMIC CHIP 1μF	16V
C103	1-126-965-11	ELECT 22μF	20% 50V	C213	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C104	1-163-251-11	CERAMIC CHIP 100pF	5% 50V	C214	1-164-346-11	CERAMIC CHIP 1μF	16V
C105	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C215	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C106	1-126-933-11	ELECT 100μF	20% 16V	C216	1-104-664-11	ELECT 47μF	20% 16V
C107	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C217	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C108	1-126-933-11	ELECT 100μF	20% 16V	C218	1-104-664-11	ELECT 47μF	20% 16V
C109	1-163-037-11	CERAMIC CHIP 0.022μF	10% 50V	C219	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C110	1-104-664-11	ELECT 47μF	20% 16V	C220	1-126-933-11	ELECT 100μF	20% 16V
C111	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C221	1-164-505-11	CERAMIC CHIP 2.2μF	16V
C112	1-163-275-11	CERAMIC CHIP 0.001μF	5% 50V	C222	1-164-346-11	CERAMIC CHIP 1μF	16V
C113	1-104-664-11	ELECT 47μF	20% 16V	C223	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C114	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C224	1-164-346-11	CERAMIC CHIP 1μF	16V
C115	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	C225	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
				C226	1-104-664-11	ELECT 47μF	20% 16V
				C227	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C228	1-104-664-11	ELECT 47μF	20% 16V	C303	1-163-275-11	CERAMIC CHIP 0.001μF	5% 50V
C229	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	C304	1-163-038-11	CERAMIC CHIP 0.1μF	25V
C230	1-163-251-11	CERAMIC CHIP 100pF	5% 50V	C305	1-163-038-11	CERAMIC CHIP 0.1μF	25V
C232	1-216-295-11	SHORT 0		C306	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C236	1-163-251-11	CERAMIC CHIP 100pF	5% 50V	C307	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C237	1-164-505-11	CERAMIC CHIP 2.2μF	16V	C308	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C240	1-126-933-11	ELECT 100μF	20% 16V	C309	1-164-346-11	CERAMIC CHIP 1μF	16V
C241	1-104-664-11	ELECT 47μF	20% 16V	C310	1-164-346-11	CERAMIC CHIP 1μF	16V
C242	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	C311	1-164-346-11	CERAMIC CHIP 1μF	16V
C243	1-126-967-11	ELECT 47μF	20% 50V	C312	1-164-505-11	CERAMIC CHIP 2.2μF	16V
C244	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	C313	1-163-275-11	CERAMIC CHIP 0.001μF	5% 50V
C245	1-126-963-11	ELECT 4.7μF	20% 50V	C315	1-216-295-11	SHORT 0	
C246	1-104-664-11	ELECT 47μF	20% 16V	C316	1-163-239-11	CERAMIC CHIP 33pF	5% 50V
C247	1-104-664-11	ELECT 47μF	20% 16V	C317	1-163-038-11	CERAMIC CHIP 0.1μF	25V
C248	1-163-251-11	CERAMIC CHIP 100pF	5% 50V	C320	1-126-965-11	ELECT 22μF	20% 50V
C249	1-164-346-11	CERAMIC CHIP 1μF	16V	C321	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C250	1-164-346-11	CERAMIC CHIP 1μF	16V	C322	1-163-038-11	CERAMIC CHIP 0.1μF	25V
C251	1-163-087-00	CERAMIC CHIP 4pF	0.25pF 50V	C323	1-163-038-11	CERAMIC CHIP 0.1μF	25V
C252	1-163-087-00	CERAMIC CHIP 4pF	0.25pF 50V	C324	1-163-038-11	CERAMIC CHIP 0.1μF	25V
C253	1-163-251-11	CERAMIC CHIP 100pF	5% 50V	C325	1-164-346-11	CERAMIC CHIP 1μF	16V
C254	1-163-243-11	CERAMIC CHIP 47pF	5% 50V	C326	1-163-275-11	CERAMIC CHIP 0.001μF	5% 50V
C255	1-163-251-11	CERAMIC CHIP 100pF	5% 50V	C327	1-137-374-11	MYLAR 0.047μF	5% 50V
C256	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C328	1-126-964-11	ELECT 10μF	20% 50V
C257	1-126-965-11	ELECT 22μF	20% 50V	C330	1-130-777-00	MYLAR 0.1μF	5% 63V
C258	1-126-964-11	ELECT 10μF	20% 50V	C331	1-137-581-11	FILM 0.1μF	5% 100V
C259	1-164-005-11	CERAMIC CHIP 0.47μF	25V	C332	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C260	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C333	1-126-933-11	ELECT 100μF	20% 16V
C261	1-163-133-00	CERAMIC CHIP 470pF	5% 50V	C334	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C262	1-163-133-00	CERAMIC CHIP 470pF	5% 50V	C335	1-164-005-11	CERAMIC CHIP 0.47μF	25V
C263	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C336	1-163-009-11	CERAMIC CHIP 0.001μF	10% 50V
C264	1-126-962-11	ELECT 3.3μF	20% 50V	C337	1-163-009-11	CERAMIC CHIP 0.001μF	10% 50V
C265	1-126-964-11	ELECT 10μF	20% 50V	C338	1-126-962-11	ELECT 3.3μF	20% 50V
C266	1-126-964-11	ELECT 10μF	20% 50V	C339	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C267	1-126-965-11	ELECT 22μF	20% 50V	C340	1-126-933-11	ELECT 100μF	20% 16V
C268	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C341	1-164-005-11	CERAMIC CHIP 0.47μF	25V
C269	1-163-131-00	CERAMIC CHIP 390pF	5% 50V	C342	1-164-346-11	CERAMIC CHIP 1μF	16V
C270	1-163-131-00	CERAMIC CHIP 390pF	5% 50V	C343	1-163-017-00	CERAMIC CHIP 0.0047μF	10% 50V
C271	1-163-275-11	CERAMIC CHIP 0.001μF	5% 50V	C344	1-163-251-11	CERAMIC CHIP 100pF	5% 50V
C272	1-163-275-11	CERAMIC CHIP 0.001μF	5% 50V	C347	1-126-963-11	ELECT 4.7μF	20% 50V
C273	1-163-275-11	CERAMIC CHIP 0.001μF	5% 50V	C348	1-163-133-00	CERAMIC CHIP 470pF	5% 50V
C274	1-163-275-11	CERAMIC CHIP 0.001μF	5% 50V	C350	1-126-964-11	ELECT 10μF	20% 50V
C275	1-164-346-11	CERAMIC CHIP 1μF	16V	C351	1-164-505-11	CERAMIC CHIP 2.2μF	16V
C276	1-164-346-11	CERAMIC CHIP 1μF	16V	C352	1-164-005-11	CERAMIC CHIP 0.47μF	25V
C277	1-164-505-11	CERAMIC CHIP 2.2μF	16V	C353	1-164-505-11	CERAMIC CHIP 2.2μF	16V
C278	1-164-505-11	CERAMIC CHIP 2.2μF	16V	C354	1-164-005-11	CERAMIC CHIP 0.47μF	25V
C279	1-126-965-11	ELECT 22μF	20% 50V	C355	1-126-965-11	ELECT 22μF	20% 50V
C280	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C356	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C281	1-126-965-11	ELECT 22μF	20% 50V	C357	1-163-133-00	CERAMIC CHIP 470pF	5% 50V
C282	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C358	1-164-005-11	CERAMIC CHIP 0.47μF	25V
C283	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	C359	1-163-231-11	CERAMIC CHIP 15pF	5% 50V
C284	1-126-925-11	ELECT 470μF	20% 10V	C360	1-163-231-11	CERAMIC CHIP 15pF	5% 50V
C285	1-163-017-00	CERAMIC CHIP 0.0047μF	10% 50V	C370	1-164-505-11	CERAMIC CHIP 2.2μF	16V
C300	1-163-251-11	CERAMIC CHIP 100pF	5% 50V	C371	1-163-275-11	CERAMIC CHIP 0.001μF	5% 50V
C301	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C372	1-163-038-11	CERAMIC CHIP 0.1μF	25V
C302	1-163-275-11	CERAMIC CHIP 0.001μF	5% 50V	C373	1-164-489-11	CERAMIC CHIP 0.22μF	10% 16V
				C377	1-126-964-11	ELECT 10μF	20% 50V

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C380	1-163-038-11	CERAMIC CHIP 0.1μF	25V	C2851	1-126-964-11	ELECT 10μF	20% 50V
C1001	1-163-235-11	CERAMIC CHIP 22pF	5% 50V	C2852	1-126-964-11	ELECT 10μF	20% 50V
C1002	1-163-235-11	CERAMIC CHIP 22pF	5% 50V			<FILTER>	
C1010	1-163-038-11	CERAMIC CHIP 0.1μF	25V				
C1013	1-126-965-11	ELECT 22μF	20% 50V	CF120	1-409-327-00	TRAP, CERAMIC (6.5MHZ)	
C1014	1-163-038-11	CERAMIC CHIP 0.1μF	25V			<CONNECTOR>	
C1015	1-164-489-11	CERAMIC CHIP 0.22μF	10% 16V	CN1	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P	
C1020	1-163-259-91	CERAMIC CHIP 220pF	5% 50V	CN6	* 1-564-516-11	PLUG, CONNECTOR 13P	
C2401	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	CN101	1-695-915-11	TAB (CONTACT)	
C2402	1-163-038-11	CERAMIC CHIP 0.1μF	25V	CN102	1-695-915-11	TAB (CONTACT)	
C2403	1-104-664-11	ELECT 47μF	20% 16V	CN103	1-695-915-11	TAB (CONTACT)	
C2404	1-126-964-11	ELECT 10μF	20% 50V				
C2405	1-164-346-11	CERAMIC CHIP 1μF	16V	CN201	* 1-766-296-31	CONNECTOR, DUAL SCART	
C2801	1-163-038-11	CERAMIC CHIP 0.1μF	25V	CN204	* 1-564-509-11	PLUG, CONNECTOR 6P	
C2803	1-164-346-11	CERAMIC CHIP 1μF	16V	CN205	* 1-564-515-11	PLUG, CONNECTOR 12P	
C2804	1-163-038-11	CERAMIC CHIP 0.1μF	25V	CN206	* 1-764-334-11	PLUG, CONNECTOR 11P	
C2805	1-126-964-11	ELECT 10μF	20% 50V	CN301	* 1-564-510-11	PLUG, CONNECTOR 7P	
C2807	1-163-038-11	CERAMIC CHIP 0.1μF	25V				
C2808	1-163-038-11	CERAMIC CHIP 0.1μF	25V	CN2401	* 1-770-747-11	CONNECTOR, BOARD TO BOARD 12P	
C2809	1-163-038-11	CERAMIC CHIP 0.1μF	25V			<DIODE>	
C2810	1-163-038-11	CERAMIC CHIP 0.1μF	25V	D2	8-719-988-61	DIODE 1SS355TE-17	
C2811	1-126-964-11	ELECT 10μF	20% 50V	D11	8-719-158-15	ZENER DIODE RD5.6SB	
C2812	1-126-964-11	ELECT 10μF	20% 50V	D12	8-719-158-15	ZENER DIODE RD5.6SB	
C2813	1-126-964-11	ELECT 10μF	20% 50V	D16	8-719-988-61	DIODE 1SS355TE-17	
C2814	1-163-243-11	CERAMIC CHIP 47pF	5% 50V	D101	8-719-977-81	ZENER DIODE DTZ33B	
C2816	1-163-038-11	CERAMIC CHIP 0.1μF	25V	D102	8-719-988-61	DIODE 1SS355TE-17	
C2817	1-163-038-11	CERAMIC CHIP 0.1μF	25V	D201	8-719-977-22	ZENER DIODE DTZ9.1	
C2818	1-163-038-11	CERAMIC CHIP 0.1μF	25V	D202	8-719-977-22	ZENER DIODE DTZ9.1	
C2820	1-163-263-11	CERAMIC CHIP 330pF	5% 50V	D203	8-719-977-22	ZENER DIODE DTZ9.1	
C2821	1-163-263-11	CERAMIC CHIP 330pF	5% 50V	D204	8-719-977-22	ZENER DIODE DTZ9.1	
C2822	1-126-934-11	ELECT 220μF	20% 16V	D205	8-719-977-22	ZENER DIODE DTZ9.1	
C2823	1-163-038-11	CERAMIC CHIP 0.1μF	25V	D206	8-719-977-22	ZENER DIODE DTZ9.1	
C2826	1-163-038-11	CERAMIC CHIP 0.1μF	25V	D207	8-719-977-22	ZENER DIODE DTZ9.1	
C2827	1-163-038-11	CERAMIC CHIP 0.1μF	25V	D208	8-719-977-22	ZENER DIODE DTZ9.1	
C2828	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	D209	8-719-977-22	ZENER DIODE DTZ9.1	
C2829	1-163-038-11	CERAMIC CHIP 0.1μF	25V	D210	8-719-977-22	ZENER DIODE DTZ9.1	
C2830	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	D211	8-719-977-22	ZENER DIODE DTZ9.1	
C2831	1-163-017-00	CERAMIC CHIP 0.0047μF	10% 50V	D212	8-719-977-22	ZENER DIODE DTZ9.1	
C2832	1-163-017-00	CERAMIC CHIP 0.0047μF	10% 50V	D213	8-719-977-22	ZENER DIODE DTZ9.1	
C2833	1-163-038-11	CERAMIC CHIP 0.1μF	25V	D214	8-719-977-22	ZENER DIODE DTZ9.1	
C2834	1-163-038-11	CERAMIC CHIP 0.1μF	25V	D215	8-719-977-22	ZENER DIODE DTZ9.1	
C2835	1-163-259-91	CERAMIC CHIP 220pF	5% 50V	D216	8-719-158-15	ZENER DIODE RD5.6SB	
C2836	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	D217	8-719-158-15	ZENER DIODE RD5.6SB	
C2837	1-163-239-11	CERAMIC CHIP 33pF	5% 50V	D218	8-719-158-15	ZENER DIODE RD5.6SB	
C2838	1-163-243-11	CERAMIC CHIP 47pF	5% 50V	D220	8-719-988-61	DIODE 1SS355TE-17	
C2839	1-164-346-11	CERAMIC CHIP 1μF	16V	D221	8-719-988-61	DIODE 1SS355TE-17	
C2840	1-164-346-11	CERAMIC CHIP 1μF	16V	D223	8-719-977-22	ZENER DIODE DTZ9.1	
C2841	1-163-243-11	CERAMIC CHIP 47pF	5% 50V	D224	8-719-977-22	ZENER DIODE DTZ9.1	
C2842	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	D225	8-719-977-22	ZENER DIODE DTZ9.1	
C2843	1-104-664-11	ELECT 47μF	20% 16V	D226	8-719-977-22	ZENER DIODE DTZ9.1	
C2845	1-126-964-11	ELECT 10μF	20% 50V	D251	8-719-047-16	DIODE BAS216	
C2846	1-104-664-11	ELECT 47μF	20% 16V	D303	8-719-988-61	DIODE 1SS355TE-17	
C2847	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	D304	8-719-988-61	DIODE 1SS355TE-17	
C2848	1-163-133-00	CERAMIC CHIP 470pF	5% 50V				
C2849	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V				
C2850	1-163-251-11	CERAMIC CHIP 100pF	5% 50V				



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
D305	8-719-914-43	DIODE DAN202K					
D320	8-719-977-22	ZENER DIODE DTZ9.1					
D370	8-719-047-16	DIODE BAS216					
D401	8-719-977-22	ZENER DIODE DTZ9.1		JR1	1-216-295-11	SHORT	0
D402	8-719-988-61	DIODE 1SS355TE-17		JR2	1-216-296-91	SHORT	0
D1001	8-719-988-61	DIODE 1SS355TE-17		JR3	1-216-296-91	SHORT	0
D1010	8-719-036-58	DIODE MA3030-H(TX)		JR6	1-216-295-11	SHORT	0
				JR201	1-216-295-11	SHORT	0
D2801	8-719-073-01	DIODE MA111-(K8).S0					
D2802	8-719-914-43	DIODE DAN202K		JR205	1-216-295-11	SHORT	0
D2803	8-719-047-37	DIODE BAS16		JR206	1-216-295-11	SHORT	0
D2804	8-719-047-37	DIODE BAS16		JR207	1-216-295-11	SHORT	0
				JR208	1-216-296-91	SHORT	0
				JR209	1-216-295-11	SHORT	0
		<DELAY LINE>					
DL2801	1-234-460-21	DELAY LINE		JR211	1-216-295-11	SHORT	0
				JR212	1-216-295-11	SHORT	0
				JR303	1-216-296-91	SHORT	0
				JR304	1-216-296-91	SHORT	0
				JR305	1-216-296-91	SHORT	0
		<FERRITE BEAD>					
FB101	1-414-235-22	INDUCTOR CHIP		JR360	1-216-295-11	SHORT	0
				JR362	1-216-295-11	SHORT	0
				JR391	1-216-295-11	SHORT	0
				JR1010	1-216-295-11	SHORT	0
		<FILTER>					
FL101	1-236-071-11	ENCAPSULATED COMPONENT					
FL102	1-233-765-21	FILTER					
FL103	1-233-765-21	FILTER					
FL104	1-233-765-21	FILTER					
FL105	1-236-071-11	ENCAPSULATED COMPONENT					
FL106	1-236-071-11	ENCAPSULATED COMPONENT					
FL107	1-236-071-11	ENCAPSULATED COMPONENT					
FL108	1-236-071-11	ENCAPSULATED COMPONENT					
FL201	1-236-071-11	ENCAPSULATED COMPONENT		L101	1-410-993-42	INDUCTOR CHIP	1μH
FL202	1-236-071-11	ENCAPSULATED COMPONENT		L102	1-410-506-11	INDUCTOR	5.6μH
				L103	1-412-009-31	INDUCTOR CHIP	18μH
				L120	1-408-602-31	INDUCTOR	8.2μH
				L121	1-414-177-11	INDUCTOR	1μH
FL203	1-236-071-11	ENCAPSULATED COMPONENT		L122	1-408-602-31	INDUCTOR	8.2μH
FL1001	1-236-071-11	ENCAPSULATED COMPONENT		L201	1-414-187-11	INDUCTOR	47μH
				L202	1-412-002-31	INDUCTOR CHIP	4.7μH
				L203	1-412-002-31	INDUCTOR CHIP	4.7μH
				L204	1-412-002-31	INDUCTOR CHIP	4.7μH
				L205	1-412-002-31	INDUCTOR CHIP	4.7μH
				L206	1-412-002-31	INDUCTOR CHIP	4.7μH
				L300	1-412-006-31	INDUCTOR CHIP	10μH
IC1	8-759-376-77	IC SDA30C263-GEG		L302	1-216-295-11	SHORT	0
IC2	8-759-684-72	IC M24C64-WMN6T (A)		L303	1-216-295-11	SHORT	0
IC3	8-759-675-50	IC M27C2001-12C1-DS02					
IC4	8-759-394-57	IC PST593C-MMP-4P		L304	1-216-295-11	SHORT	0
IC103	8-752-390-37	IC CXD2064Q-T6		L2401	1-414-183-41	INDUCTOR	10μH
				L2402	1-414-183-41	INDUCTOR	10μH
IC201	8-752-081-26	IC CXA2040AQ-T4		L2801	1-414-183-41	INDUCTOR	10μH
IC202	8-759-654-15	IC MSP3410D-C5-PS-B4		L2802	1-414-183-41	INDUCTOR	10μH
IC204	8-759-008-67	IC MC14066BF					
IC205	8-759-394-57	IC PST593C-MMP-4P		L2803	1-414-183-41	INDUCTOR	10μH
IC206	8-752-058-68	IC CXA1315M		L2804	1-414-183-41	INDUCTOR	10μH
				L2806	1-414-183-41	INDUCTOR	10μH
IC301	8-752-081-43	IC CXA2076Q-TL		L2807	1-414-187-11	INDUCTOR	47μH
IC302	8-759-565-20	IC TDA4665T/V5-118		L2809	1-414-183-41	INDUCTOR	10μH
IC303	8-759-430-79	IC TDA8395T/N3					
IC1001	8-759-584-20	IC SDA5273-3CP-C55-22-GEG					
IC2802	8-759-342-13	IC SAA4981T-T					
IC2803	8-759-009-07	IC MC14053BF					
IC2804	8-759-710-07	IC NJM2234M(T1)		Q1	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC2805	8-759-038-15	IC MC74HC4538AF		Q2	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
IC2806	8-759-009-07	IC MC14053BF		Q4	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
				Q17	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
Q18	8-729-027-38	TRANSISTOR DTA144EKA-T146		Q331	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q20	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q333	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q21	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q334	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q22	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q335	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q23	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		Q360	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q24	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		Q401	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q25	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		Q402	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q82	1-801-806-11	TRANSISTOR DTC144EKA-T146		Q403	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q101	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q404	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q102	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		Q405	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q103	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		Q1001	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q104	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q1002	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q105	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q1004	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q106	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2401	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q107	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		Q2402	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q108	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		Q2403	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q109	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		Q2404	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q110	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2405	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q111	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		Q2406	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q112	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2407	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q113	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2408	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q114	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2409	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q115	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2410	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q116	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		Q2411	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q117	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		Q2412	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q118	8-729-039-67	TRANSISTOR BSS83		Q2413	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q120	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2414	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q121	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2801	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q122	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2806	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q124	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2807	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q125	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		Q2809	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q130	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		Q2810	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q201	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2811	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q203	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2812	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q204	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2813	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q205	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2814	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q206	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2815	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q207	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2816	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q208	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2818	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q211	1-801-806-11	TRANSISTOR DTC144EKA-T146		Q2819	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q212	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		Q2820	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q213	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		Q2821	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q214	1-801-806-11	TRANSISTOR DTC144EKA-T146		Q2822	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q215	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2823	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q216	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2824	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q300	1-801-806-11	TRANSISTOR DTC144EKA-T146		Q2825	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q301	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2826	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q302	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2827	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q303	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2828	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q304	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2829	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q305	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q2830	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q306	1-801-806-11	TRANSISTOR DTC144EKA-T146		Q2831	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q307	1-801-806-11	TRANSISTOR DTC144EKA-T146		Q2832	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q308	1-801-806-11	TRANSISTOR DTC144EKA-T146		Q2833	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q309	1-801-806-11	TRANSISTOR DTC144EKA-T146		Q2834	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q330	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R					



