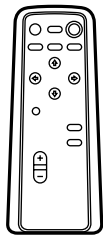


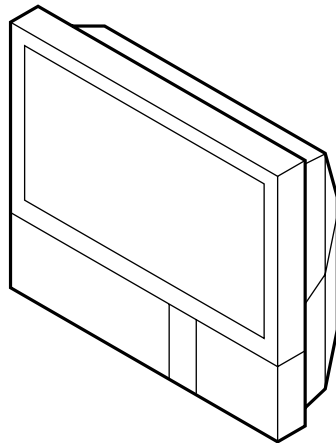
SERVICE MANUAL

LJ-2T CHASSIS

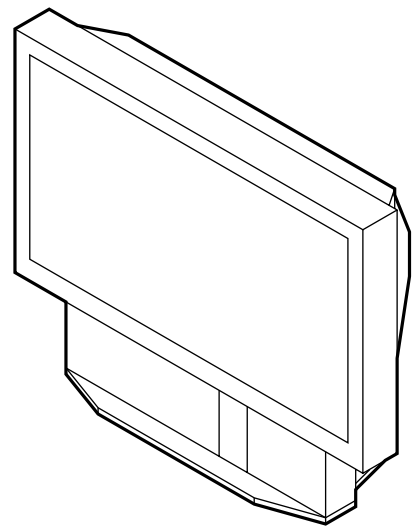
MODEL	COMMANDER	DEST.	CHASSIS No.	MODEL	COMMANDER	DEST.	CHASSIS No.
KL-W7000	RM-Y980	US	SCC-N56B-A	KL-W9000	RM-Y980	US	SCC-N56A-A
KL-W7000	RM-Y980	Canadian	SCC-N56B-A	KL-W9000	RM-Y980	Canadian	SCC-N56A-A



RM-Y980



KL-W7000



KL-W9000



* Please file according to model size...■

37

50

LCD PROJECTION DATA MONITOR
SONY®

Specifications

Acceptable signal	NTSC video signal, RGB signal (For details, see page 9.)
Projection system	3 LCD panels, 1 lens projection system
LCD panel	1.35-inch TFT LCD panel Approx. 1.54 million dots (512,880 pixels) 1068.5 × 480 dots × 3 panels
Lamp	XL-100U: HID lamp, 100 W
Lens	Large diameter hybrid lens F2.4
Screen size (measured diagonally)	KL-W7000: 37 inches (942 mm) KL-W9000: 50 inches (1,272 mm)
Viewable image size (for RGB input)	KL-W7000: Approx. 36.3 inches (921 mm) (diagonally) Approx. 803 × 452 mm (w/h) KL-W9000: Approx. 49.1 inches (1247 mm) (diagonally) Approx. 1087 × 611 mm (w/h)
Deflection frequency	Horizontal: 31.5–48 kHz Vertical: 50–85 Hz
Inputs/outputs	
VIDEO 1, 2 and 3 IN	S VIDEO (VIDEO 1, 3 IN only) (4-pin mini-DIN): Y: 1 Vp-p, 75 ohms unbalanced, sync negative C: 0.286 Vp-p (burst signal), 75 ohms VIDEO (phono jacks): 1 Vp-p, 75 ohms unbalanced, sync negative AUDIO (phono jacks): 2 channels, 500 mVrms Impedance: more than 47 kohms
VIDEO OUT	S VIDEO (4-pin mini-DIN): Y: 1 Vp-p, 75 ohms unbalanced, sync negative C: 0.286 Vp-p (burst signal), 75 ohms VIDEO (phono jacks): 1 Vp-p, 75 ohms unbalanced, sync negative AUDIO (phono jacks): 2 channels, 500 mVrms Impedance: less than 5 kohms

RGB 1, 2 IN

VIDEO (D-sub 15-pin, female):
R, G, B: 0.7 Vp-p, positive, 75 ohms terminated
Sync on Green: 0.286 Vp-p
SYNC/HD: Composite sync:
TTL, high impedance,
sync positive/negative
Horizontal sync: TTL, high impedance, sync positive/negative
VD: Vertical sync: TTL, high impedance, sync positive/negative
AUDIO (RGB 1 IN) (phono jacks)
2 channels, 500 mVrms
Impedance: more than 47 kohms
AUDIO (RGB 2 IN) (stereo minijack)
500 mVrms
Impedance: more than 47 kohms

Power requirement

100 to 120 V AC, 50/60 Hz

Power consumption

190 W (MAX)
Standby mode: 2 W

Dimensions

KL-W7000: 920 × 825 × 390 mm
(36¹/₄ × 32¹/₂ × 15³/₈ inches)
(w/h/d)
KL-W9000: 1,228 × 1,055 × 565 mm
(48³/₈ × 41⁵/₈ × 22¹/₄ inches) (w/h/d)

Mass

KL-W7000: Approx. 30 kg
(68 lbs 2 oz)
KL-W9000: Approx. 43 kg
(106 lbs 8 oz)

Supplied accessories

Remote control RM-Y980 (1)
Size AA (R6) batteries (2)
AC power cord (1)
RGB signal cable (D-sub 15-pin ↔ D-sub 15-pin) (1)
HD15-HD15 (male, without the No. 9 pin) adaptor (1)
Macintosh adaptor (1)
Windows 95 Monitor Information Disk (1)
Brackets (2)
Screws for brackets (2)
Buckle (1)
Hexagon head wrench (1)
Dust remover (1)

Optional accessories

Lamp unit XL-100U

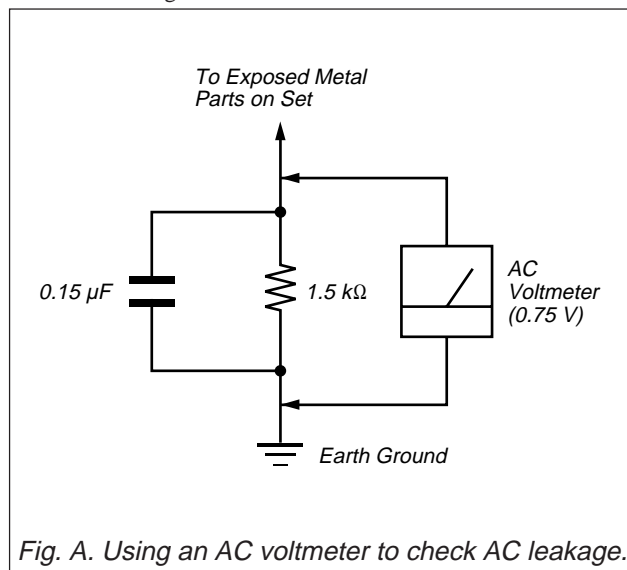
Design and specifications are subject to change without notice.

SAFETY CHECK-OUT (US Model only)

KL-W7000/W9000
RM-Y980

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

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the condition of the monopole antenna (if any). Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
8. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
9. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC Leakage. Check leakage as described below.



LEAKAGE TEST

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

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

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60 – 100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

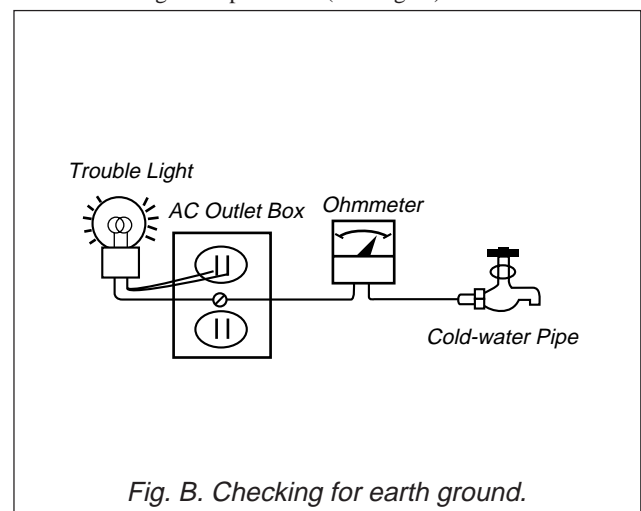


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SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY SHADING AND MARK Δ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!
LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE Δ SONT CRITIQUES POUR LA SÉCURITÉ. NE LES REMPLACER QUE PAR UNE PIÈCE PORTANT LE NUMÉRO SPECIFIÉ. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIÉS DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

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 1 GENERAL

Precautions

This projection monitor operates on extremely high voltage. To prevent fire or electric shock, please follow the precautions below.

On safety

- Operate the monitor only on 100 V to 120 V AC.
- One blade of the plug is wider than the other for safety purposes and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- Should any liquid or solid object fall into the cabinet, unplug the monitor and have it checked by qualified personnel before operating it further.
- Unplug the monitor from the wall outlet if you are not going to use it for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- The fans inside the monitor continue working for a while even after the monitor has been turned off. Do not unplug the monitor from the AC outlet while the fans are working.

On installation

- To prevent internal heat build-up, do not block the ventilation openings.
- Do not install the monitor in a hot or humid place, or in a place subject to excessive dust or mechanical vibration.

On screen

The screen surface is easily scratched. Do not rub, touch or tap it with sharp or abrasive objects. Be especially careful when transporting the monitor.

On LCD panel

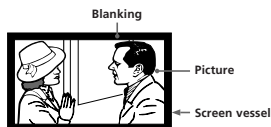
- Do not expose the screen to direct sunlight. It may damage the LCD panel.
- When the monitor is used in a cold place, the image may look lengthened. This is not a malfunction. The image will become normal when the temperature rises.
- When the same static picture has been displayed continuously, an afterimage impression of that picture may remain on the screen. This will disappear after a certain time.

- If you turn on the monitor immediately after power has been restored at an interruption, an LCD burn may occur. This is not a malfunction. The image will become normal after a certain time.

On blanking around the picture

The monitor displays black masks between the picture and the screen vessel because the monitor under-scans to obtain the necessary space on the screen to display the picture. This is called blanking. Note that the black masks on each vessel are not uniform.

The blanking on the video picture will be wider to optimize picture.



On moisture condensation

If the projection monitor is transported directly from a cold to a warm location, or if the room temperature has changed suddenly, the picture may be blurred or show poor color. This is because moisture has condensed on the lenses inside. If this happens, let the moisture evaporate before using the monitor.