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
Q2835	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R85	1-216-065-91	RES-CHIP 4.7K	5% 1/10W
Q2836	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R88	1-216-025-11	RES-CHIP 100	5% 1/10W
				R91	1-216-025-11	RES-CHIP 100	5% 1/10W
				R92	1-216-025-11	RES-CHIP 100	5% 1/10W
		<RESISTOR>					
R1	1-216-049-11	RES-CHIP 1K	5% 1/10W	R93	1-216-033-00	RES-CHIP 220	5% 1/10W
R2	1-216-025-11	RES-CHIP 100	5% 1/10W	R94	1-216-033-00	RES-CHIP 220	5% 1/10W
R3	1-216-025-11	RES-CHIP 100	5% 1/10W	R95	1-216-033-00	RES-CHIP 220	5% 1/10W
R4	1-216-013-00	RES-CHIP 33	5% 1/10W	R97	1-216-025-11	RES-CHIP 100	5% 1/10W
R5	1-216-073-00	RES-CHIP 10K	5% 1/10W	R100	1-216-033-00	RES-CHIP 220	5% 1/10W
R6	1-208-798-11	METAL CHIP 4.7K	0.5% 1/10W	R101	1-216-061-00	RES-CHIP 3.3K	5% 1/10W
R7	1-216-041-00	RES-CHIP 470	5% 1/10W	R102	1-216-025-11	RES-CHIP 100	5% 1/10W
R9	1-216-041-00	RES-CHIP 470	5% 1/10W	R103	1-216-025-11	RES-CHIP 100	5% 1/10W
R20	1-216-025-11	RES-CHIP 100	5% 1/10W	R104	1-216-073-00	RES-CHIP 10K	5% 1/10W
R21	1-216-025-11	RES-CHIP 100	5% 1/10W	R105	1-216-113-00	RES-CHIP 470K	5% 1/10W
R24	1-216-065-91	RES-CHIP 4.7K	5% 1/10W	R106	1-216-073-00	RES-CHIP 10K	5% 1/10W
R25	1-216-065-91	RES-CHIP 4.7K	5% 1/10W	R107	1-216-043-91	RES-CHIP 560	5% 1/10W
R28	1-216-073-00	RES-CHIP 10K	5% 1/10W	R108	1-216-091-00	RES-CHIP 56K	5% 1/10W
R29	1-216-065-91	RES-CHIP 4.7K	5% 1/10W	R109	1-216-049-11	RES-CHIP 1K	5% 1/10W
R30	1-216-065-91	RES-CHIP 4.7K	5% 1/10W	R110	1-216-071-00	RES-CHIP 8.2K	5% 1/10W
R31	1-216-065-91	RES-CHIP 4.7K	5% 1/10W	R111	1-216-029-00	RES-CHIP 150	5% 1/10W
R32	1-216-025-11	RES-CHIP 100	5% 1/10W	R112	1-216-029-00	RES-CHIP 150	5% 1/10W
R33	1-216-025-11	RES-CHIP 100	5% 1/10W	R113	1-216-001-00	RES-CHIP 10	5% 1/10W
R34	1-216-025-11	RES-CHIP 100	5% 1/10W	R114	1-216-029-00	RES-CHIP 150	5% 1/10W
R35	1-216-025-11	RES-CHIP 100	5% 1/10W	R115	1-216-037-00	RES-CHIP 330	5% 1/10W
R39	1-216-073-00	RES-CHIP 10K	5% 1/10W	R116	1-216-041-00	RES-CHIP 470	5% 1/10W
R40	1-216-067-00	RES-CHIP 5.6K	5% 1/10W	R117	1-216-069-00	RES-CHIP 6.8K	5% 1/10W
R42	1-216-069-00	RES-CHIP 6.8K	5% 1/10W	R118	1-216-017-91	RES-CHIP 47	5% 1/10W
R44	1-216-069-00	RES-CHIP 6.8K	5% 1/10W	R119	1-216-075-00	RES-CHIP 12K	5% 1/10W
R46	1-216-095-00	RES-CHIP 82K	5% 1/10W	R120	1-216-069-00	RES-CHIP 6.8K	5% 1/10W
R47	1-216-057-00	RES-CHIP 2.2K	5% 1/10W	R121	1-216-073-00	RES-CHIP 10K	5% 1/10W
R48	1-216-121-11	RES-CHIP 1M	5% 1/10W	R122	1-216-041-00	RES-CHIP 470	5% 1/10W
R49	1-216-025-11	RES-CHIP 100	5% 1/10W	R123	1-216-031-00	RES-CHIP 180	5% 1/10W
R52	1-216-081-00	RES-CHIP 22K	5% 1/10W	R124	1-216-049-11	RES-CHIP 1K	5% 1/10W
R53	1-216-049-11	RES-CHIP 1K	5% 1/10W	R125	1-216-081-00	RES-CHIP 22K	5% 1/10W
R54	1-216-025-11	RES-CHIP 100	5% 1/10W	R126	1-216-025-11	RES-CHIP 100	5% 1/10W
R58	1-216-063-91	RES-CHIP 3.9K	5% 1/10W	R127	1-216-081-00	RES-CHIP 22K	5% 1/10W
R59	1-216-025-11	RES-CHIP 100	5% 1/10W	R128	1-216-035-00	RES-CHIP 270	5% 1/10W
R60	1-216-025-11	RES-CHIP 100	5% 1/10W	R129	1-216-037-00	RES-CHIP 330	5% 1/10W
R61	1-216-025-11	RES-CHIP 100	5% 1/10W	R130	1-216-061-00	RES-CHIP 3.3K	5% 1/10W
R62	1-216-025-11	RES-CHIP 100	5% 1/10W	R131	1-216-073-00	RES-CHIP 10K	5% 1/10W
R63	1-216-025-11	RES-CHIP 100	5% 1/10W	R132	1-216-025-11	RES-CHIP 100	5% 1/10W
R64	1-216-025-11	RES-CHIP 100	5% 1/10W	R133	1-216-041-00	RES-CHIP 470	5% 1/10W
R65	1-216-025-11	RES-CHIP 100	5% 1/10W	R134	1-216-001-00	RES-CHIP 10	5% 1/10W
R66	1-216-057-00	RES-CHIP 2.2K	5% 1/10W	R135	1-216-045-00	RES-CHIP 680	5% 1/10W
R67	1-216-057-00	RES-CHIP 2.2K	5% 1/10W	R136	1-216-033-00	RES-CHIP 220	5% 1/10W
R69	1-216-049-11	RES-CHIP 1K	5% 1/10W	R137	1-216-049-11	RES-CHIP 1K	5% 1/10W
R70	1-216-025-11	RES-CHIP 100	5% 1/10W	R138	1-216-041-00	RES-CHIP 470	5% 1/10W
R71	1-216-025-11	RES-CHIP 100	5% 1/10W	R139	1-216-049-11	RES-CHIP 1K	5% 1/10W
R72	1-216-025-11	RES-CHIP 100	5% 1/10W	R140	1-216-041-00	RES-CHIP 470	5% 1/10W
R73	1-216-025-11	RES-CHIP 100	5% 1/10W	R141	1-216-047-91	RES-CHIP 820	5% 1/10W
R74	1-216-025-11	RES-CHIP 100	5% 1/10W	R142	1-216-295-11	SHORT 0	
R76	1-216-025-11	RES-CHIP 100	5% 1/10W	R144	1-216-051-00	RES-CHIP 1.2K	5% 1/10W
R78	1-216-025-11	RES-CHIP 100	5% 1/10W	R145	1-216-025-11	RES-CHIP 100	5% 1/10W
R79	1-216-033-00	RES-CHIP 220	5% 1/10W	R146	1-216-025-11	RES-CHIP 100	5% 1/10W
R80	1-216-049-11	RES-CHIP 1K	5% 1/10W	R147	1-216-025-11	RES-CHIP 100	5% 1/10W
				R148	1-216-025-11	RES-CHIP 100	5% 1/10W

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R149	1-216-025-11	RES-CHIP	100 5% 1/10W	R211	1-216-049-11	RES-CHIP	1K 5% 1/10W
R150	1-216-025-11	RES-CHIP	100 5% 1/10W	R212	1-216-022-00	RES-CHIP	75 5% 1/10W
R151	1-216-025-11	RES-CHIP	100 5% 1/10W	R213	1-216-022-00	RES-CHIP	75 5% 1/10W
R152	1-216-061-00	RES-CHIP	3.3K 5% 1/10W	R214	1-216-049-11	RES-CHIP	1K 5% 1/10W
R153	1-216-025-11	RES-CHIP	100 5% 1/10W	R216	1-216-025-11	RES-CHIP	100 5% 1/10W
R154	1-216-295-11	SHORT	0	R217	1-216-113-00	RES-CHIP	470K 5% 1/10W
R157	1-216-295-11	SHORT	0	R218	1-216-025-11	RES-CHIP	100 5% 1/10W
R160	1-216-295-11	SHORT	0	R219	1-216-113-00	RES-CHIP	470K 5% 1/10W
R161	1-208-794-11	METAL CHIP	3.3K 0.5% 1/10W	R220	1-216-295-11	SHORT	0
R162	1-208-790-11	METAL CHIP	2.2K 0.5% 1/10W	R221	1-216-039-00	RES-CHIP	390 5% 1/10W
R163	1-216-033-00	RES-CHIP	220 5% 1/10W	R222	1-216-089-11	RES-CHIP	47K 5% 1/10W
R164	1-216-089-11	RES-CHIP	47K 5% 1/10W	R223	1-216-295-11	SHORT	0
R165	1-216-089-11	RES-CHIP	47K 5% 1/10W	R224	1-216-039-00	RES-CHIP	390 5% 1/10W
R166	1-216-033-00	RES-CHIP	220 5% 1/10W	R225	1-216-089-11	RES-CHIP	47K 5% 1/10W
R167	1-216-043-91	RES-CHIP	560 5% 1/10W	R226	1-216-049-11	RES-CHIP	1K 5% 1/10W
R168	1-216-067-00	RES-CHIP	5.6K 5% 1/10W	R227	1-216-023-00	RES-CHIP	82 5% 1/10W
R169	1-216-033-00	RES-CHIP	220 5% 1/10W	R228	1-216-022-00	RES-CHIP	75 5% 1/10W
R170	1-208-798-11	METAL CHIP	4.7K 0.5% 1/10W	R229	1-216-049-11	RES-CHIP	1K 5% 1/10W
R171	1-216-025-11	RES-CHIP	100 5% 1/10W	R230	1-216-023-00	RES-CHIP	82 5% 1/10W
R172	1-216-033-00	RES-CHIP	220 5% 1/10W	R232	1-216-049-11	RES-CHIP	1K 5% 1/10W
R174	1-216-049-11	RES-CHIP	1K 5% 1/10W	R233	1-216-025-11	RES-CHIP	100 5% 1/10W
R175	1-216-049-11	RES-CHIP	1K 5% 1/10W	R234	1-216-113-00	RES-CHIP	470K 5% 1/10W
R176	1-216-049-11	RES-CHIP	1K 5% 1/10W	R235	1-216-025-11	RES-CHIP	100 5% 1/10W
R177	1-208-811-11	METAL CHIP	16K 0.5% 1/10W	R236	1-216-113-00	RES-CHIP	470K 5% 1/10W
R178	1-216-081-00	RES-CHIP	22K 5% 1/10W	R237	1-216-295-11	SHORT	0
R179	1-216-041-00	RES-CHIP	470 5% 1/10W	R238	1-216-089-11	RES-CHIP	47K 5% 1/10W
R180	1-216-089-11	RES-CHIP	47K 5% 1/10W	R239	1-216-039-00	RES-CHIP	390 5% 1/10W
R181	1-216-089-11	RES-CHIP	47K 5% 1/10W	R240	1-216-295-11	SHORT	0
R182	1-216-635-11	METAL CHIP	220 0.5% 1/10W	R241	1-216-089-11	RES-CHIP	47K 5% 1/10W
R183	1-208-700-11	METAL CHIP	330 0.5% 1/10W	R242	1-216-039-00	RES-CHIP	390 5% 1/10W
R184	1-216-041-00	RES-CHIP	470 5% 1/10W	R243	1-216-295-11	SHORT	0
R185	1-216-043-91	RES-CHIP	560 5% 1/10W	R244	1-216-041-00	RES-CHIP	470 5% 1/10W
R186	1-216-067-00	RES-CHIP	5.6K 5% 1/10W	R245	1-216-049-11	RES-CHIP	1K 5% 1/10W
R187	1-216-049-11	RES-CHIP	1K 5% 1/10W	R246	1-216-295-11	SHORT	0
R188	1-216-057-00	RES-CHIP	2.2K 5% 1/10W	R247	1-216-041-00	RES-CHIP	470 5% 1/10W
R189	1-216-043-91	RES-CHIP	560 5% 1/10W	R248	1-216-025-11	RES-CHIP	100 5% 1/10W
R190	1-216-067-00	RES-CHIP	5.6K 5% 1/10W	R250	1-216-295-11	SHORT	0
R191	1-216-057-00	RES-CHIP	2.2K 5% 1/10W	R251	1-216-049-11	RES-CHIP	1K 5% 1/10W
R192	1-216-049-11	RES-CHIP	1K 5% 1/10W	R252	1-216-073-00	RES-CHIP	10K 5% 1/10W
R193	1-216-049-11	RES-CHIP	1K 5% 1/10W	R253	1-216-049-11	RES-CHIP	1K 5% 1/10W
R194	1-216-049-11	RES-CHIP	1K 5% 1/10W	R254	1-216-041-00	RES-CHIP	470 5% 1/10W
R195	1-216-049-11	RES-CHIP	1K 5% 1/10W	R255	1-216-025-11	RES-CHIP	100 5% 1/10W
R196	1-216-049-11	RES-CHIP	1K 5% 1/10W	R256	1-216-025-11	RES-CHIP	100 5% 1/10W
R197	1-216-049-11	RES-CHIP	1K 5% 1/10W	R257	1-216-073-00	RES-CHIP	10K 5% 1/10W
R198	1-216-033-00	RES-CHIP	220 5% 1/10W	R258	1-216-041-00	RES-CHIP	470 5% 1/10W
R199	1-208-764-11	METAL CHIP	180 0.5% 1/10W	R259	1-216-061-00	RES-CHIP	3.3K 5% 1/10W
R200	1-216-049-11	RES-CHIP	1K 5% 1/10W	R260	1-216-033-00	RES-CHIP	220 5% 1/10W
R201	1-216-295-11	SHORT	0	R261	1-216-041-00	RES-CHIP	470 5% 1/10W
R202	1-216-049-11	RES-CHIP	1K 5% 1/10W	R262	1-216-025-11	RES-CHIP	100 5% 1/10W
R203	1-216-025-11	RES-CHIP	100 5% 1/10W	R263	1-216-049-11	RES-CHIP	1K 5% 1/10W
R204	1-216-025-11	RES-CHIP	100 5% 1/10W	R264	1-216-089-11	RES-CHIP	47K 5% 1/10W
R205	1-216-081-00	RES-CHIP	22K 5% 1/10W	R265	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
R206	1-216-033-00	RES-CHIP	220 5% 1/10W	R266	1-216-089-11	RES-CHIP	47K 5% 1/10W
R207	1-216-089-11	RES-CHIP	47K 5% 1/10W	R267	1-216-083-00	RES-CHIP	27K 5% 1/10W
R208	1-216-041-00	RES-CHIP	470 5% 1/10W	R268	1-216-089-11	RES-CHIP	47K 5% 1/10W
R209	1-216-049-11	RES-CHIP	1K 5% 1/10W	R269	1-216-089-11	RES-CHIP	47K 5% 1/10W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R270	1-216-022-00	RES-CHIP	75 5% 1/10W	R343	1-216-061-00	RES-CHIP	3.3K 5% 1/10W
R271	1-216-022-00	RES-CHIP	75 5% 1/10W	R344	1-216-067-00	RES-CHIP	5.6K 5% 1/10W
R272	1-216-022-00	RES-CHIP	75 5% 1/10W	R347	1-216-025-11	RES-CHIP	100 5% 1/10W
R273	1-216-022-00	RES-CHIP	75 5% 1/10W	R348	1-216-025-11	RES-CHIP	100 5% 1/10W
R274	1-216-089-11	RES-CHIP	47K 5% 1/10W	R349	1-216-025-11	RES-CHIP	100 5% 1/10W
R280	1-216-049-11	RES-CHIP	1K 5% 1/10W	R350	1-216-041-00	RES-CHIP	470 5% 1/10W
R281	1-216-089-11	RES-CHIP	47K 5% 1/10W	R351	1-216-053-00	RES-CHIP	1.5K 5% 1/10W
R282	1-216-093-91	RES-CHIP	68K 5% 1/10W	R352	1-216-077-91	RES-CHIP	15K 5% 1/10W
R283	1-216-065-91	RES-CHIP	4.7K 5% 1/10W	R353	1-216-049-11	RES-CHIP	1K 5% 1/10W
R284	1-216-089-11	RES-CHIP	47K 5% 1/10W	R354	1-216-295-11	SHORT	0
R285	1-216-093-91	RES-CHIP	68K 5% 1/10W	R355	1-216-093-91	RES-CHIP	68K 5% 1/10W
R286	1-216-065-91	RES-CHIP	4.7K 5% 1/10W	R356	1-216-133-00	RES-CHIP	3.3M 5% 1/10W
R287	1-216-041-00	RES-CHIP	470 5% 1/10W	R358	1-216-105-91	RES-CHIP	220K 5% 1/10W
R288	1-216-049-11	RES-CHIP	1K 5% 1/10W	R359	1-216-295-11	SHORT	0
R289	1-216-033-00	RES-CHIP	220 5% 1/10W	R360	1-216-129-00	RES-CHIP	2.2M 5% 1/10W
R290	1-216-033-00	RES-CHIP	220 5% 1/10W	R361	1-216-129-00	RES-CHIP	2.2M 5% 1/10W
R291	1-216-057-00	RES-CHIP	2.2K 5% 1/10W	R362	1-216-049-11	RES-CHIP	1K 5% 1/10W
R292	1-216-057-00	RES-CHIP	2.2K 5% 1/10W	R364	1-216-049-11	RES-CHIP	1K 5% 1/10W
R295	1-216-049-11	RES-CHIP	1K 5% 1/10W	R366	1-216-073-00	RES-CHIP	10K 5% 1/10W
R296	1-216-049-11	RES-CHIP	1K 5% 1/10W	R367	1-216-051-00	RES-CHIP	1.2K 5% 1/10W
R297	1-216-033-00	RES-CHIP	220 5% 1/10W	R368	1-216-025-11	RES-CHIP	100 5% 1/10W
R298	1-216-033-00	RES-CHIP	220 5% 1/10W	R370	1-216-295-11	SHORT	0
R300	1-216-025-11	RES-CHIP	100 5% 1/10W	R371	1-216-033-00	RES-CHIP	220 5% 1/10W
R301	1-216-033-00	RES-CHIP	220 5% 1/10W	R373	1-216-049-11	RES-CHIP	1K 5% 1/10W
R302	1-216-295-11	SHORT	0	R374	1-216-041-00	RES-CHIP	470 5% 1/10W
R303	1-216-295-11	SHORT	0	R375	1-216-049-11	RES-CHIP	1K 5% 1/10W
R304	1-216-129-00	RES-CHIP	2.2M 5% 1/10W	R376	1-216-081-00	RES-CHIP	22K 5% 1/10W
R305	1-216-033-00	RES-CHIP	220 5% 1/10W	R377	1-216-049-11	RES-CHIP	1K 5% 1/10W
R308	1-216-025-11	RES-CHIP	100 5% 1/10W	R378	1-208-811-11	METAL CHIP	16K 0.5% 1/10W
R309	1-216-033-00	RES-CHIP	220 5% 1/10W	R379	1-216-041-00	RES-CHIP	470 5% 1/10W
R310	1-216-033-00	RES-CHIP	220 5% 1/10W	R392	1-216-049-11	RES-CHIP	1K 5% 1/10W
R314	1-216-295-11	SHORT	0	R393	1-208-782-11	METAL CHIP	1K 0.5% 1/10W
R315	1-216-295-11	SHORT	0	R394	1-208-782-11	METAL CHIP	1K 0.5% 1/10W
R316	1-216-033-00	RES-CHIP	220 5% 1/10W	R395	1-216-295-11	SHORT	0
R317	1-216-033-00	RES-CHIP	220 5% 1/10W	R396	1-216-022-00	RES-CHIP	75 5% 1/10W
R320	1-216-025-11	RES-CHIP	100 5% 1/10W	R397	1-216-022-00	RES-CHIP	75 5% 1/10W
R321	1-216-025-11	RES-CHIP	100 5% 1/10W	R398	1-216-022-00	RES-CHIP	75 5% 1/10W
R322	1-216-025-11	RES-CHIP	100 5% 1/10W	R399	1-216-022-00	RES-CHIP	75 5% 1/10W
R323	1-216-033-00	RES-CHIP	220 5% 1/10W	R401	1-216-033-00	RES-CHIP	220 5% 1/10W
R325	1-216-089-11	RES-CHIP	47K 5% 1/10W	R402	1-216-073-00	RES-CHIP	10K 5% 1/10W
R326	1-216-025-11	RES-CHIP	100 5% 1/10W	R403	1-216-081-00	RES-CHIP	22K 5% 1/10W
R327	1-216-025-11	RES-CHIP	100 5% 1/10W	R404	1-216-083-00	RES-CHIP	27K 5% 1/10W
R329	1-216-089-11	RES-CHIP	47K 5% 1/10W	R405	1-216-073-00	RES-CHIP	10K 5% 1/10W
R330	1-216-025-11	RES-CHIP	100 5% 1/10W	R406	1-216-073-00	RES-CHIP	10K 5% 1/10W
R331	1-216-059-00	RES-CHIP	2.7K 5% 1/10W	R407	1-216-073-00	RES-CHIP	10K 5% 1/10W
R332	1-216-049-11	RES-CHIP	1K 5% 1/10W	R408	1-216-049-11	RES-CHIP	1K 5% 1/10W
R333	1-216-067-00	RES-CHIP	5.6K 5% 1/10W	R409	1-216-049-11	RES-CHIP	1K 5% 1/10W
R334	1-216-041-00	RES-CHIP	470 5% 1/10W	R410	1-216-081-00	RES-CHIP	22K 5% 1/10W
R335	1-208-806-11	METAL CHIP	10K 0.5% 1/10W	R411	1-216-081-00	RES-CHIP	22K 5% 1/10W
R336	1-216-109-00	RES-CHIP	330K 5% 1/10W	R1001	1-216-025-11	RES-CHIP	100 5% 1/10W
R337	1-216-025-11	RES-CHIP	100 5% 1/10W	R1002	1-216-025-11	RES-CHIP	100 5% 1/10W
R338	1-216-049-11	RES-CHIP	1K 5% 1/10W	R1008	1-216-121-11	RES-CHIP	1M 5% 1/10W
R339	1-216-049-11	RES-CHIP	1K 5% 1/10W	R1009	1-216-121-11	RES-CHIP	1M 5% 1/10W
R340	1-216-025-11	RES-CHIP	100 5% 1/10W	R1010	1-216-295-11	SHORT	0
R341	1-216-025-11	RES-CHIP	100 5% 1/10W	R1011	1-216-073-00	RES-CHIP	10K 5% 1/10W
R342	1-216-049-11	RES-CHIP	1K 5% 1/10W				