On cleaning

- Clean the cabinet of the monitor with a dry soft cloth. Stubborn stains may be removed with a cloth slightly dampened with solution of mild soap and water, then wipe it with a dry soft cloth. Do not use any type of solvent such as alcohol, benzene, thinner or insecticide. Such solvent may damage the finish of the monitor or erase the indications on the panel.
- Wipe the screen with a dust remover (supplied) occasionally, as the screen easily catches dust. The dust remover is washable. Wash it with warm water or mild detergent solution.
- Stubborn stains on the screen may be removed with a soft cloth slightly dampened with solution of mild soap and water.
- If the picture becomes dark after using the monitor for a long period of time, it may be necessary to clean the inside of the monitor. Consult qualified service personnel.

Getting Started

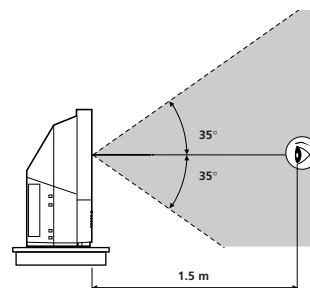
Step 1: Installing the projection monitor

Optimum viewing area

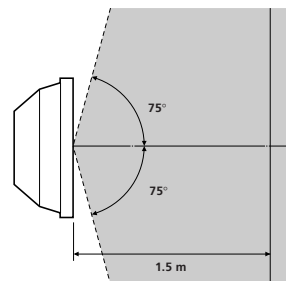
For the best picture quality, install the monitor within the areas shown below.

■ for KL-W7000

Vertical viewing area (side view)

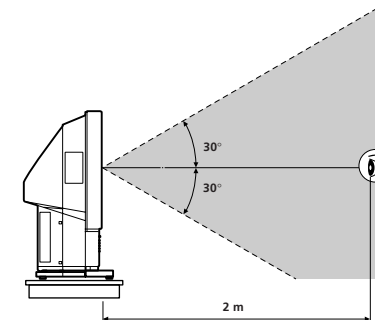


Horizontal viewing area (top view)

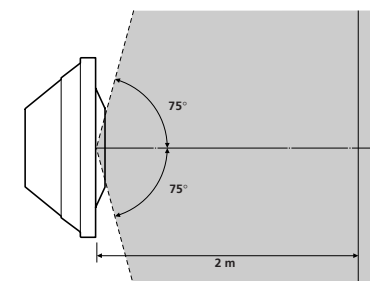


■ for KL-W9000

Vertical viewing area (side view)



Horizontal viewing area (top view)

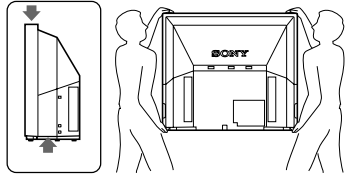


EN

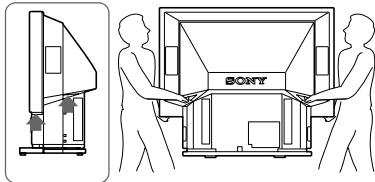
Carrying your monitor

Be sure to grasp the areas indicated by the arrows when carrying the monitor, and to use more than two people. Never grasp the front panel.

■ for KL-W7000



■ for KL-W9000

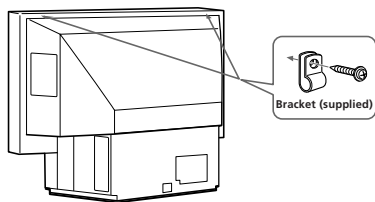


Stabilizing the monitor

Using the brackets

After setting up, secure the monitor to a wall, etc. with the supplied brackets.

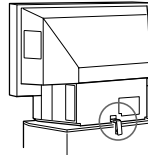
- 1 Mount the two supplied brackets with the screws to the upper rear sides of the monitor.



- 2 Pass a strong cord or a chain through each bracket mounted in step 1, and then secure it to a wall or a pillar, etc.

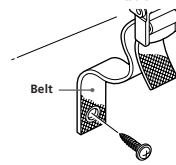
Using the buckle

You can also use the supplied buckle to secure the monitor to the stand.

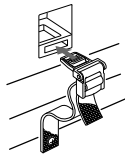


- 1 Attach the buckle to the stand on which the monitor is mounted.

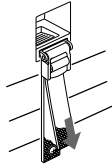
Tighten the supplied screw firmly.



- 2 Insert the buckle until it clicks.



- 3 Pull the belt to fasten.



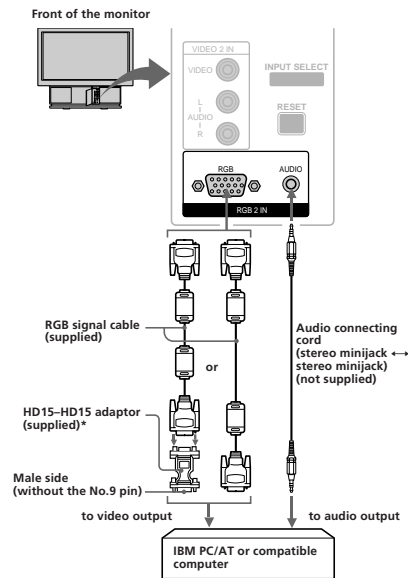
Step 2: Hookup

Before making the connection, turn off the power and disconnect the AC power cords of the monitor and the equipment to be connected. Refer to the instruction manual of the equipment you connect.

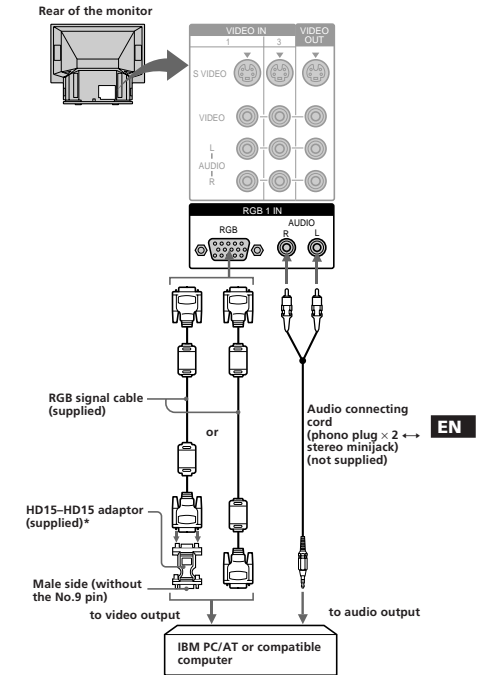
Connecting to an IBM PC/AT or compatible computer

Connect the RGB 1 IN connector on the front of the monitor to the video/audio outputs of the computer using the supplied RGB signal cable (D-sub 15 pin ↔ D-sub 15 pin).

Using the front RGB 2 IN connector



Using the rear RGB 1 IN connector



* The HD15-HD15 adaptor (supplied) may be needed for some models. The male side (without the No. 9 pin) of the adaptor should be connected to the computer.

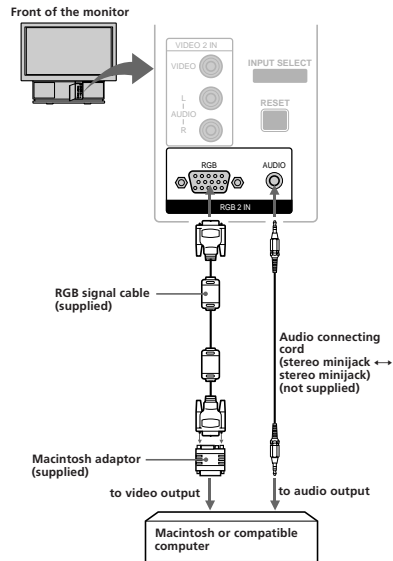
For customers using the supplied HD15-HD15 adaptor

This monitor uses a No. 9 pin in the video signal connector for DDC1 and DDC2B compatibility. Some PC systems which are not compatible with either DDC1 or DDC2B may not accept the No. 9 pin. If you are not sure whether your PC system accepts the No. 9 pin or not, use the HD15 (Female) - HD15 (Male without the No. 9 pin) adapter (supplied).

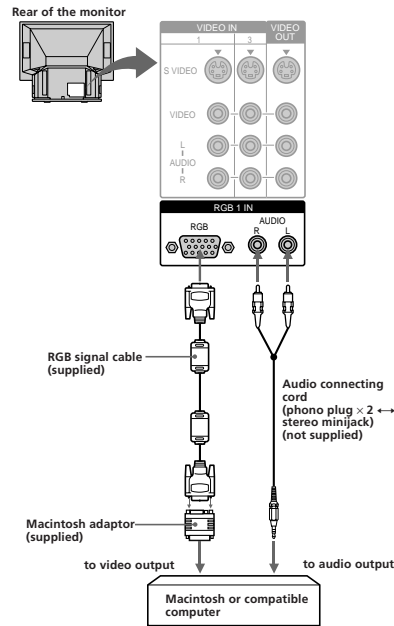
Connecting to a Macintosh or compatible computer

Connect the RGB 2 IN connector on the front or the RGB 1 IN connector at the rear of the monitor to the video/audio outputs of the computer using the supplied RGB signal cable (D-sub 15 pin ↔ D-sub 15 pin) and the supplied Macintosh adaptor.

Using the front RGB 2 IN connector



Using the rear RGB 1 IN connector



About the supplied Macintosh adaptor

The supplied Macintosh adaptor is compatible with Macintosh LC, Performa, Quadra and Power Macintosh series computers. Macintosh II series and some version of PowerBook models may need an another adaptor with micro switches (not supplied).

Preset and user modes

Preset modes

The monitor has nine factory preset modes for the most popular industry standards as shown below.

No.	Resolution (dots × lines)	Horizontal frequency (kHz)	Vertical frequency (Hz)	Graphics mode
1	640 × 400	31.468	70.086	VGA mode (Text)
2	640 × 480	31.468	59.94	VGA mode (Graphics)
3	800 × 600	37.879	60.317	SVGA VESA
4	800 × 600	46.875	75.000	SVGA VESA
5	1024 × 768	48.363	60.004	VESA
6	864 × 480	31.469	59.94	Sony Wide-VGA*
7	1072 × 600	37.879	60.317	Sony Wide-SVGA*
8	1376 × 768	48.363	60.004	Sony Wide-XGA*
9	640 × 480	34.954	66.667	Macintosh 13" color

* For the timing chart of the signals, see page 28.

User modes

When using a video mode that is not one of the preset modes, some fine tuning may be required to optimize the display to your preference. Simply adjust the monitor according to the adjustments instructions on page 16. The adjustments will be stored automatically and recalled whenever that mode is used.