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R1012	1-216-041-00	RES-CHIP	470 5% 1/10W	R2812	1-216-295-11	SHORT	0
R1014	1-216-065-91	RES-CHIP	4.7K 5% 1/10W	R2813	1-216-295-11	SHORT	0
R1017	1-216-295-11	SHORT	0	R2814	1-216-049-11	RES-CHIP	1K 5% 1/10W
R1020	1-216-097-11	RES-CHIP	100K 5% 1/10W	R2815	1-216-295-11	SHORT	0
R1021	1-216-029-00	RES-CHIP	150 5% 1/10W	R2816	1-216-049-11	RES-CHIP	1K 5% 1/10W
R1022	1-216-029-00	RES-CHIP	150 5% 1/10W	R2820	1-216-295-11	SHORT	0
R1023	1-216-029-00	RES-CHIP	150 5% 1/10W	R2821	1-216-049-11	RES-CHIP	1K 5% 1/10W
R1024	1-216-045-00	RES-CHIP	680 5% 1/10W	R2822	1-216-033-00	RES-CHIP	220 5% 1/10W
R1026	1-216-025-11	RES-CHIP	100 5% 1/10W	R2823	1-216-089-11	RES-CHIP	47K 5% 1/10W
R1027	1-216-025-11	RES-CHIP	100 5% 1/10W	R2824	1-216-073-00	RES-CHIP	10K 5% 1/10W
R1028	1-216-025-11	RES-CHIP	100 5% 1/10W	R2825	1-216-025-11	RES-CHIP	100 5% 1/10W
R2401	1-216-073-00	RES-CHIP	10K 5% 1/10W	R2826	1-216-033-00	RES-CHIP	220 5% 1/10W
R2403	1-216-097-11	RES-CHIP	100K 5% 1/10W	R2827	1-216-105-91	RES-CHIP	220K 5% 1/10W
R2404	1-208-782-11	METAL CHIP	1K 0.5% 1/10W	R2829	1-216-049-11	RES-CHIP	1K 5% 1/10W
R2405	1-208-794-11	METAL CHIP	3.3K 0.5% 1/10W	R2830	1-216-039-00	RES-CHIP	390 5% 1/10W
R2406	1-216-057-00	RES-CHIP	2.2K 5% 1/10W	R2831	1-216-295-11	SHORT	0
R2407	1-208-772-11	METAL CHIP	390 0.5% 1/10W	R2832	1-216-097-11	RES-CHIP	100K 5% 1/10W
R2408	1-208-782-11	METAL CHIP	1K 0.5% 1/10W	R2833	1-216-045-00	RES-CHIP	680 5% 1/10W
R2409	1-216-033-00	RES-CHIP	220 5% 1/10W	R2834	1-216-081-00	RES-CHIP	22K 5% 1/10W
R2410	1-216-049-11	RES-CHIP	1K 5% 1/10W	R2835	1-216-083-00	RES-CHIP	27K 5% 1/10W
R2411	1-216-057-00	RES-CHIP	2.2K 5% 1/10W	R2836	1-216-033-00	RES-CHIP	220 5% 1/10W
R2412	1-208-764-11	METAL CHIP	180 0.5% 1/10W	R2837	1-216-081-00	RES-CHIP	22K 5% 1/10W
R2413	1-208-782-11	METAL CHIP	1K 0.5% 1/10W	R2838	1-216-081-00	RES-CHIP	22K 5% 1/10W
R2414	1-216-033-00	RES-CHIP	220 5% 1/10W	R2839	1-216-081-00	RES-CHIP	22K 5% 1/10W
R2415	1-216-103-00	RES-CHIP	180K 5% 1/10W	R2840	1-216-073-00	RES-CHIP	10K 5% 1/10W
R2416	1-208-782-11	METAL CHIP	1K 0.5% 1/10W	R2841	1-208-784-11	METAL CHIP	1.2K 0.5% 1/10W
R2417	1-216-065-91	RES-CHIP	4.7K 5% 1/10W	R2842	1-216-049-11	RES-CHIP	1K 5% 1/10W
R2418	1-208-782-11	METAL CHIP	1K 0.5% 1/10W	R2843	1-208-782-11	METAL CHIP	1K 0.5% 1/10W
R2419	1-208-782-11	METAL CHIP	1K 0.5% 1/10W	R2844	1-216-295-11	SHORT	0
R2420	1-208-793-11	METAL CHIP	3K 0.5% 1/10W	R2846	1-216-033-00	RES-CHIP	220 5% 1/10W
R2421	1-216-655-11	METAL CHIP	1.5K 0.5% 1/10W	R2848	1-216-049-11	RES-CHIP	1K 5% 1/10W
R2422	1-208-782-11	METAL CHIP	1K 0.5% 1/10W	R2850	1-216-033-00	RES-CHIP	220 5% 1/10W
R2423	1-208-782-11	METAL CHIP	1K 0.5% 1/10W	R2851	1-216-025-11	RES-CHIP	100 5% 1/10W
R2424	1-216-057-00	RES-CHIP	2.2K 5% 1/10W	R2852	1-216-097-11	RES-CHIP	100K 5% 1/10W
R2425	1-208-780-11	METAL CHIP	820 0.5% 1/10W	R2853	1-216-037-00	RES-CHIP	330 5% 1/10W
R2426	1-216-025-11	RES-CHIP	100 5% 1/10W	R2854	1-216-037-00	RES-CHIP	330 5% 1/10W
R2427	1-208-782-11	METAL CHIP	1K 0.5% 1/10W	R2855	1-216-097-11	RES-CHIP	100K 5% 1/10W
R2428	1-216-033-00	RES-CHIP	220 5% 1/10W	R2856	1-216-295-11	SHORT	0
R2429	1-216-025-11	RES-CHIP	100 5% 1/10W	R2857	1-216-295-11	SHORT	0
R2430	1-208-782-11	METAL CHIP	1K 0.5% 1/10W	R2858	1-216-049-11	RES-CHIP	1K 5% 1/10W
R2431	1-208-782-11	METAL CHIP	1K 0.5% 1/10W	R2859	1-216-295-11	SHORT	0
R2432	1-216-057-00	RES-CHIP	2.2K 5% 1/10W	R2860	1-216-025-11	RES-CHIP	100 5% 1/10W
R2433	1-216-025-11	RES-CHIP	100 5% 1/10W	R2861	1-216-027-00	RES-CHIP	120 5% 1/10W
R2434	1-216-025-11	RES-CHIP	100 5% 1/10W	R2862	1-216-049-11	RES-CHIP	1K 5% 1/10W
R2435	1-216-025-11	RES-CHIP	100 5% 1/10W	R2863	1-216-005-00	RES-CHIP	15 5% 1/10W
R2436	1-216-049-11	RES-CHIP	1K 5% 1/10W	R2864	1-216-005-00	RES-CHIP	15 5% 1/10W
R2437	1-216-073-00	RES-CHIP	10K 5% 1/10W	R2865	1-216-049-11	RES-CHIP	1K 5% 1/10W
R2438	1-216-073-00	RES-CHIP	10K 5% 1/10W	R2866	1-216-049-11	RES-CHIP	1K 5% 1/10W
R2439	1-208-775-11	METAL CHIP	510 0.5% 1/10W	R2867	1-216-025-11	RES-CHIP	100 5% 1/10W
R2440	1-216-635-11	METAL CHIP	220 0.5% 1/10W	R2868	1-216-033-00	RES-CHIP	220 5% 1/10W
R2801	1-216-025-11	RES-CHIP	100 5% 1/10W	R2869	1-216-049-11	RES-CHIP	1K 5% 1/10W
R2804	1-216-295-11	SHORT	0	R2871	1-216-049-11	RES-CHIP	1K 5% 1/10W
R2805	1-216-065-91	RES-CHIP	4.7K 5% 1/10W	R2872	1-216-073-00	RES-CHIP	10K 5% 1/10W
R2808	1-216-025-11	RES-CHIP	100 5% 1/10W	R2873	1-216-073-00	RES-CHIP	10K 5% 1/10W
R2809	1-216-025-11	RES-CHIP	100 5% 1/10W	R2874	1-216-033-00	RES-CHIP	220 5% 1/10W
R2811	1-216-295-11	SHORT	0	R2875	1-216-033-00	RES-CHIP	220 5% 1/10W

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C6507	1-136-164-00	MYLAR	0.082 μ F 5% 50V	D6038	8-719-312-47	DIODE RBA-406B	
C6508	1-136-164-00	MYLAR	0.082 μ F 5% 50V	D6042	8-719-979-64	DIODE UF4005PKG23	
C6509	1-107-824-11	CERAMIC	220pF 5% 1KV	D6043	8-719-110-53	ZENER DIODE RD20ESB2	
C6510	1-136-165-00	MYLAR	0.1 μ F 5% 50V	D6044	8-719-979-64	DIODE UF4005PKG23	
C6511	1-117-631-21	FILM	3300pF 3% 1.2KV	D6045	8-719-110-53	ZENER DIODE RD20ESB2	
C6512	1-126-965-11	ELECT	22 μ F 20% 50V	D6046	8-719-110-53	ZENER DIODE RD20ESB2	
C6513	1-126-967-11	ELECT	47 μ F 20% 50V	D6047	8-719-110-53	ZENER DIODE RD20ESB2	
C6514	1-126-936-11	ELECT	3300 μ F 20% 16V	D6048	8-719-921-88	DIODE MTZJ-13B	
C6515	1-126-936-11	ELECT	3300 μ F 20% 16V	D6049	8-719-031-78	DIODE S2L40F	
C6516	1-126-941-11	ELECT	470 μ F 20% 25V	D6050	8-719-991-33	DIODE 1SS133T-77	
C6517	1-126-967-11	ELECT	47 μ F 20% 50V	D6051	8-719-991-33	DIODE 1SS133T-77	
C6518	1-126-941-11	ELECT	470 μ F 20% 25V	D6501	8-719-510-35	DIODE D2SBA60F	
C6519	1-126-941-11	ELECT	470 μ F 20% 25V	D6504	8-719-991-33	DIODE 1SS133T-77	
C6520	1-126-967-11	ELECT	47 μ F 20% 50V	D6505	8-719-991-33	DIODE 1SS133T-77	
C6522	1-161-964-51	CERAMIC	0.0047 μ F 250V	D6506	8-719-110-17	ZENER DIODE RD10ESB2	
C6523	1-161-964-51	CERAMIC	0.0047 μ F 250V	D6507	8-719-063-73	DIODE D1NL20U-TR	
C6525	1-126-957-11	ELECT	0.22 μ F 20% 50V	D6508	8-719-510-12	DIODE D10SC4M	
<CONNECTOR>				D6509	8-719-510-12	DIODE D10SC4M	
CN6001	1-695-915-11	TAB (CONTACT)		D6510	8-719-510-12	DIODE D10SC4M	
CN6002	1-695-915-11	TAB (CONTACT)		D6511	8-719-063-73	DIODE D1NL20U-TR	
CN6004	1-695-915-11	TAB (CONTACT)		D6512	8-719-991-33	DIODE 1SS133T-77	
CN6005 *	1-580-843-11	PIN, CONNECTOR (POWER)		D6514	8-719-991-33	DIODE 1SS133T-77	
CN6006 *	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P		D6515	8-719-110-53	ZENER DIODE RD20ESB2	
CN6008 *	1-564-509-11	PLUG, CONNECTOR 6P		D6516	8-719-991-33	DIODE 1SS133T-77	
CN6009	1-695-915-11	TAB (CONTACT)		D6517	8-719-991-33	DIODE 1SS133T-77	
CN6011 *	1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P		<FUSE>			
CN6012 *	1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P		F6001 Δ	1-576-232-21	FUSE (H.B.C.) 5A/250V	
CN6013 *	1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P		<FERRITE BEAD>			
CN6502 *	1-564-510-11	PLUG, CONNECTOR 7P		FB6009	1-410-397-21	FERRITE 1.1 μ H	
CN6503 *	1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P		<IC>			
<DIODE>				IC6001 Δ	8-759-468-89	IC TOP209P	
D6001	8-719-068-00	DIODE ERC04-06SE		IC6004	8-759-537-24	IC KA7500B	
D6002	8-719-052-91	DIODE D4SBS4-F		IC6005 Δ	8-749-924-35	PHOTO COUPLER ON3171-R	
D6003	8-719-510-53	DIODE D4SB60L		IC6006 Δ	8-749-924-35	PHOTO COUPLER ON3171-R	
D6004	8-719-057-96	DIODE D10SC6M-4012		IC6007	8-759-185-47	IC IR2112	
D6005	8-719-982-27	DIODE MTZJ-33C		IC6008	8-749-920-61	IC SE-135N	
D6006	8-719-068-00	DIODE ERC04-06SE		IC6501	8-729-045-61	TRANSISTOR MX0542AB-F	
D6007	8-719-068-00	DIODE ERC04-06SE		IC6502	8-759-908-15	IC TL431CLP	
D6008	8-719-073-23	ZENER DIODE ST02D-200TA		<COIL>			
D6012	8-719-991-33	DIODE 1SS133T-77		L6002	1-412-525-31	INDUCTOR 10 μ H	
D6013	8-719-110-03	ZENER DIODE RD7.5ESB2		L6003	1-412-525-31	INDUCTOR 10 μ H	
D6014	8-719-991-33	DIODE 1SS133T-77		L6004	1-412-525-31	INDUCTOR 10 μ H	
D6017	8-719-063-73	DIODE D1NL20U-TR		L6005	1-412-525-31	INDUCTOR 10 μ H	
D6018	8-719-991-33	DIODE 1SS133T-77		L6006	1-412-525-31	INDUCTOR 10 μ H	
D6025	8-719-063-73	DIODE D1NL20U-TR		L6008	1-412-533-21	INDUCTOR 47 μ H	
D6032	8-719-991-33	DIODE 1SS133T-77		L6009	1-412-523-41	INDUCTOR 6.8 μ H	
D6033	8-719-991-33	DIODE 1SS133T-77		L6010	1-412-523-41	INDUCTOR 6.8 μ H	
D6034	8-719-991-33	DIODE 1SS133T-77		L6011	1-412-525-31	INDUCTOR 10 μ H	
D6035	8-719-018-83	DIODE D2S4M		L6501	1-412-525-31	INDUCTOR 10 μ H	
D6036	8-719-018-83	DIODE D2S4M					
D6037	8-719-031-78	DIODE S2L40F					