A total of 15 user-defined modes can be stored in memory. If a 16th mode is entered, it will replace the first.

Recommended horizontal timing conditions

Horizontal sync width should be more than 1.0 μsec.

Horizontal blanking width should be more than 3.6 μsec.

When "OUT OF SCAN RANGE" appears on the screen

The monitor receives a signal whose frequency range is not within that specified for the monitor.

Notes

- When projecting a Wide-VGA, Wide-SVGA or Wide-XGA signal, set the picture mode to FULL. In NORMAL mode, the picture with aspect ratio 16:9 will be compressed to aspect ratio 4:3 and appear lengthened vertically. For details, see page 15.
- The monitor does not accept an interlace mode signal.

Plug & Play

This monitor complies with the DDC™1 and DDC2B which are the Display Data Channel (DDC) standards of VESA.

When a DDC1 host system is connected, the monitor synchronizes with the V. CLK in accordance with the VESA standards and outputs the EDID (Extended Display Identification Data) to the data line.

When a DDC2B host system is connected, the monitor automatically switches to each communication.

For customers using Windows 95

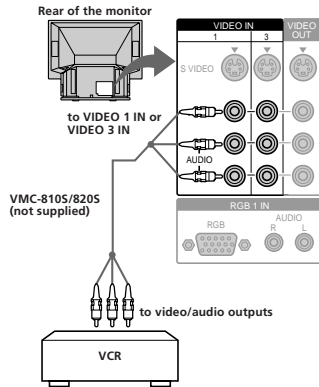
Install the new model information from the "Windows 95 Monitor Information Disk" into your PC. (To install the file, refer to the supplied "About the Windows 95 Monitor Information Disk/File.")

This monitor complies with the "VESA DDC" Plug&Play standard. If your PC/video card does not comply with DDC, select "Plug and Play Monitor (VESA DDC)" as "Monitor type" from "Control Panel" in Windows 95. Some PC/video cards do not comply with DDC. Even if your computer complies with DDC, it may have some problems connecting with this monitor. In this case, select this monitor's model name (KL-W7000 or KL-W9000) as "Monitor type" in Windows 95.

EN

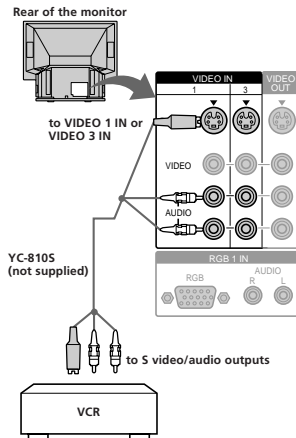
Connecting to video equipment

To a VCR not equipped with an S video connector



You can also use the VIDEO 2 IN jacks on the front of the monitor for the video / audio connections.

To an S video equipped VCR



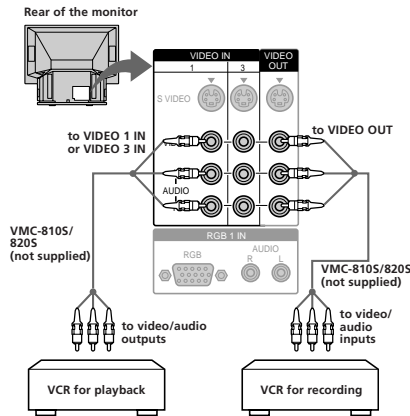
Note
When you connect the cable to both the VIDEO jack and the S VIDEO connector, the picture from the S VIDEO connector is displayed on the monitor screen.

Connecting two VCRs for editing

The monitor outputs signals from the VIDEO IN jacks through the VIDEO OUT jacks. With two VCRs connected to the VIDEO IN and VIDEO OUT jacks, you can edit the tape.

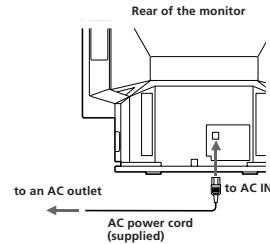
Note

For the RGB signal input from the RGB 1/2 IN connectors, the monitor outputs only the audio signal.



Connecting the AC power cord

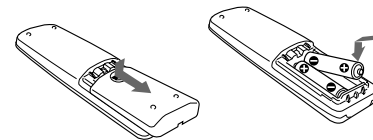
Connect the supplied power cord to the AC IN socket of the monitor and to a wall AC outlet.



Step 3: Setting up the remote control

Inserting batteries

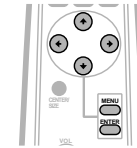
Insert two size AA (R6) batteries (supplied) by matching the + and - on the battery to the diagram inside the battery compartment.



Notes

- Under normal conditions, batteries will last up to six months. If the remote control does not operate properly, the batteries may be worn out. When replacing batteries, replace both of them with new ones.
- Do not mix old batteries with new ones or mix different types of batteries together.
- If the electrolyte inside the battery should leak, wipe the contaminated area of the battery compartment with a cloth and replace the old batteries with new ones. To prevent the electrolyte from leaking, remove the batteries when you don't plan to use the remote control for a long period of time.
- Do not handle the remote control roughly. Do not drop it, step on it, or let it get wet.
- Do not place the remote control in direct sunlight, near a heater, or where the humidity is high.

Changing the menu language

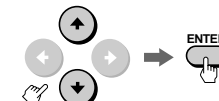


If you prefer Spanish or French to English, you can change the menu language.

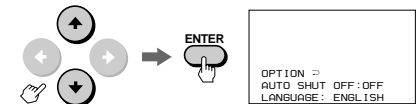
1 Press MENU.



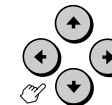
2 Press + or - to select OPTION, and press ENTER.



3 Press + or - to select LANGUAGE, and press ENTER.



4 Press +, -, + or - to select your favorite language, "ENGLISH," "FRANCAIS (French)" or "ESPAÑOL (Spanish)."



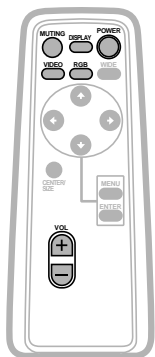
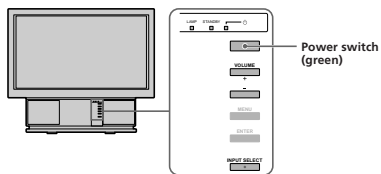
5 Press MENU to return to the original screen.

Notes

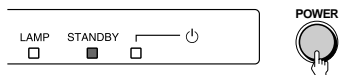
- You can operate the menu using the buttons on the monitor. The VOLUME + button functions the same as + and -, and VOLUME - as + and -.
- You cannot use the AUTO SHUT OFF function for the input from VIDEO IN. (See page 22.)

EN

Projecting the picture




- 1 If the **STANDBY** indicator on the front of the monitor is lit in orange, press **POWER** on the remote control to turn on the power.



Press the power switch (green) on the monitor if the **STANDBY** indicator is not lit.



The green  (power) indicator flashes, then lights up.

- 2 Turn on the power of the connected equipment.
- 3 Press **RGB** or **VIDEO** to select the input you want to watch.
The selected input indication is displayed on the screen.

To watch a computer picture input from the RGB IN connector

Each time you press RGB, the display changes as follows:

RGB 1 ↔ RGB 2



To watch a video picture input from the VIDEO IN jacks

Each time you press VIDEO, the display changes as follows:

VIDEO 1 → VIDEO 2 → VIDEO 3



You can also select the input by pressing **INPUT SELECT** on the monitor.

Each time you press **INPUT SELECT**, the display changes as follows:

RGB 1 → RGB 2 → VIDEO 1 → VIDEO 2 → VIDEO 3



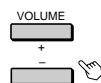
The input signal indication will automatically disappear.

- 4 Press **VOL +/- (VOLUME +/-)** to adjust the volume.

Remote control




Monitor



To turn off the monitor

Press **POWER** on the remote control. The monitor enters standby mode and the **STANDBY** indicator lights up. To turn off the main power, press the power switch (green) on the monitor.

Note

To protect the lamp mounted as a source of light, if you try to turn on the power within about 30 minutes after the power has been turned off, the  (power) indicator flashes and the picture does not appear.

Muting the sound

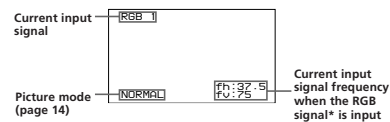
Press **MUTING**.

"MUTING" appears on the screen.

To restore the sound, press **MUTING** again, or press **VOL+**.

Displaying on-screen information

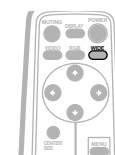
Press **DISPLAY** to display the following information on the screen.



*fh: Horizontal frequency
fv: Vertical frequency
"OUT OF SCAN RANGE" appears if the scanning frequency range is not within the acceptable limits. (See page 9.)

To make the on-screen information disappear, press **DISPLAY** again.

Watching the picture in wide picture mode



Watching the video picture in wide mode

You can enjoy a variety of wide mode picture.

EN

Press **WIDE** until the mode you want appears on the screen.

Each time you press **WIDE**, the mode changes as follows:

NORMAL → FULL → ZOOM → SUB TITLE → WIDE ZOOM

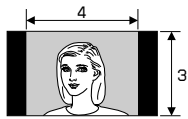


(continued)

Recommended picture mode

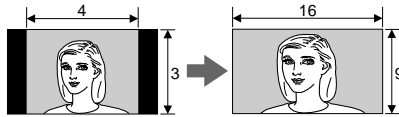
When watching a picture with normal aspect ratio 4:3

Select NORMAL.



The picture with normal aspect ratio 4:3 is displayed as it is.

Select WIDE ZOOM.



The picture is enlarged horizontally and vertically and the upper and lower portions of the picture are compressed to the screen size.

When watching a picture recorded after a 16:9 picture has been compressed to aspect ratio 4:3

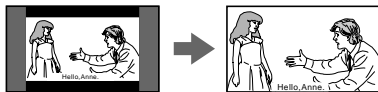
Select FULL.



The picture compressed to aspect ratio 4:3 is enlarged horizontally to the screen size.

When watching a wide-format movie or software with black bands and subtitles (with subtitles inside the picture)

Select ZOOM.



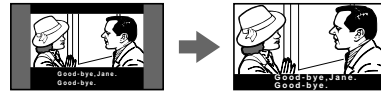
The wide-format picture is enlarged horizontally and vertically to the screen size.



The picture with aspect ratio 16:9 is enlarged to the screen size as it is.

When watching a movie or software with subtitles (with subtitles outside the picture)

Select SUB TITLE.