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
L6502	1-412-525-31	INDUCTOR	10 μ H	R6049	1-249-429-11	CARBON	10K 5% 1/4W
L6503	1-412-525-31	INDUCTOR	10 μ H	R6050	1-249-417-11	CARBON	1K 5% 1/4W
				R6051	1-215-444-00	METAL	9.1K 1% 1/4W
				R6052	1-249-417-11	CARBON	1K 5% 1/4W
				R6053	1-249-417-11	CARBON	1K 5% 1/4W
		<IC LINK>		R6054	1-249-417-11	CARBON	1K 5% 1/4W
PS6001 Δ	1-533-595-31	LINK, IC (3.15A/90V AC, 60V DC)		R6055	1-249-425-11	CARBON	4.7K 5% 1/4W
PS6002 Δ	1-533-595-31	LINK, IC (3.15A/90V AC, 60V DC)		R6056	1-249-421-11	CARBON	2.2K 5% 1/4W
PS6003 Δ	1-533-597-31	LINK, IC (5A/90V AC, 60V DC)		R6057	1-249-429-11	CARBON	10K 5% 1/4W
PS6501 Δ	1-801-549-21	PROTECTOR, MODULE		R6058	1-249-429-11	CARBON	10K 5% 1/4W
PS6502 Δ	1-533-597-31	LINK, IC (5A/90V AC, 60V DC)		R6059	1-249-425-11	CARBON	4.7K 5% 1/4W
PS6503 Δ	1-801-550-21	PROTECTOR, MODUL		R6060	1-249-413-11	CARBON	470 5% 1/4W F
PS6504 Δ	1-532-637-91	LINK, IC (1A/150V)		R6061	1-215-477-00	METAL	220K 1% 1/4W
PS6505 Δ	1-801-550-21	PROTECTOR, MODUL		R6062	1-249-417-11	CARBON	1K 5% 1/4W F
				R6063	1-249-397-11	CARBON	22 5% 1/4W F
		<TRANSISTOR>		R6064	1-249-397-11	CARBON	22 5% 1/4W F
Q6001	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		R6065	1-249-441-11	CARBON	100K 5% 1/4W
Q6002	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		R6066	1-216-366-00	METAL OXIDE	0.56 5% 2W F
Q6003	8-729-119-76	TRANSISTOR 2SA1175-HFE		R6067	1-249-425-11	CARBON	4.7K 5% 1/4W F
Q6005	8-729-119-76	TRANSISTOR 2SA1175-HFE		R6068	1-249-425-11	CARBON	4.7K 5% 1/4W F
Q6009	8-729-140-97	TRANSISTOR 2SB734-34		R6069	1-215-477-00	METAL	220K 1% 1/4W
Q6010	8-729-922-37	TRANSISTOR 2SD2144S-UVW		R6070	1-249-417-11	CARBON	1K 5% 1/4W F
Q6011	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		R6071	1-215-453-00	METAL	22K 1% 1/4W
Q6012	8-729-119-76	TRANSISTOR 2SA1175-HFE		R6072	1-215-476-00	METAL	200K 1% 1/4W
Q6013	8-729-820-82	TRANSISTOR 2SA1208-S		R6073	1-249-413-11	CARBON	470 5% 1/4W
Q6014	8-729-028-10	TRANSISTOR IRFI744G-LF		R6074	1-215-858-00	METAL OXIDE	15 5% 1W F
Q6015	8-729-028-10	TRANSISTOR IRFI744G-LF		R6075	1-216-358-11	METAL OXIDE	5.6 5% 1W F
Q6501	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		R6079	1-249-377-11	CARBON	0.47 5% 1/4W F
Q6502	8-729-026-39	TRANSISTOR 2SA933AS-QT		R6080	1-249-377-11	CARBON	0.47 5% 1/4W F
Q6503	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		R6081	1-249-377-11	CARBON	0.47 5% 1/4W F
Q6504	8-729-922-37	TRANSISTOR 2SD2144S-UVW		R6082	1-249-377-11	CARBON	0.47 5% 1/4W F
Q6505	8-729-119-76	TRANSISTOR 2SA1175-HFE		R6083	1-249-377-11	CARBON	0.47 5% 1/4W F
Q6506	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		R6084	1-249-377-11	CARBON	0.47 5% 1/4W F
				R6085 Δ	1-212-849-61	FUSIBLE	4.7 5% 1/4W F
				R6086	1-249-429-11	CARBON	10K 5% 1/4W
		<RESISTOR>		R6502	1-260-127-11	CARBON	220K 5% 1/2W
R6000 Δ	1-202-885-91	SOLID	1M 20% 1/2W	R6503	1-260-127-11	CARBON	220K 5% 1/2W
R6001	1-249-417-11	CARBON	1K 5% 1/4W	R6504 Δ	1-220-926-11	FUSIBLE	0.47 10% 1/2W F
R6002 Δ	1-218-265-11	METAL	8.2M 5% 1W	R6505	1-260-127-11	CARBON	220K 5% 1/2W
R6008	1-247-881-00	CARBON	120K 5% 1/4W	R6507	1-260-127-11	CARBON	220K 5% 1/2W
R6009	1-260-128-91	CARBON	270K 5% 1/2W	R6508	1-249-391-11	CARBON	6.8 5% 1/4W
R6010	1-260-128-91	CARBON	270K 5% 1/2W	R6509	1-249-391-11	CARBON	6.8 5% 1/4W
R6013	1-202-968-11	CEMENTED	1.2 5% 10W	R6510	1-215-428-00	METAL	2K 1% 1/4W
R6014	1-249-437-11	CARBON	47K 5% 1/4W	R6511	1-249-437-11	CARBON	47K 5% 1/4W
R6018	1-249-437-11	CARBON	47K 5% 1/4W	R6512	1-215-429-00	METAL	2.2K 1% 1/4W
R6019	1-249-437-11	CARBON	47K 5% 1/4W	R6513	1-249-417-11	CARBON	1K 5% 1/4W
R6022	1-247-791-91	CARBON	22 5% 1/4W	R6514	1-249-429-11	CARBON	10K 5% 1/4W
R6024	1-205-998-11	CEMENTED	1 5% 10W	R6515	1-247-807-31	CARBON	100 5% 1/4W
R6026	1-205-998-11	CEMENTED	1 5% 10W	R6516	1-249-429-11	CARBON	10K 5% 1/4W
R6027	1-249-425-11	CARBON	4.7K 5% 1/4W	R6517	1-249-417-11	CARBON	1K 5% 1/4W
R6032 Δ	1-202-933-61	FUSIBLE	0.1 10% 1/2W F	R6518	1-249-377-11	CARBON	0.47 5% 1/4W F
R6034	1-247-895-91	CARBON	470K 5% 1/4W	R6519	1-249-425-11	CARBON	4.7K 5% 1/4W
R6045	1-215-427-00	METAL	1.8K 1% 1/4W	R6520	1-249-425-11	CARBON	4.7K 5% 1/4W
R6046	1-249-433-11	CARBON	22K 5% 1/4W	R6521	1-215-858-00	METAL OXIDE	15 5% 1W F
R6047	1-249-437-11	CARBON	47K 5% 1/4W	R6522	1-240-251-11	CMT,MELF	6.8 5% 10W
R6048	1-249-425-11	CARBON	4.7K 5% 1/4W	R6523	1-215-445-00	METAL	10K 1% 1/4W

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C738	1-101-880-00	CERAMIC	47pF 5% 50V				
C739	1-104-664-11	ELECT	47 μ F 20% 25V				
C740	1-102-114-00	CERAMIC	470pF 10% 50V				
	<CONNECTOR>				<CAPACITOR>		
CN731	1-695-915-11	TAB (CONTACT)		C762	1-126-964-11	ELECT	10 μ F 20% 50V
CN732	* 1-564-508-11	PLUG, CONNECTOR 5P		C763	1-161-754-00	CERAMIC	0.001 μ F 10% 2KV
CN733	* 1-564-511-11	PLUG, CONNECTOR 8P		C764	1-102-112-00	CERAMIC	330pF 10% 50V
CN734	* 1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P		C765	1-161-830-00	CERAMIC	0.0047 μ F 500V
CN735	Δ 1-251-182-41	SOCKET, PICTURE TUBE		C766	1-162-115-00	CERAMIC	330pF 10% 2KV
CN736	* 1-564-512-11	PLUG, CONNECTOR 9P		C767	1-107-662-11	ELECT	22 μ F 20% 250V
CN737	* 1-564-512-11	PLUG, CONNECTOR 9P		C768	1-101-880-00	CERAMIC	47pF 5% 50V
	<DIODE>			C769	1-104-664-11	ELECT	47 μ F 20% 25V
D731	8-719-991-33	DIODE 1SS133T-77		C770	1-102-114-00	CERAMIC	470pF 10% 50V
D732	8-719-991-33	DIODE 1SS133T-77			<CONNECTOR>		
D733	8-719-991-33	DIODE 1SS133T-77		CN761	1-695-915-11	TAB (CONTACT)	
D735	8-719-991-33	DIODE 1SS133T-77		CN762	* 1-564-508-11	PLUG, CONNECTOR 5P	
D736	8-719-991-33	DIODE 1SS133T-77		CN763	* 1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P	
	<COIL>			CN764	Δ 1-251-182-41	SOCKET, PICTURE TUBE	
L731	1-408-623-31	INDUCTOR	470 μ H	CN765	* 1-564-512-11	PLUG, CONNECTOR 9P	
L732	1-408-619-31	INDUCTOR	220 μ H	CN766	* 1-764-333-11	PLUG, CONNECTOR 10P	
	<TRANSISTOR>				<DIODE>		
Q731	8-729-200-17	TRANSISTOR 2SA1091-O		D761	8-719-991-33	DIODE 1SS133T-77	
Q732	8-729-045-56	TRANSISTOR 2SC2611-15		D762	8-719-991-33	DIODE 1SS133T-77	
Q733	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		D763	8-719-991-33	DIODE 1SS133T-77	
	<RESISTOR>			D765	8-719-991-33	DIODE 1SS133T-77	
R731	1-219-743-11	CARBON	100 5% 1/2W	D766	8-719-991-33	DIODE 1SS133T-77	
R732	1-260-132-11	CARBON	560K 5% 1/2W		<COIL>		
R733	1-215-923-00	METAL OXIDE	10K 5% 3W F	L761	1-408-623-31	INDUCTOR	470 μ H
R735	1-247-807-31	CARBON	100 5% 1/4W	L762	1-408-619-31	INDUCTOR	220 μ H
R736	1-249-425-11	CARBON	4.7K 5% 1/4W		<TRANSISTOR>		
R737	1-260-099-11	CARBON	1K 5% 1/2W	Q761	8-729-200-17	TRANSISTOR 2SA1091-O	
R738	1-249-407-11	CARBON	150 5% 1/4W	Q762	8-729-045-56	TRANSISTOR 2SC2611-15	
R739	1-260-133-11	CARBON	680K 5% 1/2W	Q763	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
R740	1-202-818-00	SOLID	1K 20% 1/2W	Q764	8-729-119-76	TRANSISTOR 2SA1175-HFE	
R741	1-249-393-11	CARBON	10 5% 1/4W		<RESISTOR>		
R742	1-249-409-11	CARBON	220 5% 1/4W	R761	1-219-743-11	CARBON	100 5% 1/2W
R744	1-247-891-00	CARBON	330K 5% 1/4W	R762	1-260-132-11	CARBON	560K 5% 1/2W
R745	1-247-843-11	CARBON	3.3K 5% 1/4W	R763	1-215-923-00	METAL OXIDE	10K 5% 3W F
R746	1-202-814-11	SOLID	33K 20% 1/2W	R765	1-247-807-31	CARBON	100 5% 1/4W
	<SPARK GAP>			R766	1-260-099-11	CARBON	1K 5% 1/2W
SG731	1-519-422-11	GAP, SPARK		R767	1-249-425-11	CARBON	4.7K 5% 1/4W
SG732	1-519-422-11	GAP, SPARK		R768	1-260-133-11	CARBON	680K 5% 1/2W
SG733	1-519-422-11	GAP, SPARK		R769	1-202-818-00	SOLID	1K 20% 1/2W
	*****			R770	1-249-409-11	CARBON	220 5% 1/4W
				R771	1-219-743-11	CARBON	100 5% 1/2W

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The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R772	1-249-393-11	CARBON	10 5% 1/4W	C543	1-126-964-11	ELECT	10 μ F 20% 50V
R773	1-249-413-11	CARBON	470 5% 1/4W	C548	1-102-244-00	CERAMIC	220pF 10% 500V
R775	1-249-427-11	CARBON	6.8K 5% 1/4W	C550	1-126-935-11	ELECT	470 μ F 20% 16V
R776	1-249-437-11	CARBON	47K 5% 1/4W	C551	1-126-935-11	ELECT	470 μ F 20% 16V
R777	1-249-425-11	CARBON	4.7K 5% 1/4W	C554	1-137-501-11	FILM	0.0068 μ F 5% 630V
R778	1-202-814-11	SOLID	33K 20% 1/2W	C555	1-126-960-11	ELECT	1 μ F 20% 50V
R779	1-249-409-11	CARBON	220 5% 1/4W	C556	1-130-495-00	MYLAR	0.1 μ F 5% 50V
<SPARK GAP>				C557	1-126-964-11	ELECT	10 μ F 20% 50V
SG761	1-519-422-11	GAP, SPARK		C558	1-126-935-11	ELECT	470 μ F 20% 16V
SG762	1-519-422-11	GAP, SPARK		C701	1-126-933-11	ELECT	100 μ F 20% 16V
SG763	1-519-422-11	GAP, SPARK		C801	1-104-665-11	ELECT	100 μ F 20% 25V
*****				C802	1-104-665-11	ELECT	100 μ F 20% 25V
* A-1640-374-AE BOARD, COMPLETE				C803	1-126-934-11	ELECT	220 μ F 20% 16V
*****				C804	1-126-934-11	ELECT	220 μ F 20% 16V
4-382-854-11 SCREW (M3X10), P, SW (+)				C805	1-126-934-11	ELECT	220 μ F 20% 16V
7-682-952-09 SCREW +PSW 3X16				C806	1-126-934-11	ELECT	220 μ F 20% 16V
<CAPACITOR>				C807	1-137-374-11	MYLAR	0.047 μ F 5% 50V
C502	1-126-959-11	ELECT	0.47 μ F 20% 50V	C808	1-137-374-11	MYLAR	0.047 μ F 5% 50V
C506	1-126-933-11	ELECT	100 μ F 20% 16V	C809	1-137-374-11	MYLAR	0.047 μ F 5% 50V
C507	1-126-965-11	ELECT	22 μ F 20% 50V	C810	1-137-374-11	MYLAR	0.047 μ F 5% 50V
C508	1-102-228-00	CERAMIC	470pF 10% 500V	C811	1-102-074-00	CERAMIC	0.001 μ F 10% 50V
C509	1-106-383-00	MYLAR	0.047 μ F 10% 200V	C812	1-136-169-00	MYLAR	0.22 μ F 5% 50V
C511	1-130-475-00	MYLAR	0.0022 μ F 5% 50V	C813	1-137-374-11	MYLAR	0.047 μ F 5% 50V
C512	1-136-479-11	FILM	0.001 μ F 5% 50V	C815	1-104-665-11	ELECT	100 μ F 20% 25V
C513	1-126-965-11	ELECT	22 μ F 20% 50V	C817	1-104-664-11	ELECT	47 μ F 20% 25V
C514	Δ 1-162-116-91	CERAMIC	680pF 10% 2KV	C818	1-126-933-11	ELECT	100 μ F 20% 16V
C515	Δ 1-136-759-91	FILM	0.039 μ F 5% 630V	C819	1-104-664-11	ELECT	47 μ F 20% 25V
C516	Δ 1-117-648-11	FILM	15000pF 3% 1.2KV	C821	1-130-495-00	MYLAR	0.1 μ F 5% 50V
C518	1-130-495-00	MYLAR	0.1 μ F 5% 50V	C822	1-107-648-91	ELECT	100 μ F 20% 160V
C519	1-106-359-00	MYLAR	0.0047 μ F 10% 100V	C823	1-104-664-11	ELECT	47 μ F 20% 25V
C520	1-162-116-00	CERAMIC	680pF 10% 2KV	C825	1-104-665-11	ELECT	100 μ F 20% 25V
C521	1-162-116-00	CERAMIC	680pF 10% 2KV	C826	1-136-165-00	MYLAR	0.1 μ F 5% 50V
C523	1-117-673-11	FILM	1.5 μ F 5% 250V	C827	1-126-964-11	ELECT	10 μ F 20% 50V
C524	1-106-359-00	MYLAR	0.0047 μ F 10% 100V	C828	1-102-824-00	CERAMIC	470pF 5% 50V
C526	1-102-228-00	CERAMIC	470pF 10% 500V	C829	1-126-959-11	ELECT	0.47 μ F 20% 50V
C527	1-126-970-11	ELECT	330 μ F 20% 50V	C830	1-102-824-00	CERAMIC	470pF 5% 50V
C528	1-107-957-11	ELECT	1 μ F 20% 250V	C831	1-126-960-11	ELECT	1 μ F 20% 50V
C529	1-109-844-11	FILM	0.68 μ F 5% 250V	C832	1-126-960-11	ELECT	1 μ F 20% 50V
C530	1-107-648-91	ELECT	100 μ F 20% 160V	C833	1-126-960-11	ELECT	1 μ F 20% 50V
C531	1-126-971-11	ELECT	470 μ F 20% 50V	C834	1-126-968-11	ELECT	100 μ F 20% 50V
C532	1-126-971-11	ELECT	470 μ F 20% 50V	C835	1-126-967-11	ELECT	47 μ F 20% 50V
C533	1-107-655-11	ELECT	47 μ F 20% 250V	C836	1-136-169-00	MYLAR	0.22 μ F 5% 50V
C535	1-106-387-00	MYLAR	0.068 μ F 10% 200V	C837	1-126-963-11	ELECT	4.7 μ F 20% 50V
C536	1-130-489-00	MYLAR	0.033 μ F 5% 50V	C838	1-104-665-11	ELECT	100 μ F 20% 25V
C537	1-126-968-11	ELECT	100 μ F 20% 50V	C839	1-137-374-11	MYLAR	0.047 μ F 5% 50V
C538	1-126-968-11	ELECT	100 μ F 20% 50V	C840	1-104-665-11	ELECT	100 μ F 20% 25V
C539	1-162-114-00	CERAMIC	0.0047 μ F 2KV	C841	1-137-374-11	MYLAR	0.047 μ F 5% 50V
C540	1-137-372-11	MYLAR	0.022 μ F 5% 50V	C842	1-137-374-11	MYLAR	0.047 μ F 5% 50V
C541	1-137-372-11	MYLAR	0.022 μ F 5% 50V	C843	1-104-664-11	ELECT	47 μ F 20% 25V
C542	1-126-934-11	ELECT	220 μ F 20% 16V	C844	1-126-933-11	ELECT	100 μ F 20% 16V
				C845	1-126-933-11	ELECT	100 μ F 20% 16V
				C846	1-126-933-11	ELECT	100 μ F 20% 16V
				C847	1-126-933-11	ELECT	100 μ F 20% 16V
				C848	1-126-933-11	ELECT	100 μ F 20% 16V
				C849	1-102-973-00	CERAMIC	100pF 5% 50V
				C850	1-102-973-00	CERAMIC	100pF 5% 50V