The wide-format picture is enlarged and the subtitle area is compressed so that the picture is aligned with the screen size.

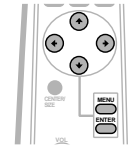
Note

- You can also change the picture mode by using the menu.

Notes on wide picture modes

- Select a picture mode taking into account that one which changes the aspect ratio of the original picture will provide an appear different from that of the original image.
- If the monitor is used for profit or for public viewing, modifying the original picture by changing picture modes may constitute an infringement of the rights of authors or producers which are legally protected by laws.
- When a normal 4:3 picture is watched in WIDE ZOOM mode, the surrounding portions may be cut off or modified. The original picture can be viewed in NORMAL mode.

Adjusting the vertical position of the video picture



You can scroll the picture up or down when:

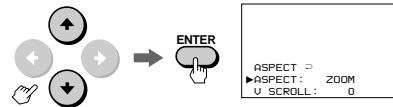
- the upper or lower portions of the picture in WIDE ZOOM mode are cut off.
- you want to move the picture in ZOOM mode as you like.
- subtitles are lost from the screen in SUB TITLE mode.

Scrolling the picture functions on the WIDE ZOOM, ZOOM and SUB TITLE modes only.

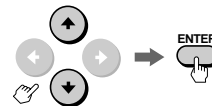
1 Press MENU.



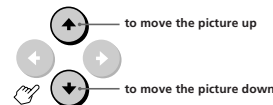
2 Press ↑ or ↓ to select ASPECT, and press ENTER.



3 Press ↑ or ↓ to select V SCROLL, and press ENTER.



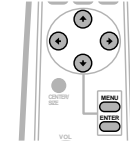
4 Press ↑ or ↓ to adjust the vertical position of the picture.



Note

- You can operate the menu using the buttons on the monitor. The VOLUME + button functions the same as ↑ and ↓, and VOLUME - as ← and →.

Watching the computer picture in wide picture mode



If you set the picture mode to FULL when a Wide-VGA, Wide-SVGA or Wide-XGA signal is received, you can watch the picture with aspect ratio 16:9 as it is. The Wide-VGA, Wide-SVGA and Wide-XGA signals are independently standardized by Sony. When you use the signals with the timing chart on page 28, you can obtain an effective wide mode picture.

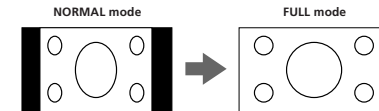
Press WIDE to display FULL or NORMAL on the screen.

Each time you press WIDE, you can select FULL and NORMAL alternately.



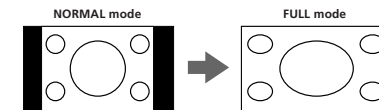
EN

When a Wide-VGA, Wide-SVGA or Wide-XGA signal is received



The picture with aspect ratio 16:9 is enlarged to the screen size.

When a conventional VGA, SVGA or XGA signal is received



The picture with aspect ratio 4:3 is enlarged horizontally to the screen size.

Adjusting the position of a computer picture

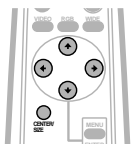
You can move the picture up, down, right or left to make it easy to watch by using the SIZE/CENTER button. For details, see page 16.

If you watch the Wide-VGA, Wide-SVGA or Wide-XGA signal in NORMAL mode
A 16:9 picture will be compressed horizontally to a 4:3 picture.

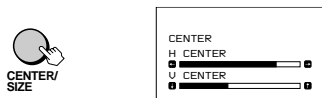
Adjusting the computer picture

Adjusting the position (CENTER)

After projecting the picture from a computer, you may need to adjust the position of the picture to fit the monitor screen. You can also move the picture as you like. The setting is only for the input signal displayed on the screen.



- 1 Press CENTER/SIZE until the CENTER adjustment screen appears.



- 2 Press ←, →, ↑ or ↓ to adjust the position.

For horizontal adjustment press ← or →. (H CENTER)



For vertical adjustment press ↑ or ↓. (V CENTER)



The CENTER adjustment screen automatically disappears after about 10 seconds if you do not press any button. You can also erase the CENTER adjustment screen by pressing CENTER/SIZE again.

To reset to the factory preset setting

Press RESET on the monitor. At the same time, the picture size and video/audio settings (pages 17 to 21) are also reset to the factory preset levels.

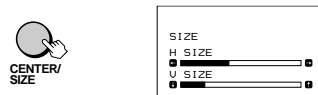
Note

- You can adjust the position by using the CENTER/SIZE and ◁/▷/↑/↓ buttons on the monitor.

Adjusting the picture size (SIZE)

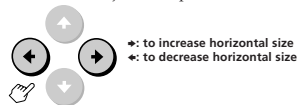
After projecting the picture from a computer, you may need to adjust the picture size to fit the monitor screen. The setting is only for the input signal displayed on the screen.

- 1 Press CENTER/SIZE until the SIZE adjustment screen appears.

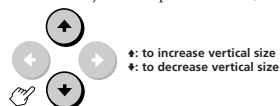


- 2 Press ←, →, ↑ or ↓ to adjust the picture size.

For horizontal adjustment press ← or →. (H SIZE)



For vertical adjustment press ↑ or ↓. (V SIZE)



The SIZE adjustment screen automatically disappears after about 10 seconds if you do not press any button. You can also erase the SIZE adjustment screen by pressing CENTER/SIZE again.

To reset to the factory preset setting

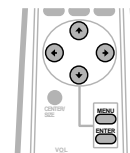
Press RESET on the monitor. At the same time, the picture position and video/audio settings (pages 17 to 21) are also reset to the factory preset levels.

Notes

- For a picture with resolution of 640 × 350, 640 × 400 or 640 × 480, the vertical size cannot be increased from the size that was projected the first time.
- You can adjust the size using the CENTER/SIZE and ◁/▷/↑/↓ buttons on the monitor.

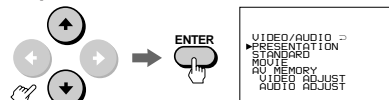
Selecting the preset picture viewing mode

The video/audio mode feature allows you to choose four different modes of picture/sound settings. Choose the one that best suits the type of program that you want to watch.

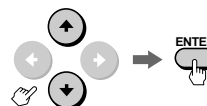


- 1 Press MENU.

- 2 Press ↑ or ↓ to select VIDEO/AUDIO, and press ENTER.



- 3 Press ↑ or ↓ to select the desired item, and press ENTER.



Choose	To
PRESENTATION	Watch the picture input from a computer.
STANDARD	Watch the picture input from video equipment.
MOVIE	Watch a movie.
AV MEMORY	Adjust the quality of the picture/sound to suit your taste. (For details, see pages 18-21.)

- 4 Press MENU to return to the original screen.

To reset to the factory preset setting

Press RESET on the monitor.

When watching a computer picture, the mode resets to PRESENTATION. When watching a video picture, the mode resets to STANDARD. At the same time, the position and size of a computer picture (page 16) are also reset to the factory preset levels. The settings in AV MEMORY do not reset.

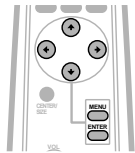
Note

- You cannot adjust the settings in modes other than AV MEMORY.

EN

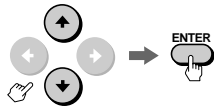
Adjusting the picture (AV MEMORY)

You can adjust the quality of the picture to suit your taste and store the settings into AV MEMORY.

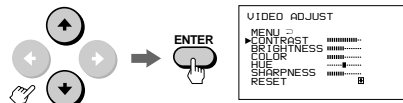


1 Press MENU.

2 Press + or - to select VIDEO/AUDIO, and press ENTER.



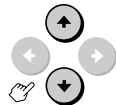
3 Press + or - to select VIDEO ADJUST, and press ENTER.



4 Select the item you want to adjust.

For example:

(1) To adjust the brightness, press + or - to move the cursor (▶) to BRIGHTNESS.

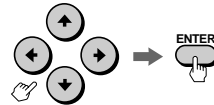


(2) Press ENTER.



5 Adjust the selected item.

Press +, -, +, or - to adjust the item, and press ENTER.



Item	Press + or - to	Press + or - to
CONTRAST	Decrease picture contrast.	Brighten the picture.
BRIGHTNESS	Darken the picture.	Brighten the picture.
COLOR	Decrease color intensity.	Increase color intensity.
HUE	Make picture tones become purplish.	Make picture tones become greenish.
SHARPNESS	Soften the picture.	Sharpen the picture.

6 To adjust other items, repeat steps 4 and 5.

7 Press MENU to return to the original screen.

To reset to the factory preset setting

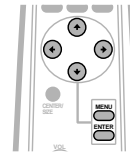
Move the cursor (▶) to RESET at the bottom of the VIDEO ADJUST menu, and press ENTER.

Notes

- When the RGB signal is input, COLOR, HUE and SHARPNESS cannot be adjusted.
- You can adjust the items in AV MEMORY for each input from VIDEO 1, 2 and 3, and RGB 1 IN and RGB 2 IN.
- You can operate the menu using the buttons on the monitor. VOLUME + functions the same as + and -, and VOLUME - as + and -.

Adjusting the picture in more details

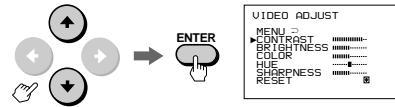
You can adjust the picture with the NR (noise reduction), H-WHITE and COLOR TEMP (temperature) options.



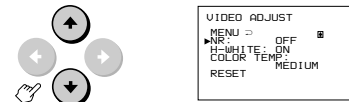
1 Press MENU.

2 Press + or - to select VIDEO/AUDIO, and press ENTER.

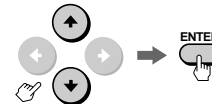
3 Press + or - to select VIDEO ADJUST, and press ENTER.



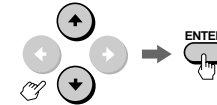
4 Press + or - to move the cursor (▶) to RESET, then press + again.



5 Select the desired item with + or -, then press ENTER.



6 Press + or - to adjust the item, then press ENTER.



Choose	To
NR (Noise Reduction)	Reduce picture noise. You can choose LOW or HIGH position.
H-WHITE	Emphasize the white color with the ON position.
COLOR TEMP (Color temperature)	Make the white color warm (reddish) with the LOW position. Make it cool (bluish) with the HIGH position.