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C851	1-137-374-11	MYLAR	0.047μF 5% 50V	CN805	* 1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P	
C852	1-137-374-11	MYLAR	0.047μF 5% 50V	CN806	* 1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P	
C853	1-137-374-11	MYLAR	0.047μF 5% 50V	CN807	* 1-564-509-11	PLUG, CONNECTOR 6P	
C854	1-126-933-11	ELECT	100μF 20% 16V	CN808	* 1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P	
C855	1-102-973-00	CERAMIC	100pF 5% 50V	CN810	* 1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P	
C856	1-102-973-00	CERAMIC	100pF 5% 50V				
C857	1-126-933-11	ELECT	100μF 20% 16V			<DIODE>	
C858	1-104-665-11	ELECT	100μF 20% 25V	D501	8-719-991-33	DIODE 1SS133T-77	
C859	1-104-665-11	ELECT	100μF 20% 25V	D502	8-719-991-33	DIODE 1SS133T-77	
C860	1-126-933-11	ELECT	100μF 20% 16V	D503	8-719-991-33	DIODE 1SS133T-77	
C861	1-137-374-11	MYLAR	0.047μF 5% 50V	D504	8-719-921-63	DIODE MTZJ-7.5B	
C862	1-137-374-11	MYLAR	0.047μF 5% 50V	D507	8-719-302-43	DIODE EL1Z	
C863	1-137-374-11	MYLAR	0.047μF 5% 50V				
C864	1-126-933-11	ELECT	100μF 20% 16V	D508	8-719-900-26	DIODE ERD29-08J	
C865	1-137-366-11	MYLAR	0.0022μF 5% 50V	D509	8-719-945-80	DIODE ERC06-15S	
C866	1-136-177-00	MYLAR	1μF 5% 50V	D510	8-719-991-33	DIODE 1SS133T-77	
C867	1-104-664-11	ELECT	47μF 20% 25V	D511	8-719-302-43	DIODE EL1Z	
C868	1-164-096-11	CERAMIC	0.01μF 50V	D512	8-719-991-33	DIODE 1SS133T-77	
C869	1-130-491-00	MYLAR	0.047μF 5% 50V				
C870	1-164-096-11	CERAMIC	0.01μF 50V	D513	8-719-302-43	DIODE EL1Z	
C872	1-126-960-11	ELECT	1μF 20% 50V	D514	8-719-908-03	DIODE GP08D	
C874	1-104-664-11	ELECT	47μF 20% 25V	D515	8-719-908-03	DIODE GP08D	
C875	1-164-096-11	CERAMIC	0.01μF 50V	D517	8-719-018-82	DIODE RGP02-20EL-6394	
C876	1-102-973-00	CERAMIC	100pF 5% 50V	D519	8-719-991-33	DIODE 1SS133T-77	
C877	1-102-973-00	CERAMIC	100pF 5% 50V				
C878	1-104-664-11	ELECT	47μF 20% 25V	D524	8-719-991-33	DIODE 1SS133T-77	
C879	1-104-664-11	ELECT	47μF 20% 25V	D527	8-719-109-85	ZENER DIODE RD5.1ESB2	
C880	1-104-664-11	ELECT	47μF 20% 25V	D560	8-719-991-33	DIODE 1SS133T-77	
C881	1-102-973-00	CERAMIC	100pF 5% 50V	D701	8-719-109-63	ZENER DIODE RD3.0ESB2	
C882	1-102-973-00	CERAMIC	100pF 5% 50V	D702	8-719-991-33	DIODE 1SS133T-77	
C883	1-102-973-00	CERAMIC	100pF 5% 50V				
C884	1-104-665-11	ELECT	100μF 20% 25V	D820	8-719-109-68	ZENER DIODE RD3.6ESB1	
C885	1-104-664-11	ELECT	47μF 20% 25V	D828	8-719-109-89	ZENER DIODE RD5.6ESB2	
C886	1-102-973-00	CERAMIC	100pF 5% 50V	D829	8-719-109-84	ZENER DIODE RD5.1ESB1	
C887	1-102-973-00	CERAMIC	100pF 5% 50V	D835	8-719-109-89	ZENER DIODE RD5.6ESB2	
C888	1-102-973-00	CERAMIC	100pF 5% 50V	D840	8-719-991-33	DIODE 1SS133T-77	
C889	1-104-665-11	ELECT	100μF 20% 25V				
C897	1-104-665-11	ELECT	100μF 20% 25V	D842	8-719-991-33	DIODE 1SS133T-77	
C898	1-164-096-11	CERAMIC	0.01μF 50V	D845	8-719-991-33	DIODE 1SS133T-77	
				D846	8-719-991-33	DIODE 1SS133T-77	
				D850	8-719-109-89	ZENER DIODE RD5.6ESB2	
				D901	8-719-110-08	ZENER DIODE RD8.2ESB2	
						<FERRITE BEAD>	
				FB501	1-410-397-21	FERRITE 1.1μH	
						<IC>	
CN501	* 1-764-333-11	PLUG, CONNECTOR 10P		IC501	8-759-133-90	IC μPC339C	
CN502	* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P		IC801	8-759-327-51	IC PA0053B	
CN503	* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P		IC802	8-759-327-51	IC PA0053B	
CN504	* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P		IC803	8-759-183-37	IC CA0007AD	
CN505	* 1-506-371-00	PIN, CONNECTOR 2P		IC804	8-759-464-79	IC PM0011AS	
CN506	* 1-779-892-11	CONNECTOR, BOARD TO BOARD 10P					
CN507	* 1-564-507-11	PLUG, CONNECTOR 4P		IC805	8-759-711-28	IC NJM2058D	
CN508	1-695-915-11	TAB (CONTACT)		IC806	8-759-464-79	IC PM0011AS	
CN651	* 1-779-892-11	CONNECTOR, BOARD TO BOARD 10P		IC807	8-759-700-69	IC NJM79L12A	
CN652	* 1-779-892-11	CONNECTOR, BOARD TO BOARD 10P		IC808	8-759-464-79	IC PM0011AS	
CN801	* 1-564-507-11	PLUG, CONNECTOR 4P		IC809	8-749-014-37	IC STK392-150	
CN802	* 1-564-507-11	PLUG, CONNECTOR 4P					
CN803	* 1-564-507-11	PLUG, CONNECTOR 4P		IC810	8-749-014-37	IC STK392-150	
CN804	* 1-779-892-11	CONNECTOR, BOARD TO BOARD 10P					

KP-51DS1U

RM-892



• The components identified by **E** in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

The components identified by shading and mark **△** are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
IC811	8-759-981-96	IC RC4560D		R503	1-247-843-11	CARBON 3.3K	5% 1/4W
IC812	8-759-701-56	IC NJM78M05FA		R504	1-249-419-11	CARBON 1.5K	5% 1/4W
IC813	8-759-701-65	IC NJM79M05FA		R505	1-247-887-00	CARBON 220K	5% 1/4W
IC814	8-759-595-88	IC AN77L12-TA					
		<COIL>		R507	1-249-422-11	CARBON 2.7K	5% 1/4W
L502	1-410-478-11	INDUCTOR 47μH		R508	1-260-338-51	CARBON 6.8K	5% 1/2W
L503	1-459-111-00	INDUCTOR 10mH		R509	1-249-437-11	CARBON 47K	5% 1/4W
L505	△ 1-416-637-11	COIL, HORIZONTAL LINEARITY		R510	1-215-918-00	METAL OXIDE 1.5K	5% 3W F
L506	1-412-552-11	INDUCTOR 2.2mH		R511	1-215-918-00	METAL OXIDE 1.5K	5% 3W F
L801	1-406-979-11	INDUCTOR 220μH		R512	1-215-918-00	METAL OXIDE 1.5K	5% 3W F
L802	1-406-979-11	INDUCTOR 220μH		R513	1-247-843-11	CARBON 3.3K	5% 1/4W
L803	1-406-665-11	INDUCTOR 100μH		R514	1-215-443-00	METAL 8.2K	1% 1/4W
		<NEON LAMP>		R516	1-215-467-00	METAL 82K	1% 1/4W
NL501	1-519-108-99	LAMP, NEON		R517	1-215-449-00	METAL 15K	1% 1/4W
		<IC LINK>		R518	1-249-436-11	CARBON 39K	5% 1/4W
PS601	△ 1-533-597-31	LINK, IC (5A/90V AC, 60V DC)		R519	1-249-429-11	CARBON 10K	5% 1/4W
PS602	△ 1-533-597-31	LINK, IC (5A/90V AC, 60V DC)		R522	1-249-428-11	CARBON 8.2K	5% 1/4W
PS603	△ 1-533-593-31	LINK, IC (2A/90V AC, 60V DC)		R523	1-249-437-11	CARBON 47K	5% 1/4W
PS604	△ 1-533-593-31	LINK, IC (2A/90V AC, 60V DC)		R524	1-249-425-11	CARBON 4.7K	5% 1/4W
PS605	△ 1-533-593-31	LINK, IC (2A/90V AC, 60V DC)		R525	1-249-405-11	CARBON 100	5% 1/4W F
PS606	△ 1-533-593-31	LINK, IC (2A/90V AC, 60V DC)		R527	1-249-425-11	CARBON 4.7K	5% 1/4W
PS607	△ 1-533-593-31	LINK, IC (2A/90V AC, 60V DC)		R528	1-215-910-00	METAL OXIDE 68	5% 3W F
PS608	△ 1-533-593-31	LINK, IC (2A/90V AC, 60V DC)		R529	1-215-453-00	METAL 22K	1% 1/4W
		<TRANSISTOR>		R530	1-249-429-11	CARBON 10K	5% 1/4W
Q501	8-729-119-80	TRANSISTOR 2SC2688-LK		R531	1-260-326-11	CARBON 680	5% 1/2W
Q502	8-729-044-29	TRANSISTOR 2SD2539(LBSONY-1)		R532	1-260-312-11	CARBON 47	5% 1/2W
Q503	8-729-119-76	TRANSISTOR 2SA1175-HFE		R533	1-214-912-00	METAL 91K	1% 1/2W
Q504	8-729-823-81	TRANSISTOR 2SC4632LS-CB7		R534	1-215-479-00	METAL 270K	1% 1/4W
Q505	8-729-038-83	TRANSISTOR 2SK2251-01-F19		R535	1-247-887-00	CARBON 220K	5% 1/4W
Q506	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		R536	1-249-377-11	CARBON 0.47	5% 1/4W F
Q507	8-729-032-61	TRANSISTOR 2SC5022-02		R537	1-260-336-11	CARBON 4.7K	5% 1/2W
Q508	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		R538	1-249-425-11	CARBON 4.7K	5% 1/4W
Q701	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		R539	1-249-377-11	CARBON 0.47	5% 1/4W F
Q702	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		R540	1-249-377-11	CARBON 0.47	5% 1/4W F
Q801	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		R541	1-247-807-31	CARBON 100	5% 1/4W
Q802	8-729-119-76	TRANSISTOR 2SA1175-HFE		R542	1-216-426-11	METAL OXIDE 82	5% 1W F
Q803	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		R543	1-216-349-00	METAL OXIDE 1	5% 1W F
Q804	8-729-119-76	TRANSISTOR 2SA1175-HFE		R544	1-216-426-11	METAL OXIDE 82	5% 1W F
Q805	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		R545	1-249-377-11	CARBON 0.47	5% 1/4W F
Q806	8-729-119-76	TRANSISTOR 2SA1175-HFE		R546	1-249-377-11	CARBON 0.47	5% 1/4W F
Q808	8-729-030-02	TRANSISTOR DTC144ESA		R548	1-249-413-11	CARBON 470	5% 1/4W
Q809	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		R549	1-249-434-11	CARBON 27K	5% 1/4W
Q810	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		R550	1-247-807-31	CARBON 100	5% 1/4W
		<RESISTOR>		R551	1-249-437-11	CARBON 47K	5% 1/4W
R1	△ METAL	1% 1/4W		R552	1-247-807-31	CARBON 100	5% 1/4W
R501	1-249-421-11	CARBON 2.2K	5% 1/4W	R553	1-247-881-00	CARBON 120K	5% 1/4W
R502	1-216-465-21	METAL OXIDE 27K	5% 2W F	R554	1-249-405-11	CARBON 100	5% 1/4W F
				R555	1-247-807-31	CARBON 100	5% 1/4W
				R556	1-260-099-11	CARBON 1K	5% 1/2W
				R557	1-216-490-11	METAL OXIDE 39K	5% 3W F
				R558	1-216-490-11	METAL OXIDE 39K	5% 3W F
				R559	1-216-490-11	METAL OXIDE 39K	5% 3W F
				R561	1-249-418-11	CARBON 1.2K	5% 1/4W
				R562	1-202-838-00	SOLID 100K	10% 1/2W
				R563	1-215-453-00	METAL 22K	1% 1/4W
				R564	1-249-417-11	CARBON 1K	5% 1/4W
				R566	1-249-425-11	CARBON 4.7K	5% 1/4W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R567	1-216-390-11	METAL OXIDE	1.2 5% 3W F	R837	1-249-441-11	CARBON	100K 5% 1/4W
R568	1-247-903-00	CARBON	1M 5% 1/4W	R838	1-249-421-11	CARBON	2.2K 5% 1/4W
R569	1-216-390-11	METAL OXIDE	1.2 5% 3W F	R839	1-247-807-31	CARBON	100 5% 1/4W
R570	1-215-910-00	METAL OXIDE	68 5% 3W F	R841	1-249-409-11	CARBON	220 5% 1/4W
R571	1-249-422-11	CARBON	2.7K 5% 1/4W	R842	1-247-807-31	CARBON	100 5% 1/4W
R572	1-247-895-91	CARBON	470K 5% 1/4W	R843	1-247-807-31	CARBON	100 5% 1/4W
R573	1-249-438-11	CARBON	56K 5% 1/4W	R844	1-247-807-31	CARBON	100 5% 1/4W
R574	1-249-435-11	CARBON	33K 5% 1/4W	R845	1-249-441-11	CARBON	100K 5% 1/4W
R576	1-247-807-31	CARBON	100 5% 1/4W	R846	1-247-807-31	CARBON	100 5% 1/4W
R577	1-249-422-11	CARBON	2.7K 5% 1/4W	R847	1-215-481-00	METAL	330K 1% 1/4W
R579	1-247-889-00	CARBON	270K 5% 1/4W	R850	1-215-481-00	METAL	330K 1% 1/4W
R580	1-249-437-11	CARBON	47K 5% 1/4W	R851	1-247-807-31	CARBON	100 5% 1/4W
R581	1-215-460-00	METAL	43K 1% 1/4W	R852	1-247-807-31	CARBON	100 5% 1/4W
R582	1-247-881-00	CARBON	120K 5% 1/4W	R853	1-247-887-00	CARBON	220K 5% 1/4W
R583	1-249-428-11	CARBON	8.2K 5% 1/4W	R854	1-249-429-11	CARBON	10K 5% 1/4W
R584	1-249-429-11	CARBON	10K 5% 1/4W	R856	1-247-807-31	CARBON	100 5% 1/4W
R585	1-216-490-11	METAL OXIDE	39K 5% 3W F	R857	1-247-807-31	CARBON	100 5% 1/4W
R586	1-215-892-11	METAL OXIDE	1K 5% 2W F	R858	1-215-455-00	METAL	27K 1% 1/4W
R587	1-249-441-11	CARBON	100K 5% 1/4W	R859	1-215-455-00	METAL	27K 1% 1/4W
R588	1-249-433-11	CARBON	22K 5% 1/4W	R860	1-215-455-00	METAL	27K 1% 1/4W
R589	1-247-887-00	CARBON	220K 5% 1/4W	R861	1-215-455-00	METAL	27K 1% 1/4W
R591	1-249-425-11	CARBON	4.7K 5% 1/4W	R862	1-215-455-00	METAL	27K 1% 1/4W
R592	1-249-437-11	CARBON	47K 5% 1/4W	R863	1-215-455-00	METAL	27K 1% 1/4W
R593	1-247-807-31	CARBON	100 5% 1/4W	R865	1-249-424-11	CARBON	3.9K 5% 1/4W
R702	1-249-421-11	CARBON	2.2K 5% 1/4W	R867	1-215-457-00	METAL	33K 1% 1/4W
R703	1-249-421-11	CARBON	2.2K 5% 1/4W	R868	1-215-445-00	METAL	10K 1% 1/4W
R801	1-247-807-31	CARBON	100 5% 1/4W	R869	1-249-425-11	CARBON	4.7K 5% 1/4W
R802	1-247-807-31	CARBON	100 5% 1/4W	R871	1-249-417-11	CARBON	1K 5% 1/4W
R803	1-249-430-11	CARBON	12K 5% 1/4W	R872	1-249-425-11	CARBON	4.7K 5% 1/4W
R805	1-247-807-31	CARBON	100 5% 1/4W	R873	1-247-807-31	CARBON	100 5% 1/4W
R806	1-249-429-11	CARBON	10K 5% 1/4W	R874	1-249-435-11	CARBON	33K 5% 1/4W
R807	1-247-807-31	CARBON	100 5% 1/4W	R875	1-249-441-11	CARBON	100K 5% 1/4W
R809	1-249-425-11	CARBON	4.7K 5% 1/4W	R879	1-215-445-00	METAL	10K 1% 1/4W
R810	1-247-807-31	CARBON	100 5% 1/4W	R881	1-249-408-11	CARBON	180 5% 1/4W
R811	1-247-807-31	CARBON	100 5% 1/4W	R882	1-249-429-11	CARBON	10K 5% 1/4W
R814	1-247-807-31	CARBON	100 5% 1/4W	R883	1-249-429-11	CARBON	10K 5% 1/4W
R815	1-247-807-31	CARBON	100 5% 1/4W	R884	1-215-445-00	METAL	10K 1% 1/4W
R816	1-247-807-31	CARBON	100 5% 1/4W	R885	1-249-441-11	CARBON	100K 5% 1/4W
R817	1-247-807-31	CARBON	100 5% 1/4W	R886	1-249-428-11	CARBON	8.2K 5% 1/4W
R819	1-247-807-31	CARBON	100 5% 1/4W	R887	1-247-807-31	CARBON	100 5% 1/4W
R821	1-249-431-11	CARBON	15K 5% 1/4W	R888	1-247-807-31	CARBON	100 5% 1/4W
R822	1-249-417-11	CARBON	1K 5% 1/4W	R889	1-249-435-11	CARBON	33K 5% 1/4W
R823	1-249-417-11	CARBON	1K 5% 1/4W	R890	1-249-441-11	CARBON	100K 5% 1/4W
R824	1-215-462-00	METAL	51K 1% 1/4W	R891	1-247-843-11	CARBON	3.3K 5% 1/4W
R825	1-249-441-11	CARBON	100K 5% 1/4W	R895	1-249-421-11	CARBON	2.2K 5% 1/4W
R826	1-215-462-00	METAL	51K 1% 1/4W	R896	1-249-441-11	CARBON	100K 5% 1/4W
R827	1-216-474-11	METAL OXIDE	82 5% 3W F	R897	1-247-807-31	CARBON	100 5% 1/4W
R828	1-249-426-11	CARBON	5.6K 5% 1/4W	R898	1-249-409-11	CARBON	220 5% 1/4W
R829	1-249-426-11	CARBON	5.6K 5% 1/4W	R900	1-216-474-11	METAL OXIDE	82 5% 3W F
R830	1-249-414-11	CARBON	560 5% 1/4W	R901	1-215-449-00	METAL	15K 1% 1/4W
R831	1-249-414-11	CARBON	560 5% 1/4W	R902	1-215-449-00	METAL	15K 1% 1/4W
R832	1-249-441-11	CARBON	100K 5% 1/4W	R903	1-215-421-00	METAL	1K 1% 1/4W
R833	1-216-474-11	METAL OXIDE	82 5% 3W F	R904	1-214-800-11	METAL	2.2 1% 1/2W
R834	1-249-441-11	CARBON	100K 5% 1/4W	R905	1-214-800-11	METAL	2.2 1% 1/2W
R835	1-249-441-11	CARBON	100K 5% 1/4W	R906	1-214-800-11	METAL	2.2 1% 1/2W
R836	1-247-807-31	CARBON	100 5% 1/4W	R908	1-215-445-00	METAL	10K 1% 1/4W

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The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R909	1-215-421-00	METAL	1K 1% 1/4W	R966	1-249-409-11	CARBON	220 5% 1/4W
R910	1-215-421-00	METAL	1K 1% 1/4W	R967	1-215-455-00	METAL	27K 1% 1/4W
R911	1-215-461-00	METAL	47K 1% 1/4W	R968	1-215-455-00	METAL	27K 1% 1/4W
R912	1-215-445-00	METAL	10K 1% 1/4W	R969	1-215-455-00	METAL	27K 1% 1/4W
R913	1-215-455-00	METAL	27K 1% 1/4W	R970	1-215-455-00	METAL	27K 1% 1/4W
R914	1-215-455-00	METAL	27K 1% 1/4W	R971	1-215-455-00	METAL	27K 1% 1/4W
R915	1-215-455-00	METAL	27K 1% 1/4W	R972	1-215-455-00	METAL	27K 1% 1/4W
R916	1-215-455-00	METAL	27K 1% 1/4W	R973	1-214-800-11	METAL	2.2 1% 1/2W
R917	1-215-455-00	METAL	27K 1% 1/4W	R974	1-215-457-00	METAL	33K 1% 1/4W
R918	1-215-455-00	METAL	27K 1% 1/4W	R975	1-214-800-11	METAL	2.2 1% 1/2W
R919	1-249-436-11	CARBON	39K 5% 1/4W	R976	1-215-433-00	METAL	3.3K 1% 1/4W
R920	1-214-800-11	METAL	2.2 1% 1/2W	R978	1-215-445-00	METAL	10K 1% 1/4W
R921	1-249-431-11	CARBON	15K 5% 1/4W	R979	1-249-425-11	CARBON	4.7K 5% 1/4W
R922	1-215-445-00	METAL	10K 1% 1/4W	R980	1-249-409-11	CARBON	220 5% 1/4W
R923	1-249-425-11	CARBON	4.7K 5% 1/4W	R981	1-249-409-11	CARBON	220 5% 1/4W
R924	1-215-445-00	METAL	10K 1% 1/4W	R983	1-249-409-11	CARBON	220 5% 1/4W
R925	1-249-425-11	CARBON	4.7K 5% 1/4W	R984	1-215-445-00	METAL	10K 1% 1/4W
R926	1-249-408-11	CARBON	180 5% 1/4W	R985	1-249-429-11	CARBON	10K 5% 1/4W
R927	1-249-429-11	CARBON	10K 5% 1/4W	R986	1-215-453-00	METAL	22K 1% 1/4W
R928	1-249-429-11	CARBON	10K 5% 1/4W	R987	1-249-408-11	CARBON	180 5% 1/4W
R929	1-214-800-11	METAL	2.2 1% 1/2W	R988	1-249-429-11	CARBON	10K 5% 1/4W
R930	1-214-800-11	METAL	2.2 1% 1/2W	R989	1-249-425-11	CARBON	4.7K 5% 1/4W
R931	1-215-445-00	METAL	10K 1% 1/4W	R990	1-249-431-11	CARBON	15K 5% 1/4W
R933	1-215-445-00	METAL	10K 1% 1/4W	R991	1-249-429-11	CARBON	10K 5% 1/4W
R934	1-249-422-11	CARBON	2.7K 5% 1/4W	R993	1-249-425-11	CARBON	4.7K 5% 1/4W
R935	1-249-429-11	CARBON	10K 5% 1/4W	R994	1-216-474-11	METAL OXIDE	82 5% 3W F
R936	1-249-431-11	CARBON	15K 5% 1/4W	R997	1-215-445-00	METAL	10K 1% 1/4W
R937	1-249-436-11	CARBON	39K 5% 1/4W	R998	1-249-425-11	CARBON	4.7K 5% 1/4W
R938	1-215-421-00	METAL	1K 1% 1/4W	R999	1-249-425-11	CARBON	4.7K 5% 1/4W
R939	1-259-878-11	CARBON	1.5M 5% 1/4W	R1904	1-249-425-11	CARBON	4.7K 5% 1/4W
R940	1-249-441-11	CARBON	100K 5% 1/4W			<SPARK GAP>	
R941	1-249-441-11	CARBON	100K 5% 1/4W	SG501	1-519-422-11	GAP, SPARK	
R942	1-249-421-11	CARBON	2.2K 5% 1/4W			<TRANSFORMER>	
R943	1-249-441-11	CARBON	100K 5% 1/4W	T501	1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE	
R944	1-215-421-00	METAL	1K 1% 1/4W	T502	Δ 1-431-211-11	TRANSFORMER, FERRITE (PMT)	
R945	1-249-437-11	CARBON	47K 5% 1/4W	T504	Δ 1-453-331-11	FBT ASSY NX-4012//M	
R946	1-215-421-00	METAL	1K 1% 1/4W			*****	
R947	1-249-441-11	CARBON	100K 5% 1/4W			* A-1640-375-AD BOARD, COMPLETE	
R948	1-249-409-11	CARBON	220 5% 1/4W			*****	
R949	1-247-807-31	CARBON	100 5% 1/4W			4-201-023-11 SPACER, INSULATING	
R950	1-247-807-31	CARBON	100 5% 1/4W			4-202-373-01 SPRING, IC	
R951	1-247-807-31	CARBON	100 5% 1/4W			4-382-854-11 SCREW (M3X10), P, SW (+)	
R952	1-247-807-31	CARBON	100 5% 1/4W			<CAPACITOR>	
R953	1-249-435-11	CARBON	33K 5% 1/4W	C1501	1-163-005-11	CERAMIC CHIP	470pF 10% 50V
R954	1-215-433-00	METAL	3.3K 1% 1/4W	C1503	1-137-399-11	MYLAR	0.1 μ F 5% 100V
R955	1-215-433-00	METAL	3.3K 1% 1/4W	C1504	1-164-690-91	CERAMIC CHIP	0.0022 μ F 5% 50V
R956	1-249-429-11	CARBON	10K 5% 1/4W	C1506	1-126-969-11	ELECT	220 μ F 20% 50V
R957	1-214-800-11	METAL	2.2 1% 1/2W	C1507	1-163-243-11	CERAMIC CHIP	47pF 5% 50V
R958	1-214-800-11	METAL	2.2 1% 1/2W	C1508	1-137-401-11	MYLAR	0.22 μ F 10% 100V
R959	1-215-433-00	METAL	3.3K 1% 1/4W				
R961	1-249-425-11	CARBON	4.7K 5% 1/4W				
R962	1-214-800-11	METAL	2.2 1% 1/2W				
R963	1-214-800-11	METAL	2.2 1% 1/2W				
R964	1-215-433-00	METAL	3.3K 1% 1/4W				
R965	1-215-433-00	METAL	3.3K 1% 1/4W				



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C1509	1-163-251-11	CERAMIC CHIP 100pF	5% 50V	C1705	1-163-251-11	CERAMIC CHIP 100pF	5% 50V
C1510	1-126-972-11	ELECT 1000µF	20% 50V	C1706	1-163-251-11	CERAMIC CHIP 100pF	5% 50V
C1511	1-126-972-11	ELECT 1000µF	20% 50V	C1707	1-164-232-11	CERAMIC CHIP 0.01µF	10% 50V
C1512	1-126-960-11	ELECT 1µF	20% 50V	C1708	1-126-935-11	ELECT 470µF	20% 16V
C1513	1-164-232-11	CERAMIC CHIP 0.01µF	10% 50V	C1709	1-164-232-11	CERAMIC CHIP 0.01µF	10% 50V
C1514	1-164-232-11	CERAMIC CHIP 0.01µF	10% 50V	C1710	1-163-243-11	CERAMIC CHIP 47pF	5% 50V
C1516	1-164-004-11	CERAMIC CHIP 0.1µF	10% 25V	C1711	1-163-243-11	CERAMIC CHIP 47pF	5% 50V
C1517	1-126-964-11	ELECT 10µF	20% 50V	C1715	1-164-232-11	CERAMIC CHIP 0.01µF	10% 50V
C1518	1-126-933-11	ELECT 100µF	20% 16V	C1716	1-164-232-11	CERAMIC CHIP 0.01µF	10% 50V
C1519	1-126-933-11	ELECT 100µF	20% 16V	C1717	1-164-232-11	CERAMIC CHIP 0.01µF	10% 50V
C1520	1-126-964-11	ELECT 10µF	20% 50V	C1718	1-126-968-11	ELECT 100µF	20% 50V
C1521	1-164-232-11	CERAMIC CHIP 0.01µF	10% 50V	C1719	1-126-968-11	ELECT 100µF	20% 50V
C1523	1-163-243-11	CERAMIC CHIP 47pF	5% 50V	C1720	1-164-232-11	CERAMIC CHIP 0.01µF	10% 50V
C1524	1-136-177-00	MYLAR 1µF	5% 50V	C1721	1-164-232-11	CERAMIC CHIP 0.01µF	10% 50V
C1525	1-104-665-11	ELECT 100µF	20% 25V	C1723	1-163-235-11	CERAMIC CHIP 22pF	5% 50V
C1526	1-104-664-11	ELECT 47µF	20% 25V	C1724	1-164-004-11	CERAMIC CHIP 0.1µF	10% 25V
C1527	1-163-145-00	CERAMIC CHIP 0.0015µF	5% 50V	C1725	1-164-004-11	CERAMIC CHIP 0.1µF	10% 25V
C1528	1-163-145-00	CERAMIC CHIP 0.0015µF	5% 50V	C1726	1-164-004-11	CERAMIC CHIP 0.1µF	10% 25V
C1529	1-164-690-91	CERAMIC CHIP 0.0022µF	5% 50V	C1727	1-164-004-11	CERAMIC CHIP 0.1µF	10% 25V
C1530	1-104-664-11	ELECT 47µF	20% 16V	C1802	1-164-232-11	CERAMIC CHIP 0.01µF	10% 50V
C1531	1-164-232-11	CERAMIC CHIP 0.01µF	10% 50V	C1803	1-126-935-11	ELECT 470µF	20% 16V
C1532	1-126-960-11	ELECT 1µF	20% 50V	C1804	1-126-964-11	ELECT 10µF	20% 50V
C1601	1-163-009-11	CERAMIC CHIP 0.001µF	10% 50V	C1805	1-164-232-11	CERAMIC CHIP 0.01µF	10% 50V
C1602	1-163-009-11	CERAMIC CHIP 0.001µF	10% 50V	C1806	1-104-665-11	ELECT 100µF	20% 25V
C1603	1-130-495-00	MYLAR 0.1µF	5% 50V	C1807	1-126-964-11	ELECT 10µF	20% 50V
C1604	1-130-495-00	MYLAR 0.1µF	5% 50V	C1808	1-164-232-11	CERAMIC CHIP 0.01µF	10% 50V
C1605	1-107-715-11	ELECT 22µF	20% 50V	C1809	1-104-665-11	ELECT 100µF	20% 25V
C1606	1-164-232-11	CERAMIC CHIP 0.01µF	10% 50V	C1810	1-164-232-11	CERAMIC CHIP 0.01µF	10% 50V
C1607	1-137-150-11	MYLAR 0.01µF	5% 50V	C1811	1-104-665-11	ELECT 100µF	20% 25V
C1610	1-126-960-11	ELECT 1µF	20% 50V	C1812	1-126-964-11	ELECT 10µF	20% 50V
C1611	1-126-960-11	ELECT 1µF	20% 50V	C1813	1-104-666-11	ELECT 220µF	20% 25V
C1612	1-126-960-11	ELECT 1µF	20% 50V	C1814	1-164-004-11	CERAMIC CHIP 0.1µF	10% 25V
C1613	1-126-967-11	ELECT 47µF	20% 50V	C1815	1-104-666-11	ELECT 220µF	20% 25V
C1614	1-126-967-11	ELECT 47µF	20% 50V	C1818	1-164-232-11	CERAMIC CHIP 0.01µF	10% 50V
C1617	1-130-495-00	MYLAR 0.1µF	5% 50V	C1821	1-126-964-11	ELECT 10µF	20% 50V
C1618	1-130-495-00	MYLAR 0.1µF	5% 50V	C1822	1-216-295-11	SHORT 0	
C1619	1-164-004-11	CERAMIC CHIP 0.1µF	10% 25V	C1824	1-216-295-11	SHORT 0	
C1621	1-104-665-11	ELECT 100µF	20% 25V	C1826	1-104-665-11	ELECT 100µF	20% 25V
C1622	1-164-690-91	CERAMIC CHIP 0.0022µF	5% 50V	C1827	1-104-664-11	ELECT 47µF	20% 25V
C1624	1-130-495-00	MYLAR 0.1µF	5% 50V	C1828	1-104-664-11	ELECT 47µF	20% 25V
C1626	1-130-495-00	MYLAR 0.1µF	5% 50V	C1829	1-104-664-11	ELECT 47µF	20% 25V
C1627	1-164-690-91	CERAMIC CHIP 0.0022µF	5% 50V	C1830	1-126-964-11	ELECT 10µF	20% 50V
C1628	1-126-964-11	ELECT 10µF	20% 50V	C1831	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V
C1630	1-128-550-21	ELECT 2200µF	20% 50V				
C1631	1-128-550-21	ELECT 2200µF	20% 50V			<CONNECTOR>	
C1632	1-104-664-11	ELECT 47µF	20% 25V	CN1501	* 1-564-506-11	PLUG, CONNECTOR 3P	
C1633	1-104-664-11	ELECT 47µF	20% 25V	CN1502	1-695-915-11	TAB (CONTACT)	
C1634	1-126-961-11	ELECT 2.2µF	20% 50V	CN1601	* 1-564-508-11	PLUG, CONNECTOR 5P	
C1635	1-104-666-11	ELECT 220µF	20% 25V	CN1604	* 1-564-507-11	PLUG, CONNECTOR 4P	
C1650	1-163-251-11	CERAMIC CHIP 100pF	5% 50V	CN1605	* 1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P	
C1651	1-163-251-11	CERAMIC CHIP 100pF	5% 50V	CN1606	* 1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
C1661	1-136-165-00	MYLAR 0.1µF	5% 50V	CN1701	* 1-564-511-11	PLUG, CONNECTOR 8P	
C1701	1-126-960-11	ELECT 1µF	20% 50V	CN1702	* 1-564-516-11	PLUG, CONNECTOR 13P	
C1702	1-126-960-11	ELECT 1µF	20% 50V	CN1703	* 1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
C1703	1-126-964-11	ELECT 10µF	20% 50V	CN1705	* 1-564-505-11	PLUG, CONNECTOR 2P	
C1704	1-126-964-11	ELECT 10µF	20% 50V				

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
CN1708 *	1-564-510-11	PLUG, CONNECTOR 7P		IC1503	8-759-998-98	IC LM358D	
CN1801	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P		IC1602	8-759-250-68	IC TDA7264	
CN1802 *	1-764-334-11	PLUG, CONNECTOR 11P		IC1603	8-759-502-21	IC TDA2822M	
CN1803 *	1-764-333-11	PLUG, CONNECTOR 10P		IC1701	8-752-908-27	IC CXP86213-003S	
CN1804 *	1-564-508-11	PLUG, CONNECTOR 5P		IC1702	8-759-675-64	IC M24C08-MN6T(A)	
CN1805 *	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P		IC1703	8-759-100-96	IC μPC4558G2	
CN1806 *	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P		IC1704	8-759-100-96	IC μPC4558G2	
CN1807 *	1-564-511-11	PLUG, CONNECTOR 8P		IC1706	8-759-352-91	IC PST9143NL	
CN1808 *	1-564-510-11	PLUG, CONNECTOR 7P		IC1801	8-759-390-57	IC μPC2405AHF	
		<DIODE>		IC1802	8-759-095-63	IC PQ09RF2	
D1501	8-719-109-89	ZENER DIODE RD5.6ESB2		IC1803	8-759-231-58	IC TA7812S	
D1502	8-719-908-03	DIODE GP08D		IC1804	8-759-069-28	IC PQ05RF11	
D1503	8-719-908-03	DIODE GP08D				<JACK>	
D1504	8-719-991-33	DIODE 1SS133T-77		J1601	1-784-653-11	JACK, PHONO 2P	
D1505	8-719-988-61	DIODE 1SS355TE-17				<CHIP CONDUCTOR>	
D1601	8-719-991-33	DIODE 1SS133T-77		JR1502	1-216-295-11	SHORT	0
D1602	8-719-914-43	DIODE DAN202K		JR1503	1-216-295-11	SHORT	0
D1603	8-719-991-33	DIODE 1SS133T-77		JR1504	1-216-295-11	SHORT	0
D1604	8-719-991-33	DIODE 1SS133T-77		JR1505	1-216-295-11	SHORT	0
D1605	8-719-914-43	DIODE DAN202K		JR1506	1-216-295-11	SHORT	0
D1606	8-719-991-33	DIODE 1SS133T-77		JR1508	1-216-295-11	SHORT	0
D1607	8-719-914-43	DIODE DAN202K		JR1510	1-216-295-11	SHORT	0
D1611	8-719-921-86	DIODE MTZJ-13		JR1511	1-216-295-11	SHORT	0
D1612	8-719-991-33	DIODE 1SS133T-77		JR1512	1-216-295-11	SHORT	0
D1613	8-719-921-86	DIODE MTZJ-13		JR1513	1-216-295-11	SHORT	0
D1614	8-719-991-33	DIODE 1SS133T-77		JR1514	1-216-295-11	SHORT	0
D1615	8-719-991-33	DIODE 1SS133T-77		JR1701	1-216-295-11	SHORT	0
D1616	8-719-991-33	DIODE 1SS133T-77				<COIL>	
D1617	8-719-403-00	DIODE MA3240-TX		L1501	1-412-524-11	INDUCTOR	8.2μH
D1618	8-719-991-33	DIODE 1SS133T-77		L1601	1-402-711-11	INDUCTOR	
D1619	8-719-991-33	DIODE 1SS133T-77		L1602	1-402-711-11	INDUCTOR	
D1620	8-719-403-00	DIODE MA3240-TX		L1701	1-408-603-31	INDUCTOR	10μH
D1621	8-719-403-00	DIODE MA3240-TX		L1702	1-408-598-31	INDUCTOR	3.9μH
D1622	8-719-403-00	DIODE MA3240-TX		L1802	1-408-603-31	INDUCTOR	10μH
D1703	8-719-109-89	ZENER DIODE RD5.6ESB2				<TRANSISTOR>	
D1704	8-719-109-89	ZENER DIODE RD5.6ESB2		Q1501	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D1705	8-719-109-84	ZENER DIODE RD5.1ESB1		Q1502	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
D1706	8-719-109-84	ZENER DIODE RD5.1ESB1		Q1503	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D1707	8-719-109-84	ZENER DIODE RD5.1ESB1		Q1505	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D1708	8-719-109-84	ZENER DIODE RD5.1ESB1		Q1601	8-729-027-56	TRANSISTOR DTC143TKA-T146	
D1709	8-719-109-81	ZENER DIODE RD4.7ESB2		Q1602	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D1710	8-719-109-81	ZENER DIODE RD4.7ESB2		Q1603	8-729-027-56	TRANSISTOR DTC143TKA-T146	
D1711	8-719-109-81	ZENER DIODE RD4.7ESB2		Q1604	8-729-027-56	TRANSISTOR DTC143TKA-T146	
D1712	8-719-109-81	ZENER DIODE RD4.7ESB2		Q1605	8-729-027-56	TRANSISTOR DTC143TKA-T146	
D1801	8-719-923-60	DIODE MTZJ-T-77-9.1A		Q1607	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D1802	8-719-923-60	DIODE MTZJ-T-77-9.1A		Q1608	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D1803	8-719-108-12	ZENER DIODE RD9.1EW		Q1609	1-801-806-11	TRANSISTOR DTC144EKA-T146	
D1804	8-719-923-60	DIODE MTZJ-T-77-9.1A		Q1610	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
D1805	8-719-108-12	ZENER DIODE RD9.1EW				<IC>	
D1806	8-719-923-60	DIODE MTZJ-T-77-9.1A		IC1501	8-759-192-71	IC STV9379	
		<IC>		IC1502	8-759-251-31	IC CA0007AM	