7 To adjust other items, repeat steps 5 and 6.

8 Press MENU to return to the original screen.

To reset to the factory preset setting

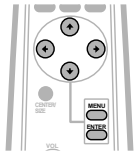
Move the cursor (▶) to RESET at the bottom of the VIDEO ADJUST menu, and press ENTER.

Notes

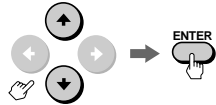
- You can adjust the items in AV MEMORY for each input from VIDEO 1, 2 and 3, and RGB 1 IN and RGB 2 IN.
- You can operate the menu using the buttons on the monitor. VOLUME + functions the same as + and -, and VOLUME - as + and -.

Adjusting the sound (AV MEMORY)

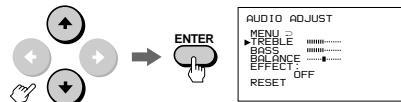
You can adjust the quality of the sound to suit your taste and store the settings into AV MEMORY.



- 1 Press MENU.
- 2 Press \uparrow or \downarrow to select VIDEO/AUDIO, and press ENTER.

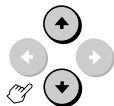


- 3 Press \uparrow or \downarrow to select AUDIO ADJUST, and press ENTER.

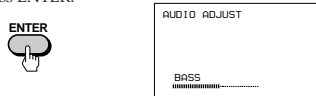


- 4 Select the item you want to adjust.

For example:
 (1) To adjust the bass, press \uparrow or \downarrow to move the cursor (▶) to BASS.

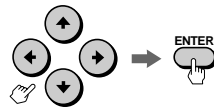


(2) Press ENTER.



- 5 Adjust the selected item.

Press \uparrow , \downarrow , \leftarrow or \rightarrow to adjust the item, and press ENTER.



Item	Press \uparrow or \downarrow to	Press \leftarrow or \rightarrow to
TREBLE	Decrease the treble response.	Increase the treble response.
BASS	Decrease the bass response.	Increase the bass response.
BALANCE	Emphasize the left speaker's volume.	Emphasize the right speaker's volume.

- 6 To adjust other items, repeat steps 4 and 5.
- 7 Press MENU to return to the original screen.

To reset to the factory preset setting

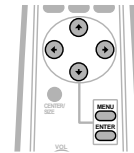
Move the cursor (▶) to RESET at the bottom of the AUDIO ADJUST menu, and press ENTER.

Notes

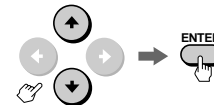
- You can adjust the items in AV MEMORY for each input from VIDEO 1, 2 and 3, and RGB 1 IN and RGB 2 IN.
- You can operate the menu using the buttons on the monitor. VOLUME + functions the same as \uparrow and \downarrow , and VOLUME - as \leftarrow and \rightarrow .

Selecting the audio effect (EFFECT)

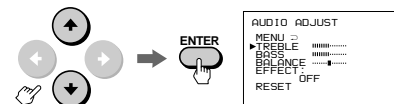
Audio effect mode allows you to enjoy dynamic sound with surround-like effect.



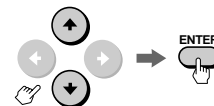
- 1 Press MENU.
- 2 Press \uparrow or \downarrow to select VIDEO/AUDIO, and press ENTER.



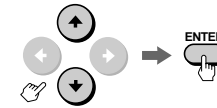
- 3 Press \uparrow or \downarrow to select AUDIO ADJUST, and press ENTER.



- 4 Press \uparrow or \downarrow to select EFFECT, and press ENTER.



- 5 Press \uparrow or \downarrow to select the desired item, and press ENTER.



Choose	To
HALL SURROUND 1	Receive dynamic three-dimensional sound.
HALL SURROUND 2	Watch a movie.
SIMULATED STEREO	Receive monaural sound with surround-like effect.
OFF	Cancel audio effect.

- 6 Press MENU to return to the original screen.

To reset to the factory preset setting

Move the cursor (▶) to RESET at the bottom of the AUDIO ADJUST menu, and press ENTER.

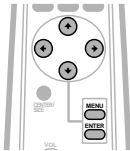
Notes

- You can adjust the items in AV MEMORY for each input from VIDEO 1, 2 and 3, and RGB 1 IN and RGB 2 IN.
- You can operate the menu using the buttons on the monitor. VOLUME + functions the same as \uparrow and \downarrow , and VOLUME - as \leftarrow and \rightarrow .

EN

Turning the power off automatically (AUTO SHUT OFF)

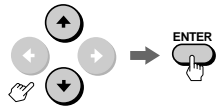
You can set the monitor to turn off when the time you specify has passed after the input of the sync signal from the computer shut off.



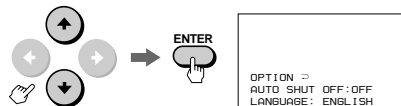
1 Press MENU.



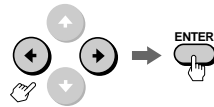
2 Press ↑ or → to select OPTION, and press ENTER.



3 Press ↑ or → to select AUTO SHUT OFF, and press ENTER.



4 Press ↑ or → to select 60 (minutes), 90 (minutes) or 120 (minutes), and press ENTER.



5 Press MENU to return to the original screen.

After the time you specify in step 4 has passed after cancellation of the input of the sync signal, the power turns off and the STANDBY indicator and the ⏻ indicator will light up.

The power turns on if you press POWER on the remote control or a signal is input from the computer again.

Note

- You cannot use this function for the input from VIDEO IN.

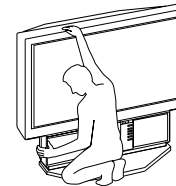
Additional Information

Cleaning the air filter

The air filter should be cleaned once a month. When it becomes difficult to remove the dust, replace the filter with a new one. To clean the filter, follow the steps below.

1 Turn off the power switch on the monitor and unplug the power cord.

2 Remove the front panel from the monitor.

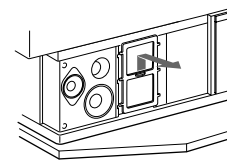


Hold the monitor tightly.

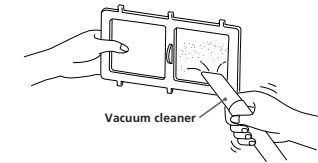


Pull the panel towards you, holding its left end. Be careful not to damage your nails.

3 Pull the air filter upwards to remove.

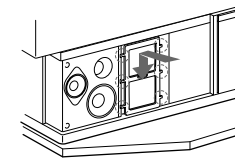


4 Remove the dust from the filter with a vacuum cleaner.



5 Attach a new filter to the monitor.

Fit the six projections securely.



6 Mount the front panel.

Be careful not to injure the speakers.

Notes

- Clean the air filter periodically. Otherwise, the temperature inside the monitor may rise abnormally.
- Do not use a torn filter. Fit the six projections on the filter to the monitor securely. Dust inside the monitor may cause distorted picture and also fire.
- Be sure to attach the air filter securely. Otherwise, the monitor will not turn on.
- Contact your Sony dealer for a new filter.

Replacing a lamp

If the screen becomes dark, the color looks unusual, or the LAMP indicator on the front of the monitor flashes, it is time to replace the lamp with a new one.

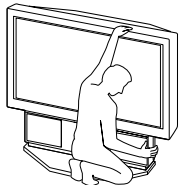
Before replacement

- Be sure to use the Sony XL-100U lamp unit (not supplied) for replacement. Use of other lamps causes damage to the monitor.
- Do not remove the lamp for any purpose other than replacement.
- Before replacement, be sure to turn off the monitor and unplug the power cord.
- When replacing the lamp, let it cool down completely, as the surface of the lamp remains hot for at least 30 minutes after the power has been switched off.
- Do not leave the removed lamp near the inflammable materials.
- Do not pour water onto the removed lamp, nor put any object inside the lamp.
- Do not put inflammable materials and metal objects inside the lamp receptacle on the monitor, after removing the lamp. Do not touch the receptacle.
- Fit the new lamp securely, otherwise the screen may become dark, or it may cause fire.

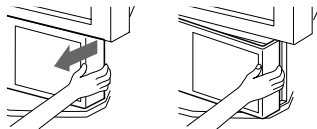
1 Turn off the power switch on the monitor and unplug the power cord.

Wait at least 30 minutes to allow the lamp to cool down before replacing it.

2 Remove the front panel.



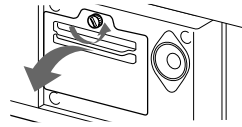
Hold the monitor tightly.



Pull the panel towards you, holding its right end. Be careful not to damage your nails.

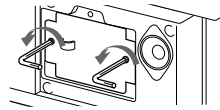
24-EN Additional Information

3 Untighten the screw with a coin or similar object to remove the lamp cover.

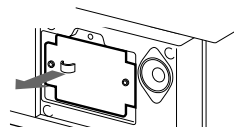


4 Loosen the two screws that secure the lamp, then pull out the lamp.

The lamp is very hot immediately after use. Never touch the front glass of the lamp or the surrounding parts.



Loosen the two screws with the hexagon head wrench (supplied with the lamp).



Pull out straight towards you by holding the handle.

Replace the removed lamp into the empty box of the replacement lamp.

5 Mount the new lamp and tighten the two screws securely.

6 Mount the lamp cover and tighten the screw.

7 Mount the front panel.

Be careful not to damage the speakers of the monitor.

Notes

- Do not touch the front glass of a new lamp or the glass of the lamp receptacle. This may reduce picture quality or lamp life.
- Be sure to attach the lamp securely. Otherwise, the monitor will not turn on.
- A loud sound may be heard when the lamp burns. This is not dangerous.
- Consult your Sony dealer for the XL-100U lamp unit.

Troubleshooting

If the problem persists after trying the methods below, contact your nearest Sony dealer.

No picture

- Check that the power cord is connected firmly.
- Is the power of the monitor turned on?
- Is the air filter mounted securely? (page 23)
- Is the lamp cover attached securely? (page 24)
- Check that the power of the connected equipment is turned on.
- Try to press any key on the connected computer.
- Check that the RGB signal cable or audio/video cords are properly connected. (The supplied HD15-HD15 adaptor may be needed for some models of IBM PC/ AT or compatible computers. For a Macintosh or compatible computer use the supplied Macintosh adaptor.)
- Make sure that no pins on the HD15 connectors are bent.
- Check that the video card is seated completely in the proper bus slot.
- Check that the frequency range of the input signal is within that specified for the monitor. (If not, "OUT OF SCAN RANGE" appears on the screen.)
- The monitor does not accept an interlace mode signal.
- For customers using Windows 95 — If "KL-W7000" or "KL-W9000" is not displayed as "Monitor type" when selecting "SONY" as "Manufacturer" from the device select screen in Windows 95, select "Standard monitor" as "Manufacturer" and "Plug and Play monitor (VESA DDC)" as "Monitor type," or select "SONY Corporation" as "Manufacturer" and "KL-W7000" or "KL-W9000" as "Monitor type."