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
Q1611	8-729-027-56	TRANSISTOR DTC143TKA-T146		R1529	1-216-025-00	RES-CHIP	100 5% 1/10W
Q1612	8-729-027-56	TRANSISTOR DTC143TKA-T146		R1530	1-216-097-00	RES-CHIP	100K 5% 1/10W
				R1531	1-216-089-00	RES-CHIP	47K 5% 1/10W
Q1613	8-729-027-56	TRANSISTOR DTC143TKA-T146		R1532	1-216-025-00	RES-CHIP	100 5% 1/10W
Q1614	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		R1533	1-249-377-11	CARBON	0.47 5% 1/4W F
Q1615	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q1616	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1534	1-216-089-11	RES-CHIP	47K 5% 1/10W
Q1617	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		R1537	1-216-073-00	RES-CHIP	10K 5% 1/10W
				R1538	1-216-083-00	RES-CHIP	27K 5% 1/10W
Q1701	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1539	1-216-073-00	RES-CHIP	10K 5% 1/10W
Q1702	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1540	1-216-091-00	RES-CHIP	56K 5% 1/10W
Q1703	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q1704	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1541	1-216-091-00	RES-CHIP	56K 5% 1/10W
Q1705	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1542	1-216-093-91	RES-CHIP	68K 5% 1/10W
				R1543	1-216-093-91	RES-CHIP	68K 5% 1/10W
Q1706	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1544	1-215-421-00	METAL	1K 1% 1/4W
Q1707	1-801-806-11	TRANSISTOR DTC144EKA-T146		R1601	1-216-025-00	RES-CHIP	100 5% 1/10W
Q1708	8-729-027-38	TRANSISTOR DTA144EKA-T146					
Q1709	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1602	1-216-041-00	RES-CHIP	470 5% 1/10W
Q1710	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1603	1-216-041-00	RES-CHIP	470 5% 1/10W
				R1604	1-216-113-00	RES-CHIP	470K 5% 1/10W
Q1711	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1605	1-216-113-00	RES-CHIP	470K 5% 1/10W
Q1801	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1606	1-249-397-11	CARBON	22 5% 1/4W F
Q1802	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q1803	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1607	1-249-397-11	CARBON	22 5% 1/4W F
Q1804	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1608	1-249-425-11	CARBON	4.7K 5% 1/4W F
				R1609	1-216-081-00	RES-CHIP	22K 5% 1/10W
Q1805	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1610	1-216-081-00	RES-CHIP	22K 5% 1/10W
Q1806	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1611	1-249-425-11	CARBON	4.7K 5% 1/4W F
Q1807	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q1808	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		R1614	1-216-357-00	METAL OXIDE	4.7 5% 1W F
Q1809	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1615	1-216-357-00	METAL OXIDE	4.7 5% 1W F
				R1617	1-216-069-00	RES-CHIP	6.8K 5% 1/10W
				R1618	1-216-081-00	RES-CHIP	22K 5% 1/10W
				R1620	1-216-065-00	RES-CHIP	4.7K 5% 1/10W
				R1625	1-216-061-00	RES-CHIP	3.3K 5% 1/10W
				R1626	1-216-061-00	RES-CHIP	3.3K 5% 1/10W
				R1629	1-216-049-00	RES-CHIP	1K 5% 1/10W
				R1630	1-216-081-00	RES-CHIP	22K 5% 1/10W
				R1631	1-249-389-11	CARBON	4.7 5% 1/4W F
				R1632	1-216-089-11	RES-CHIP	47K 5% 1/10W
				R1633	1-216-089-11	RES-CHIP	47K 5% 1/10W
				R1634	1-216-081-00	RES-CHIP	22K 5% 1/10W
				R1635	1-216-049-11	RES-CHIP	1K 5% 1/10W
				R1636	1-216-075-00	RES-CHIP	12K 5% 1/10W
				R1637	1-216-049-00	RES-CHIP	1K 5% 1/10W
				R1638	1-216-073-00	RES-CHIP	10K 5% 1/10W
				R1639	1-216-049-11	RES-CHIP	1K 5% 1/10W
				R1640	1-216-025-00	RES-CHIP	100 5% 1/10W
				R1641	1-216-065-00	RES-CHIP	4.7K 5% 1/10W
				R1642	1-216-049-00	RES-CHIP	1K 5% 1/10W
				R1643	1-216-073-00	RES-CHIP	10K 5% 1/10W
				R1644	1-216-075-00	RES-CHIP	12K 5% 1/10W
				R1645	1-216-041-00	RES-CHIP	470 5% 1/10W
				R1648	1-249-381-11	CARBON	1 5% 1/4W F
				R1649	1-216-089-00	RES-CHIP	47K 5% 1/10W
				R1650	1-216-033-00	RES-CHIP	220 5% 1/10W
				R1651	1-216-073-00	RES-CHIP	10K 5% 1/10W
				R1652	1-216-099-00	RES-CHIP	120K 5% 1/10W
				R1653	1-216-049-11	RES-CHIP	1K 5% 1/10W
				R1654	1-216-049-11	RES-CHIP	1K 5% 1/10W

<RESISTOR>

KP-51DS1U

RM-892



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R1655	1-216-073-00	RES-CHIP	10K	5%	1/10W	R1758	1-216-025-00 RES-CHIP 100 5% 1/10W
R1701	1-216-065-00	RES-CHIP	4.7K	5%	1/10W	R1759	1-216-073-00 RES-CHIP 10K 5% 1/10W
R1702	1-216-065-00	RES-CHIP	4.7K	5%	1/10W	R1760	1-216-073-00 RES-CHIP 10K 5% 1/10W
R1703	1-216-065-00	RES-CHIP	4.7K	5%	1/10W	R1762	1-216-065-00 RES-CHIP 4.7K 5% 1/10W
R1704	1-216-065-00	RES-CHIP	4.7K	5%	1/10W	R1763	1-208-797-11 METAL CHIP 4.3K 0.5% 1/10W
R1705	1-216-065-00	RES-CHIP	4.7K	5%	1/10W	R1764	1-216-065-00 RES-CHIP 4.7K 5% 1/10W
R1706	1-216-065-00	RES-CHIP	4.7K	5%	1/10W	R1765	1-216-073-00 RES-CHIP 10K 5% 1/10W
R1707	1-216-025-00	RES-CHIP	100	5%	1/10W	R1766	1-216-049-11 RES-CHIP 1K 5% 1/10W
R1708	1-216-025-00	RES-CHIP	100	5%	1/10W	R1767	1-216-113-00 RES-CHIP 470K 5% 1/10W
R1709	1-216-025-00	RES-CHIP	100	5%	1/10W	R1768	1-216-049-11 RES-CHIP 1K 5% 1/10W
R1710	1-216-049-00	RES-CHIP	1K	5%	1/10W	R1769	1-216-115-00 RES-CHIP 560K 5% 1/10W
R1711	1-216-089-00	RES-CHIP	47K	5%	1/10W	R1770	1-216-049-11 RES-CHIP 1K 5% 1/10W
R1712	1-216-073-00	RES-CHIP	10K	5%	1/10W	R1771	1-216-113-00 RES-CHIP 470K 5% 1/10W
R1713	1-216-089-00	RES-CHIP	47K	5%	1/10W	R1772	1-216-049-11 RES-CHIP 1K 5% 1/10W
R1714	1-216-073-00	RES-CHIP	10K	5%	1/10W	R1773	1-216-073-00 RES-CHIP 10K 5% 1/10W
R1715	1-216-089-00	RES-CHIP	47K	5%	1/10W	R1774	1-216-025-00 RES-CHIP 100 5% 1/10W
R1716	1-216-033-00	RES-CHIP	220	5%	1/10W	R1775	1-216-115-00 RES-CHIP 560K 5% 1/10W
R1717	1-216-089-00	RES-CHIP	47K	5%	1/10W	R1778	1-216-049-11 RES-CHIP 1K 5% 1/10W
R1718	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	R1786	1-216-025-00 RES-CHIP 100 5% 1/10W
R1719	1-216-033-00	RES-CHIP	220	5%	1/10W	R1787	1-216-025-00 RES-CHIP 100 5% 1/10W
R1720	1-216-033-00	RES-CHIP	220	5%	1/10W	R1788	1-216-025-00 RES-CHIP 100 5% 1/10W
R1721	1-216-033-00	RES-CHIP	220	5%	1/10W	R1789	1-216-049-00 RES-CHIP 1K 5% 1/10W
R1722	1-216-033-00	RES-CHIP	220	5%	1/10W	R1790	1-216-025-00 RES-CHIP 100 5% 1/10W
R1725	1-216-065-00	RES-CHIP	4.7K	5%	1/10W	R1791	1-216-025-00 RES-CHIP 100 5% 1/10W
R1726	1-216-295-11	SHORT	0			R1792	1-216-089-00 RES-CHIP 47K 5% 1/10W
R1727	1-216-033-00	RES-CHIP	220	5%	1/10W	R1793	1-216-089-00 RES-CHIP 47K 5% 1/10W
R1728	1-216-025-00	RES-CHIP	100	5%	1/10W	R1794	1-216-089-00 RES-CHIP 47K 5% 1/10W
R1729	1-216-025-00	RES-CHIP	100	5%	1/10W	R1795	1-216-089-00 RES-CHIP 47K 5% 1/10W
R1730	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	R1802	1-215-925-11 METAL OXIDE 22K 5% 3W F
R1731	1-216-033-00	RES-CHIP	220	5%	1/10W	R1803	1-216-073-00 RES-CHIP 10K 5% 1/10W
R1732	1-216-049-00	RES-CHIP	1K	5%	1/10W	R1806	1-216-021-00 RES-CHIP 68 5% 1/10W
R1733	1-216-049-00	RES-CHIP	1K	5%	1/10W	R1807	1-216-295-11 SHORT 0
R1734	1-216-049-00	RES-CHIP	1K	5%	1/10W	R1808	1-216-295-11 SHORT 0
R1735	1-216-089-00	RES-CHIP	47K	5%	1/10W	R1809	1-216-097-00 RES-CHIP 100K 5% 1/10W
R1736	1-216-033-00	RES-CHIP	220	5%	1/10W	R1810	1-216-021-00 RES-CHIP 68 5% 1/10W
R1737	1-216-033-00	RES-CHIP	220	5%	1/10W	R1811	1-216-025-00 RES-CHIP 100 5% 1/10W
R1738	1-216-025-00	RES-CHIP	100	5%	1/10W	R1812	1-216-025-00 RES-CHIP 100 5% 1/10W
R1739	1-216-073-00	RES-CHIP	10K	5%	1/10W	R1813	1-216-049-00 RES-CHIP 1K 5% 1/10W
R1740	1-216-073-00	RES-CHIP	10K	5%	1/10W	R1814	1-216-023-00 RES-CHIP 82 5% 1/10W
R1741	1-216-033-00	RES-CHIP	220	5%	1/10W	R1815	1-216-025-00 RES-CHIP 100 5% 1/10W
R1742	1-216-033-00	RES-CHIP	220	5%	1/10W	R1816	1-216-025-00 RES-CHIP 100 5% 1/10W
R1743	1-216-025-00	RES-CHIP	100	5%	1/10W	R1817	1-216-025-00 RES-CHIP 100 5% 1/10W
R1744	1-216-033-00	RES-CHIP	220	5%	1/10W	R1818	1-216-059-00 RES-CHIP 2.7K 5% 1/10W
R1745	1-216-073-00	RES-CHIP	10K	5%	1/10W	R1819	1-216-295-11 SHORT 0
R1746	1-216-025-00	RES-CHIP	100	5%	1/10W	R1820	1-216-295-11 SHORT 0
R1747	1-216-025-00	RES-CHIP	100	5%	1/10W	R1821	1-216-025-00 RES-CHIP 100 5% 1/10W
R1748	1-216-025-00	RES-CHIP	100	5%	1/10W	R1824	1-216-295-11 SHORT 0
R1749	1-216-033-00	RES-CHIP	220	5%	1/10W	R1825	1-216-295-11 SHORT 0
R1750	1-216-073-00	RES-CHIP	10K	5%	1/10W	R1826	1-216-295-11 SHORT 0
R1751	1-216-033-00	RES-CHIP	220	5%	1/10W	R1829	1-216-295-11 SHORT 0
R1752	1-216-025-00	RES-CHIP	100	5%	1/10W	R1830	1-216-073-00 RES-CHIP 10K 5% 1/10W
R1753	1-216-073-00	RES-CHIP	10K	5%	1/10W	R1831	1-216-063-91 RES-CHIP 3.9K 5% 1/10W
R1754	1-216-073-00	RES-CHIP	10K	5%	1/10W	R1832	1-216-051-00 RES-CHIP 1.2K 5% 1/10W
R1755	1-216-025-00	RES-CHIP	100	5%	1/10W	R1833	1-216-041-00 RES-CHIP 470 5% 1/10W
R1756	1-216-073-00	RES-CHIP	10K	5%	1/10W	R1834	1-216-049-00 RES-CHIP 1K 5% 1/10W
R1757	1-216-073-00	RES-CHIP	10K	5%	1/10W	R1835	1-216-049-00 RES-CHIP 1K 5% 1/10W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R1836	1-216-049-00	RES-CHIP	1K 5% 1/10W			<COIL>	
R1837	1-216-049-00	RES-CHIP	1K 5% 1/10W				
R1838	1-216-041-00	RES-CHIP	470 5% 1/10W	L4900	1-412-002-31	INDUCTOR CHIP	4.7μH
R1839	1-216-049-00	RES-CHIP	1K 5% 1/10W	L4901	1-412-002-31	INDUCTOR CHIP	4.7μH
R1840	1-216-049-00	RES-CHIP	1K 5% 1/10W	L4902	1-412-002-31	INDUCTOR CHIP	4.7μH
R1841	1-216-049-00	RES-CHIP	1K 5% 1/10W	L4903	1-412-002-31	INDUCTOR CHIP	4.7μH
R1842	1-216-051-00	RES-CHIP	1.2K 5% 1/10W			<RESISTOR>	
R1843	1-216-041-00	RES-CHIP	470 5% 1/10W	R4901	1-216-043-91	RES-CHIP	560 5% 1/10W
R1844	1-216-049-00	RES-CHIP	1K 5% 1/10W	R4903	1-216-043-91	RES-CHIP	560 5% 1/10W
R1845	1-216-049-00	RES-CHIP	1K 5% 1/10W	R4907	1-216-043-91	RES-CHIP	560 5% 1/10W
R1846	1-216-049-00	RES-CHIP	1K 5% 1/10W	R4910	1-216-295-11	SHORT	0
R1847	1-216-049-00	RES-CHIP	1K 5% 1/10W	R4912	1-216-295-11	SHORT	0
R1848	1-216-049-00	RES-CHIP	1K 5% 1/10W	R4913	1-216-295-11	SHORT	0
R1849	1-216-041-00	RES-CHIP	470 5% 1/10W	R4915	1-216-043-91	RES-CHIP	560 5% 1/10W
		<RELAY>				*****	
RY1601	1-755-028-11	RELAY				* A-1652-068-AZG BOARD, COMPLETE	
RY1602	1-755-028-11	RELAY				*****	
		<TERMINAL BOARD>				4-382-854-11	SCREW (M3X10), P, SW (+)
TB1601	1-694-303-11	TERMINAL, PUSH				<CAPACITOR>	
		<CRYSTAL>				C1433	1-104-999-11 MYLAR 0.1μF 10% 200V
						C1434	1-107-362-11 MYLAR 0.0047μF 10% 200V
						C1435	1-107-667-11 ELECT 2.2μF 20% 160V
X1701	1-579-125-11	VIBRATOR, CERAMIC (8.0MHZ)				C1436	1-130-471-00 MYLAR 0.001μF 5% 50V
						C1437	1-130-471-00 MYLAR 0.001μF 5% 50V
		*****				C1438	1-107-362-11 MYLAR 0.0047μF 10% 200V
		* A-1648-032-AU BOARD, COMPLETE				C1439	1-161-830-00 CERAMIC 0.0047μF 99% 500V
		*****				C1440	1-104-664-11 ELECT 47μF 20% 25V
		<CAPACITOR>				C1441	1-104-999-11 MYLAR 0.1μF 10% 200V
						C1443	1-126-935-11 ELECT 470μF 20% 16V
C4901	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V			C1444	1-107-639-11 ELECT 47μF 20% 160V
C4902	1-163-133-00	CERAMIC CHIP 470pF	5% 50V			C1445	1-126-933-11 ELECT 100μF 20% 16V
C4903	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V			C1446	1-126-933-11 ELECT 100μF 20% 16V
C4904	1-163-133-00	CERAMIC CHIP 470pF	5% 50V			C1450	1-130-471-00 MYLAR 0.001μF 5% 50V
		<CONNECTOR>					<CONNECTOR>
						CN1431	* 1-564-508-11 PLUG, CONNECTOR 5P
CN4901	* 1-564-522-11	PLUG, CONNECTOR 7P				CN1432	* 1-564-510-11 PLUG, CONNECTOR 7P
CN4902	* 1-564-523-11	PLUG, CONNECTOR 8P				CN1433	* 1-564-507-11 PLUG, CONNECTOR 4P
		<DIODE>				CN1434	* 1-580-689-11 PIN, CONNECTOR (PC BOARD) 4P
D4906	8-719-977-22	ZENER DIODE DTZ9.1				CN1436	1-695-915-11 TAB (CONTACT)
D4907	8-719-977-22	ZENER DIODE DTZ9.1				CN1461	* 1-564-506-11 PLUG, CONNECTOR 3P
D4908	8-719-977-22	ZENER DIODE DTZ9.1				CN1462	* 1-564-507-11 PLUG, CONNECTOR 4P
		<JACK>				CN1464	* 1-564-507-11 PLUG, CONNECTOR 4P
J4901	1-695-549-11	SOCKET, PIN 21P					<DIODE>
						D1431	8-719-110-88 ZENER DIODE RD39ESB2
						D1432	8-719-110-88 ZENER DIODE RD39ESB2
						D1433	8-719-991-33 DIODE 1SS133T-77