Picture and sound output are delayed

- When the green (power) indicator on the front is flashing, the monitor is warming up.
- It will take 30 minutes for the monitor to display the picture again after the monitor is switched off.

Screen lit and cannot see the picture

- Be sure that you are watching the monitor within the optimum viewing area. (page 5)

Good picture, no sound

- Press VOL+ (VOLUME+).
- Press MUTING so that "MUTING" disappears from the screen. (page 13)

Fuzzy picture

- Set the NR option in the VIDEO ADJUST menu to LOW or HIGH.
- If you use the monitor in a cold place, moisture condensation may have occurred. Leave the monitor as it is to let moisture evaporate.

Dark picture

- Replace the lamp for the light source with a new one. (page 24)

No color, abnormal color

- Adjust the picture in the VIDEO ADJUST menu. (page 18)

Double images

- Use of an extension cable, excessive cable length or loose connection can produce this symptom.

EN

Computer picture not centered or sized properly

- Adjust the centering and size so that the picture fits the screen. (page 16)

Distorted picture

- Check your video card manual for proper monitor setting.
- Check that the frequency and the graphic mode at which you are trying to input is within the acceptable range. (page 9) Even within the proper range some video cards may have a sync pulse that is too narrow for the monitor to sync correctly.

No picture, no sound from the connected equipment

- Are all the connecting cables connected?
- Try to press the RGB or VIDEO button on the remote control. (page 12)

The remote control does not function.

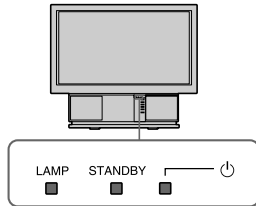
- Are the batteries worn out?

The humming noise of fans is heard even after the monitor has been turned off.

- The fans installed inside the monitor are working to prevent internal heat build-up. They will stop about 2 minutes later.

Additional Information 25-EN

What flashing of the indicators on the front of the monitor means



The $\text{\textcircled{P}}$ (power) (green), STANDBY (orange) and/or LAMP (red) indicators indicate the conditions of the monitor and warnings by lighting or flashing, as follows.

The $\text{\textcircled{P}}$ indicator lights.

→ The power of the monitor is on.

The STANDBY indicator lights.

→ The monitor is in standby mode. The monitor is turned on by pressing POWER on the remote control.

The $\text{\textcircled{P}}$ and STANDBY indicators light.

→ The Auto Shut Off function works. The monitor has been turned off when the time you specify has passed after the input of the computer is cut off.

The $\text{\textcircled{P}}$ indicator flashes.

→ The lamp for the light source is ready to turn on. Within 30 minutes the picture is displayed on the screen.

The LAMP and STANDBY indicators flash.

→ The air filter or the lamp cover is not attached securely. When you correct, the STANDBY lamp lights up and the monitor enters the standby mode. (pages 23, 24)

The LAMP indicator flashes.

→ The lamp for the light source burns out. Replace it with new one. (page 24)

The LAMP, STANDBY and $\text{\textcircled{P}}$ indicators flash.

→ The temperature inside the monitor has risen abnormally, or the fans have stopped. Check that the air filter is not clogged and the ventilation holes are not blocked. After a while turn on the monitor. (page 23)

If the monitor is not recovered after correcting the problems, contact with qualified Sony personnel.

Timing chart for the Wide-VGA, Wide-SVGA and Wide-XGA signals

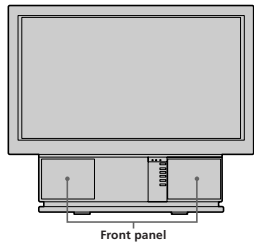
	Wide-VGA	Wide-SVGA	Wide-XGA
Pixel Clock (MHz)	34.238	53.94	87.44
1dot (nsec)	29.207	18.539	11.436
1H (μ sec)	31.777	26.4	20.676
H-Active (μ sec)	25.235	19.874	15.736
H-Blank (μ sec)	6.542	6.526	4.94
H-Front porch (μ sec)	0.701	0.89	0.366
(dots)	24	48	32
H-Sync (μ sec)	3.738	3.263	2.104
(dots)	128	176	184
H-Back porch (μ sec)	2.103	2.373	2.47
(dots)	72	128	216
H-Sync Polarity	-	-	-
V-TTL Time (Lines)	525	628	806
V-Addr Time (Lines)	480	600	768
V-Blank Start (Lines)	488	600	768
V-Blank Time (Lines)	29	28	38
V-Sync Start (Lines)	490	601	771
V Bottom Border (Lines)	8	0	0
V Front Porch (Lines)	2	1	3
Ver Sync Time (Lines)	2	4	6
V Back Porch (Lines)	25	23	29
V Top Border (Lines)	8	0	0
V-Sync Polarity	+	+	+

Identifying the parts

This section briefly describes the buttons and controls on the monitor and on the remote control. For more information, refer to the pages next to each description.

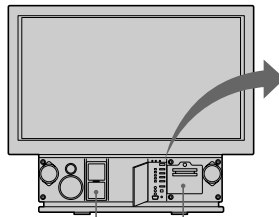
Projection monitor — Front

With the front panel attached

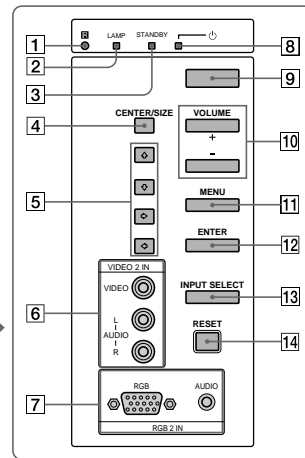


Front panel

With the front panel removed

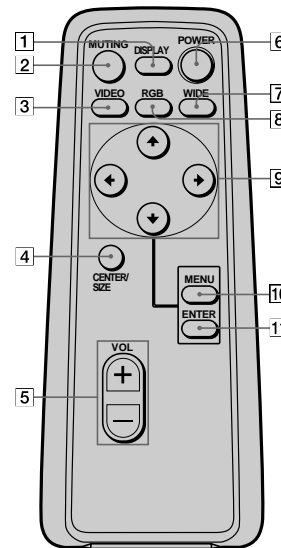


Air filter part
(page 23) Lamp part
(page 24)



- | | |
|------------------------------------|--------------------------------------|
| 1 Remote sensor | 8 ⏻ (power) indicator (pages 12, 26) |
| 2 LAMP indicator (pages 24, 26) | 9 Power switch (page 12) |
| 3 STANDBY indicator (pages 12, 26) | 10 VOLUME +/- buttons (page 12) |
| 4 CENTER/SIZE button (page 16) | 11 MENU button (page 11) |
| 5 ⬆/⬇/⬅/➡ buttons (page 16) | 12 ENTER button (page 11) |
| 6 VIDEO 2 IN jacks (page 10) | 13 INPUT SELECT button (page 12) |
| 7 RGB 2 IN connector (pages 7, 8) | 14 RESET button (pages 16, 17) |

Remote control

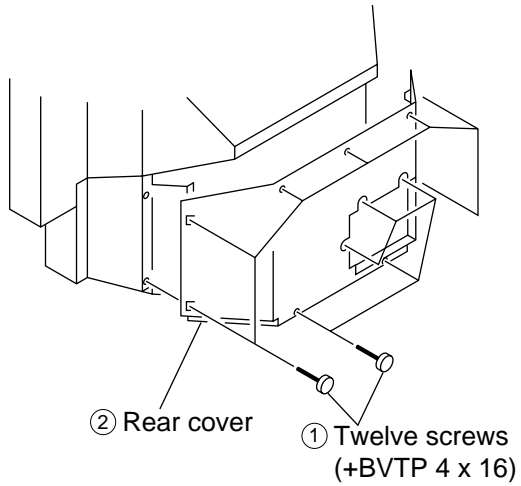


- | |
|--------------------------------------|
| 1 DISPLAY button (page 13) |
| 2 MUTING button (page 13) |
| 3 VIDEO button (page 12) |
| 4 CENTER/SIZE button (page 16) |
| 5 VOL (volume) +/- buttons (page 12) |
| 6 POWER button (page 12) |
| 7 WIDE button (pages 13, 15) |
| 8 RGB button (page 12) |
| 9 ⬆/⬇/⬅/➡ buttons (pages 11, 16) |
| 10 MENU button (page 11) |
| 11 ENTER button (page 11) |