KP-51DS1U

RM-892



The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
		<CONNECTOR>				< CAPACITOR >	
	DY1431 Δ	1-451-517-21 DEFLECTION YOKE (G)					
		<COIL>					
L1431	1-410-478-11	INDUCTOR 47 μ H		C3101	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
		<TRANSISTOR>		C3102	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
Q1431	8-729-017-06	TRANSISTOR 2SC4793		C3103	1-163-251-11	CERAMIC CHIP 100pF	5% 50V
Q1432	8-729-017-05	TRANSISTOR 2SA1837		C3104	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
Q1433	8-729-119-76	TRANSISTOR 2SA1175-HFE		C3105	1-126-964-11	ELECT 10 μ F	20% 50V
Q1434	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		C3106	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
Q1435	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		C3107	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
Q1436	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		C3109	1-163-251-11	CERAMIC CHIP 100pF	5% 50V
		<RESISTOR>		C3110	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1431	1-249-414-11	CARBON 560 5% 1/4W		C3111	1-163-251-11	CERAMIC CHIP 100pF	5% 50V
R1432	1-249-414-11	CARBON 560 5% 1/4W		C3112	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1433	1-249-377-11	CARBON 0.47 5% 1/4W F		C3113	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1435	1-216-475-11	METAL OXIDE 120 5% 3W F		C3114	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1436	1-216-475-11	METAL OXIDE 120 5% 3W F		C3115	1-163-251-11	CERAMIC CHIP 100pF	5% 50V
R1437	1-249-414-11	CARBON 560 5% 1/4W		C3116	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1438	1-215-451-00	METAL 18K 1% 1/4W		C3118	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1439	1-215-451-00	METAL 18K 1% 1/4W		C3121	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1440	1-249-414-11	CARBON 560 5% 1/4W F		C3122	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1441	1-249-409-11	CARBON 220 5% 1/4W		C3128	1-163-038-11	CERAMIC CHIP 0.1 μ F	25V
R1442	1-249-409-11	CARBON 220 5% 1/4W		C3129	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1443	1-249-377-11	CARBON 0.47 5% 1/4W F		C3130	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1444	1-249-409-11	CARBON 220 5% 1/4W		C3131	1-163-263-11	CERAMIC CHIP 330pF	5% 50V
R1445	1-249-403-11	CARBON 68 5% 1/4W		C3132	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1448	1-249-417-11	CARBON 1K 5% 1/4W		C3134	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1449	1-249-403-11	CARBON 68 5% 1/4W		C3135	1-163-222-11	CERAMIC CHIP 5pF	0.25pF 50V
R1450	1-249-417-11	CARBON 1K 5% 1/4W		C3136	1-163-222-11	CERAMIC CHIP 5pF	0.25pF 50V
R1451	1-249-409-11	CARBON 220 5% 1/4W		C3137	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1452	1-249-417-11	CARBON 1K 5% 1/4W		C3138	1-107-888-11	ELECT 47 μ F	20% 25V
R1453	1-249-401-11	CARBON 47 5% 1/4W		C3142	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1454	1-260-311-11	CARBON 39 5% 1/2W		C3143	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1455	1-249-384-11	CARBON 1.8 5% 1/4W F		C3144	1-163-159-00	CERAMIC CHIP 12pF	2% 50V
R1456	1-215-912-11	METAL OXIDE 150 5% 3W F		C3145	1-126-964-11	ELECT 10 μ F	20% 50V
R1457	1-249-417-11	CARBON 1K 5% 1/4W F		C3201	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1458	1-249-384-11	CARBON 1.8 5% 1/4W F		C3202	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1459	1-249-400-11	CARBON 39 5% 1/4W F		C3203	1-126-964-11	ELECT 10 μ F	20% 50V
R1461	1-249-414-11	CARBON 560 5% 1/4W		C3204	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1462	1-249-414-11	CARBON 560 5% 1/4W		C3205	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
R1463	1-249-393-11	CARBON 10 5% 1/4W		C3206	1-126-964-11	ELECT 10 μ F	20% 50V
R1465	1-216-475-11	METAL OXIDE 120 5% 3W F		C3207	1-126-964-11	ELECT 10 μ F	20% 50V
R1468	1-216-475-11	METAL OXIDE 120 5% 3W F		C3208	1-163-009-11	CERAMIC CHIP 0.001 μ F	10% 50V
*****				C3209	1-163-009-11	CERAMIC CHIP 0.001 μ F	10% 50V
* A-1654-043-AN BOARD, COMPLETE				C3210	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
*****				C3211	1-126-964-11	ELECT 10 μ F	20% 50V
4-204-791-01 SCREW + B, 2X8				C3212	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
				C3213	1-163-251-11	CERAMIC CHIP 100pF	5% 50V
				C3214	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
				C3215	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
				C3216	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
				C3217	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
				C3218	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
				C3219	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
				C3220	1-163-251-11	CERAMIC CHIP 100pF	5% 50V
				C3221	1-163-251-11	CERAMIC CHIP 100pF	5% 50V



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R3136	1-216-295-11	SHORT	0	R3237	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3138	1-216-295-11	SHORT	0	R3238	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3141	1-216-025-11	RES-CHIP	100 5% 1/10W	R3239	1-216-025-11	RES-CHIP	100 5% 1/10W
R3142	1-216-025-11	RES-CHIP	100 5% 1/10W	R3240	1-216-025-11	RES-CHIP	100 5% 1/10W
R3143	1-216-025-11	RES-CHIP	100 5% 1/10W	R3241	1-216-025-11	RES-CHIP	100 5% 1/10W
R3144	1-216-025-11	RES-CHIP	100 5% 1/10W	R3244	1-216-017-91	RES-CHIP	47 5% 1/10W
R3145	1-216-025-11	RES-CHIP	100 5% 1/10W	R3245	1-216-017-91	RES-CHIP	47 5% 1/10W
R3146	1-216-025-11	RES-CHIP	100 5% 1/10W	R3246	1-216-017-91	RES-CHIP	47 5% 1/10W
R3147	1-216-025-11	RES-CHIP	100 5% 1/10W	R3301	1-216-025-11	RES-CHIP	100 5% 1/10W
R3148	1-216-025-11	RES-CHIP	100 5% 1/10W	R3302	1-216-025-11	RES-CHIP	100 5% 1/10W
R3149	1-216-025-11	RES-CHIP	100 5% 1/10W	R3303	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3150	1-216-025-11	RES-CHIP	100 5% 1/10W	R3304	1-216-295-11	SHORT	0
R3151	1-216-017-91	RES-CHIP	47 5% 1/10W	R3305	1-216-025-11	RES-CHIP	100 5% 1/10W
R3154	1-216-025-11	RES-CHIP	100 5% 1/10W	R3306	1-216-025-11	RES-CHIP	100 5% 1/10W
R3155	1-216-025-11	RES-CHIP	100 5% 1/10W	R3307	1-216-025-11	RES-CHIP	100 5% 1/10W
R3156	1-216-025-11	RES-CHIP	100 5% 1/10W	R3309	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3157	1-216-025-11	RES-CHIP	100 5% 1/10W	R3310	1-216-073-00	RES-CHIP	10K 5% 1/10W
R3158	1-216-025-11	RES-CHIP	100 5% 1/10W	R3311	1-216-043-91	RES-CHIP	560 5% 1/10W
R3159	1-216-025-11	RES-CHIP	100 5% 1/10W	R3313	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3160	1-216-025-11	RES-CHIP	100 5% 1/10W	R3315	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3161	1-216-025-11	RES-CHIP	100 5% 1/10W	R3327	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3162	1-216-025-11	RES-CHIP	100 5% 1/10W	R3328	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3163	1-216-025-11	RES-CHIP	100 5% 1/10W	R3329	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3201	1-216-683-11	METAL CHIP	22K 0.5% 1/10W	R3330	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3202	1-216-065-00	RES-CHIP	4.7K 5% 1/10W	R3331	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3203	1-216-065-00	RES-CHIP	4.7K 5% 1/10W	R3332	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3204	1-216-683-11	METAL CHIP	22K 0.5% 1/10W	R3333	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3205	1-216-043-91	RES-CHIP	560 5% 1/10W	R3338	1-216-295-11	SHORT	0
R3206	1-216-675-91	METAL CHIP	10K 0.5% 1/10W	R3339	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3207	1-216-073-00	RES-CHIP	10K 5% 1/10W	R3340	1-216-073-00	RES-CHIP	10K 5% 1/10W
R3208	1-216-689-11	RES-CHIP	39K 5% 1/10W	R3341	1-216-073-00	RES-CHIP	10K 5% 1/10W
R3209	1-216-689-11	RES-CHIP	39K 5% 1/10W	R3342	1-216-295-11	SHORT	0
R3210	1-216-675-91	METAL CHIP	10K 0.5% 1/10W	R3343	1-216-295-11	SHORT	0
R3211	1-216-073-00	RES-CHIP	10K 5% 1/10W	R3344	1-216-295-11	SHORT	0
R3212	1-216-057-00	RES-CHIP	2.2K 5% 1/10W	R3345	1-216-295-11	SHORT	0
R3213	1-216-057-00	RES-CHIP	2.2K 5% 1/10W	R3346	1-216-025-11	RES-CHIP	100 5% 1/10W
R3214	1-216-295-11	SHORT	0	R3347	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3215	1-216-073-00	RES-CHIP	10K 5% 1/10W	R3348	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3216	1-216-061-00	RES-CHIP	3.3K 5% 1/10W	R3349	1-216-017-91	RES-CHIP	47 5% 1/10W
R3217	1-216-025-11	RES-CHIP	100 5% 1/10W	R3350	1-216-295-11	SHORT	0
R3218	1-216-025-11	RES-CHIP	100 5% 1/10W	R3351	1-216-295-11	SHORT	0
R3219	1-216-025-11	RES-CHIP	100 5% 1/10W	R3352	1-216-295-11	SHORT	0
R3220	1-216-025-11	RES-CHIP	100 5% 1/10W	R3354	1-216-295-11	SHORT	0
R3222	1-216-049-11	RES-CHIP	1K 5% 1/10W	R3355	1-216-295-11	SHORT	0
R3223	1-216-049-11	RES-CHIP	1K 5% 1/10W	R3357	1-216-295-11	SHORT	0
R3224	1-216-061-00	RES-CHIP	3.3K 5% 1/10W	R3359	1-216-295-11	SHORT	0
R3226	1-216-017-91	RES-CHIP	47 5% 1/10W	R3361	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3227	1-216-295-11	SHORT	0	R3362	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3228	1-216-022-00	RES-CHIP	75 5% 1/10W	R3363	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3229	1-216-049-11	RES-CHIP	1K 5% 1/10W	R3401	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3230	1-216-025-11	RES-CHIP	100 5% 1/10W	R3402	1-216-073-00	RES-CHIP	10K 5% 1/10W
R3231	1-216-025-11	RES-CHIP	100 5% 1/10W	R3403	1-216-073-00	RES-CHIP	10K 5% 1/10W
R3232	1-216-025-11	RES-CHIP	100 5% 1/10W	R3404	1-216-073-00	RES-CHIP	10K 5% 1/10W
R3233	1-216-049-11	RES-CHIP	1K 5% 1/10W	R3405	1-216-081-00	RES-CHIP	22K 5% 1/10W
R3234	1-216-049-11	RES-CHIP	1K 5% 1/10W	R3406	1-216-049-11	RES-CHIP	1K 5% 1/10W
R3235	1-216-049-11	RES-CHIP	1K 5% 1/10W	R3407	1-216-295-11	SHORT	0



The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R3410	1-216-049-11	RES-CHIP	1K 5% 1/10W	RB3311	1-239-409-11	RES-CHIP	NETWORK 47 (3216)
R3411	1-216-049-11	RES-CHIP	1K 5% 1/10W	RB3312	1-239-409-11	RES-CHIP	NETWORK 47 (3216)
R3412	1-216-049-11	RES-CHIP	1K 5% 1/10W	RB3313	1-239-409-11	RES-CHIP	NETWORK 47 (3216)
R3416	1-216-017-91	RES-CHIP	47 5% 1/10W	RB3314	1-239-409-11	RES-CHIP	NETWORK 47 (3216)
R3417	1-216-049-11	RES-CHIP	1K 5% 1/10W	RB3315	1-239-409-11	RES-CHIP	NETWORK 47 (3216)
R3418	1-216-049-11	RES-CHIP	1K 5% 1/10W	RB3316	1-239-409-11	RES-CHIP	NETWORK 47 (3216)
R3419	1-216-049-11	RES-CHIP	1K 5% 1/10W	RB3317	1-239-409-11	RES-CHIP	NETWORK 47 (3216)
R3420	1-216-049-11	RES-CHIP	1K 5% 1/10W	RB3319	1-239-409-11	RES-CHIP	NETWORK 47 (3216)
R3421	1-216-049-11	RES-CHIP	1K 5% 1/10W	RB3320	1-239-409-11	RES-CHIP	NETWORK 47 (3216)
R3422	1-216-049-11	RES-CHIP	1K 5% 1/10W	RB3321	1-239-409-11	RES-CHIP	NETWORK 47 (3216)
R3423	1-216-049-11	RES-CHIP	1K 5% 1/10W				
R3424	1-216-049-11	RES-CHIP	1K 5% 1/10W			< CRYSTAL >	
R3425	1-216-049-11	RES-CHIP	1K 5% 1/10W	X3102	1-781-212-21	VIBRATOR, CRYSTAL (13.5MHz)	
R3426	1-216-049-11	RES-CHIP	1K 5% 1/10W				
R3427	1-216-049-11	RES-CHIP	1K 5% 1/10W				
R3428	1-216-017-91	RES-CHIP	47 5% 1/10W				
R3430	1-216-295-11	SHORT	0				
		< RESISTOR CHIP NETWORK >					
RB3105	1-233-575-11	RES-CHIP	NETWORK 22				
RB3106	1-233-575-11	RES-CHIP	NETWORK 22				
RB3107	1-233-575-11	RES-CHIP	NETWORK 22				
RB3108	1-233-575-11	RES-CHIP	NETWORK 22				
RB3110	1-233-575-11	RES-CHIP	NETWORK 22				
RB3111	1-233-575-11	RES-CHIP	NETWORK 22				
RB3112	1-233-575-11	RES-CHIP	NETWORK 22				
RB3113	1-233-575-11	RES-CHIP	NETWORK 22				
RB3114	1-233-575-11	RES-CHIP	NETWORK 22				
RB3115	1-233-575-11	RES-CHIP	NETWORK 22				
RB3116	1-233-575-11	RES-CHIP	NETWORK 22				
RB3117	1-233-575-11	RES-CHIP	NETWORK 22				
RB3118	1-233-575-11	RES-CHIP	NETWORK 22				
RB3119	1-239-409-11	RES-CHIP	NETWORK 47 (3216)				
RB3120	1-239-409-11	RES-CHIP	NETWORK 47 (3216)				
RB3201	1-233-575-11	RES-CHIP	NETWORK 22				
RB3202	1-233-575-11	RES-CHIP	NETWORK 22				
RB3203	1-233-575-11	RES-CHIP	NETWORK 22				
RB3204	1-233-575-11	RES-CHIP	NETWORK 22				
RB3205	1-233-575-11	RES-CHIP	NETWORK 22				
RB3206	1-233-575-11	RES-CHIP	NETWORK 22				
RB3207	1-233-575-11	RES-CHIP	NETWORK 22				
RB3208	1-233-575-11	RES-CHIP	NETWORK 22				
RB3209	1-239-409-11	RES-CHIP	NETWORK 47 (3216)				
RB3210	1-239-409-11	RES-CHIP	NETWORK 47 (3216)				
RB3301	1-239-409-11	RES-CHIP	NETWORK 47 (3216)				
RB3302	1-239-409-11	RES-CHIP	NETWORK 47 (3216)				
RB3303	1-239-409-11	RES-CHIP	NETWORK 47 (3216)				
RB3304	1-239-409-11	RES-CHIP	NETWORK 47 (3216)				
RB3305	1-239-409-11	RES-CHIP	NETWORK 47 (3216)				
RB3306	1-239-409-11	RES-CHIP	NETWORK 47 (3216)				
RB3307	1-239-409-11	RES-CHIP	NETWORK 47 (3216)				
RB3308	1-239-409-11	RES-CHIP	NETWORK 47 (3216)				
RB3309	1-239-409-11	RES-CHIP	NETWORK 47 (3216)				
RB3310	1-239-409-11	RES-CHIP	NETWORK 47 (3216)				
						MISCELLANEOUS	

						Δ 1-223-925-41 RESISTOR ASSY (HIGH-VOLTAGE)	
						(FOCUS PACK)	
						Δ 1-451-517-21 DEFLECTION YOKE	
						Δ 1-452-790-31 NECK ASSY	
						Δ 1-452-909-41 MAGNET ASSY, 4 POLE	
						1-528-864-11 BATTERY, SOLAR	
						1-529-403-11 SPEAKER (6.6 CM)	
						1-529-643-11 SPEAKER (13 CM)	
						1-543-653-11 CORE ASSY, BEAD (DIVISION TYPE)	
						* 1-555-400-00 CABLE, PIN	
						Δ 1-776-860-12 POWER CORD, FILTER (UK)	
						Δ 8-598-955-13 BLOCK ASSY, HV HVB-1030	
						Δ 8-733-572-15 PICTURE TUBE 07MXC3 (R) (C/D CPL)	
						Δ 8-733-575-15 PICTURE TUBE 07MAC3 (B) (C/D CPL)	
						Δ A-1501-273-A SEAL (G) ASSY, MECHANICAL	

						ACCESSORIES AND PACKING MATERIALS	

						* 4-030-895-01 JOINT	
						* 4-055-672-01 BAG, PROTECTION	
						* 4-055-673-01 SHEET, PROTECTION	
						* 4-076-544-01 TRAY	
						* 4-076-545-01 INDIVIDUAL CARTON	
						* 4-076-546-01 CUSHION (UPPER) (ASSY)	
						* 4-076-547-01 CUSHION (LOWER) (ASSY)	
						* 4-076-552-01 BOARD, TOP	
						* 4-076-553-01 BOARD, BOTTOM	
						4-205-772-11 MANUAL, INSTRUCTION (ENGLISH)	

						REMOTE COMMANDER	

						1-418-572-11 COMMANDER, STANDARD (RM-892)	

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