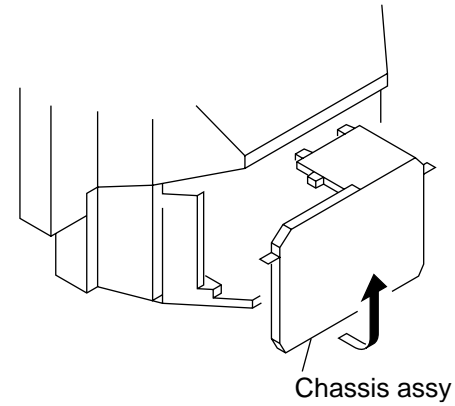
EN

SECTION 2 DISASSEMBLY

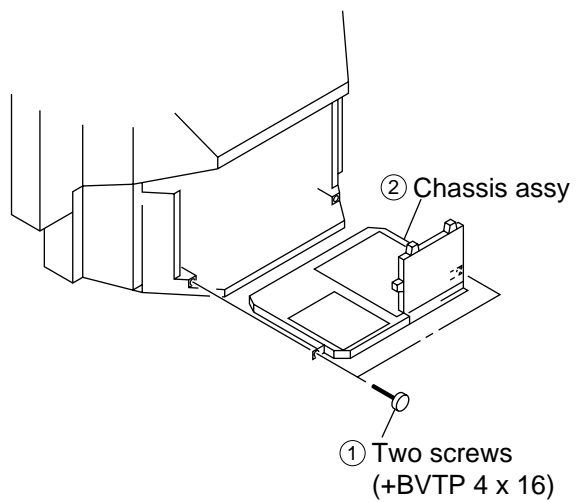
2-1. REAR COVER REMOVAL



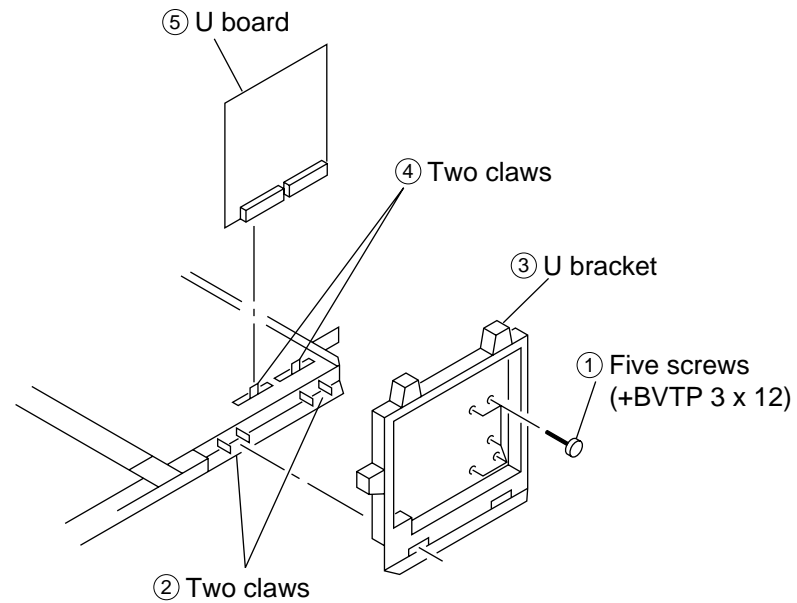
2-3. SERVICE POSITION



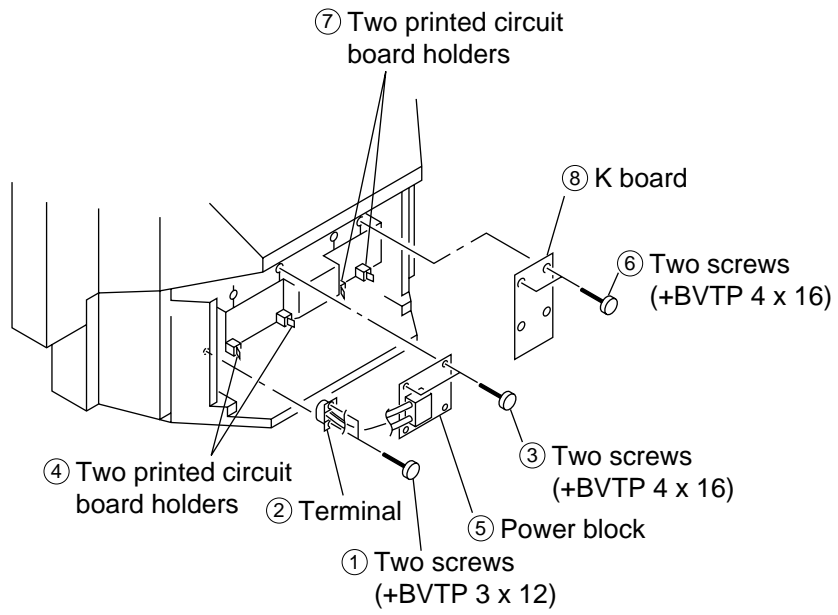
2-2. CHASSIS ASSY REMOVAL



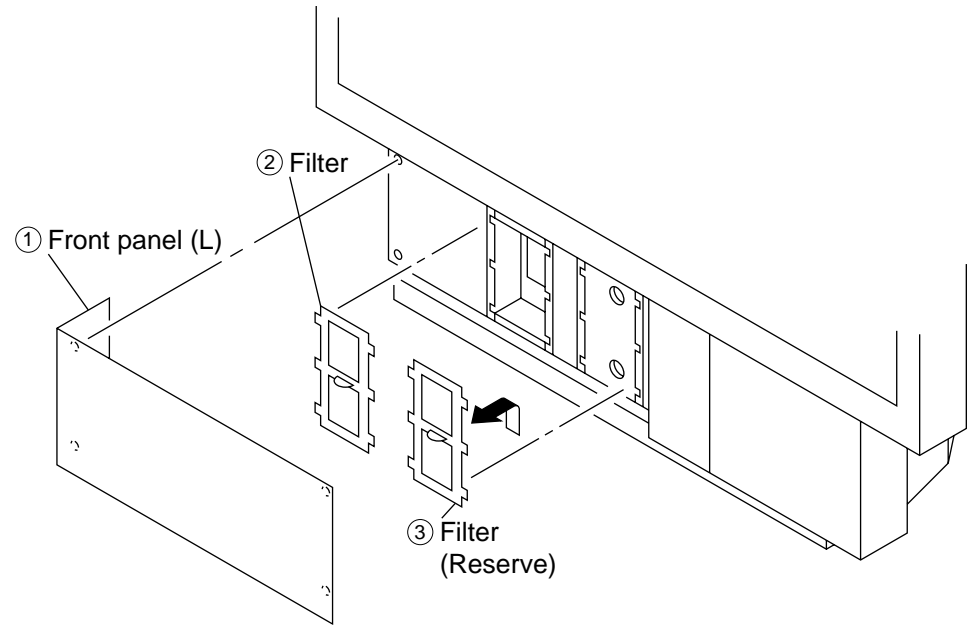
2-4. U BOARD REMOVAL



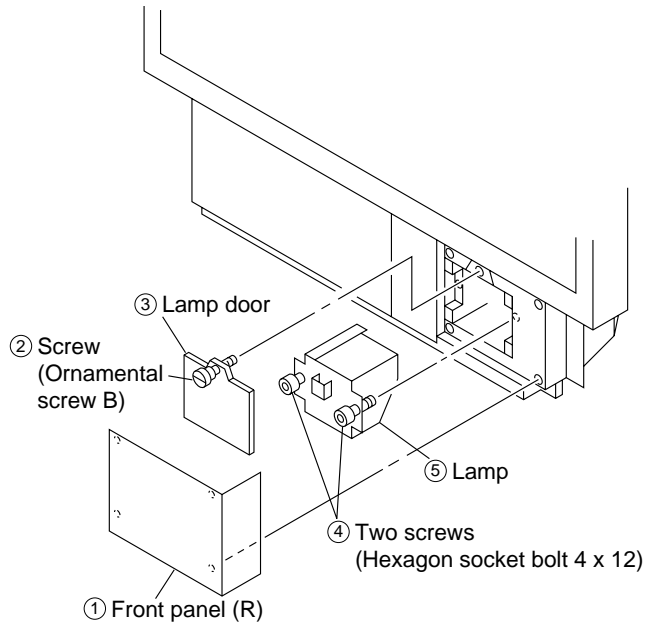
2-5. POWER BLOCK AND K BOARD REMOVAL



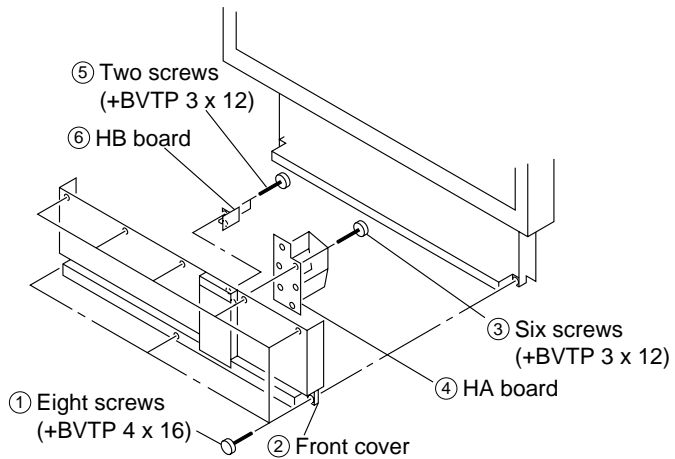
2-6. FILTER REMOVAL



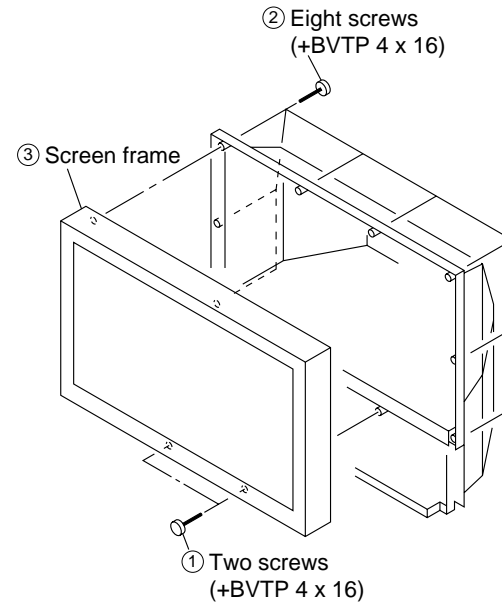
2-7. LAMP REMOVAL



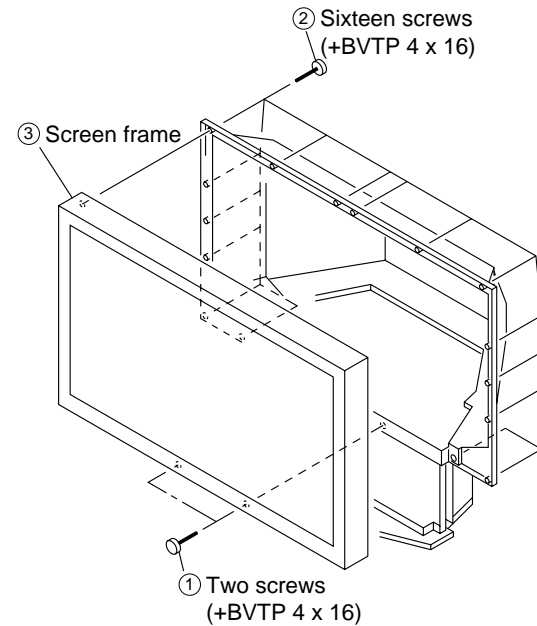
2-8. HA AND HB BOARDS REMOVAL



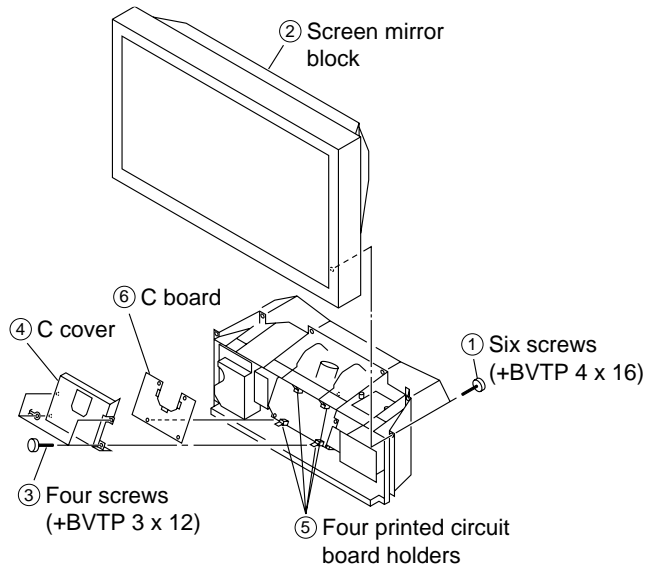
2-9-1. SCREEN FRAME REMOVAL [W7000]



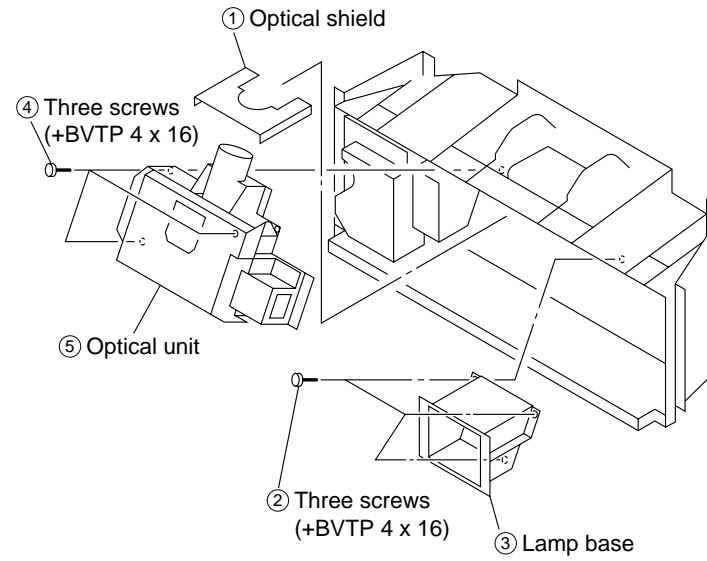
2-9-2. SCREEN FRAME REMOVAL [W9000]



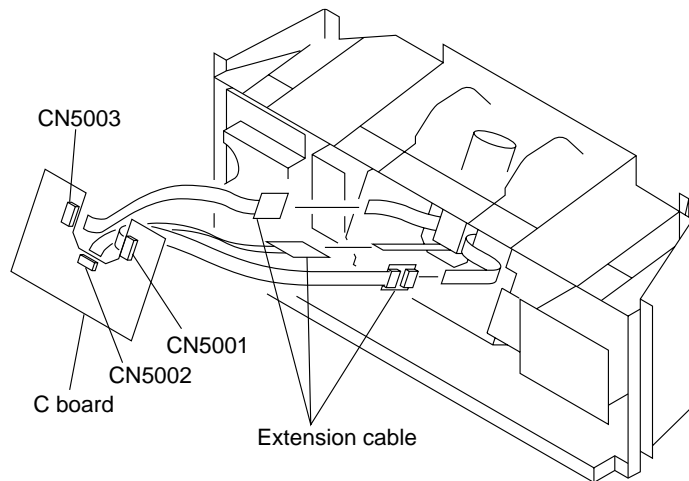
2-10-1. C BOARD REMOVAL



2-11. OPTICAL UNIT REMOVAL



2-10-2. EXTENSION CABLE (C BOARD)

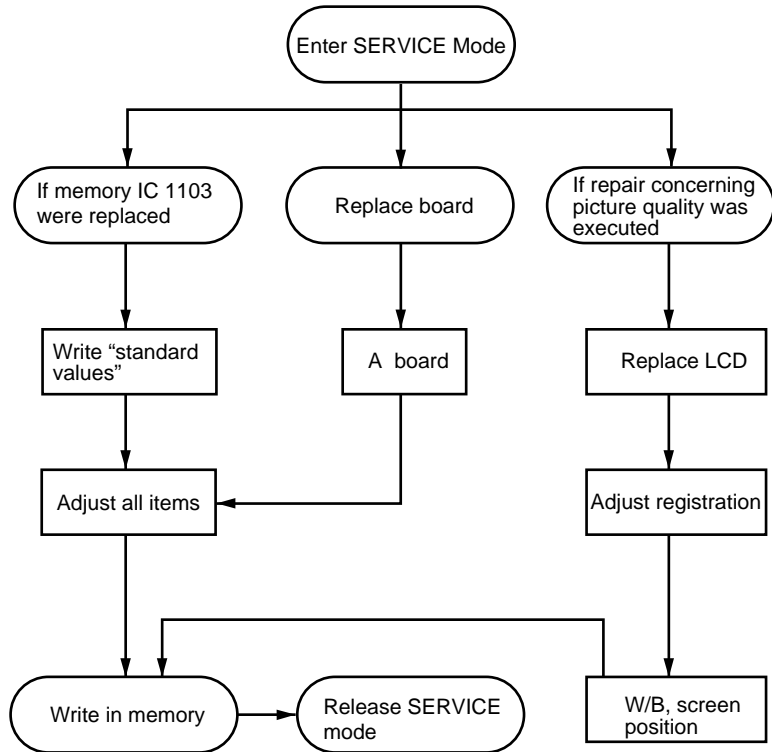


SECTION 3 CIRCUIT ADJUSTMENTS

ELECTRICAL ADJUSTMENT IN SERVICE MODE

The SERVICE mode cannot be entered with the remote commander RM-Y980 attached to this set. Use the commander of other TV set.

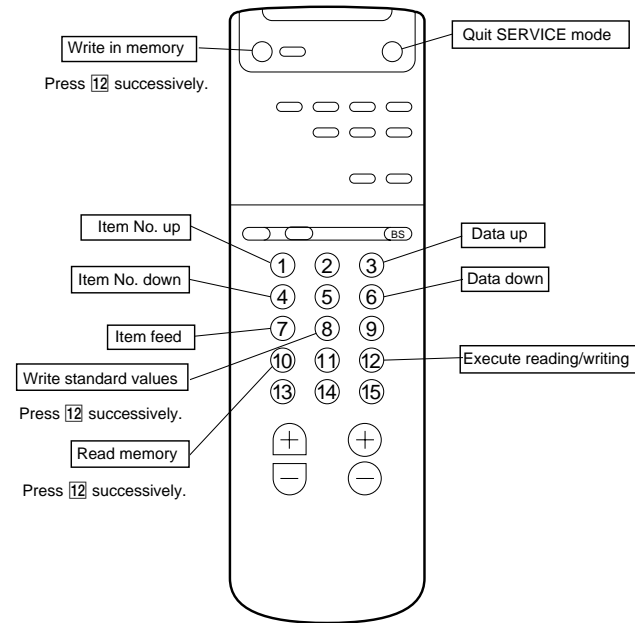
Adjustment in SERVICE mode



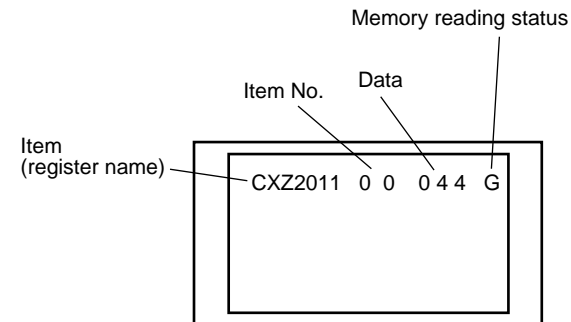
- Note:
- Write data in the memory each time when one item was adjusted.
 - Adjusted data are not saved if the power is turned off before they are written in the memory.

Function of commander in SERVICE mode

* Example of SERVICE mode using the commander of other TV set



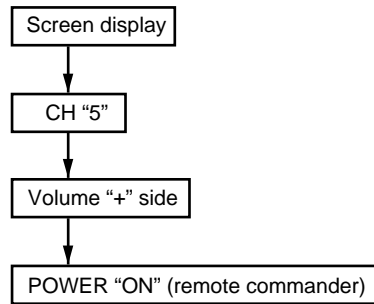
Screen in SERVICE mode



G: Memory reading normal
NG: Memory reading failed

BASIC ADJUSTMENT IN SERVICE MODE

1. To enter SERVICE mode
 - 1) Turn the POWER switch on the TV set "ON", then make it in standby status with the remote commander.
 - 2) Operate the remote commander as follows:



2. To read the memory
 - 1) Enter SERVICE mode.
 - 2) Press [10] → [12] buttons on the remote commander, and the adjusted values and set values of all items written in the memory are read out.

Note: If the memory IC was replaced, do not read the memory before writing standard values.

3. Adjustment of screen
 - 1) Select the item No. to be adjusted using [1] and [4] buttons on the remote commander.
 - 2) Adjust with [3] and [6] buttons so as to satisfy the picture quality and the set values.

4. To write data in the memory
 - After adjustment, press "MUTING" [12] buttons to write data in the memory. Press [12] button while green "WRITE" is displayed on the screen (within about 3 seconds).

Color of WRITE characters on screen

When [MUTING] button ON Green

When [12] button ON Red

5. To release SERVICE mode
 - Turn off the POWER switch on TV set and again turn it on. As a result, the SERVICE mode display is cleared and normal TV mode is resumed.
 - Or, turn off the POWER switch from the remote commander and again turn on the POWER switch on the remote commander in the standby status. As a result, the SERVICE mode display is cleared and normal TV mode is resumed.

6. To write +standard values+
 - 1) Enter SERVICE mode.
 - 2) Press 8 button, and green +STANDARD WRITE+ is displayed at the upper right of screen. Successively, press 12 button while this characters are displayed (within about 3 seconds). Green characters change to red +STANDARD WRITE+, then the screen becomes blank, and after about 5 seconds, the RGB 1 is selected and the operation stops. At this time, green +G+ is displayed. When +standard values+ writing is executed, the standard data in the microprocessor on the selected channel are written in the memory. Thus, the initialization is made.

Note: Writing of +standard values+ must be executed initially, only if the memory IC 2008 and 2009 were replaced.

SERVICE LIST

CXA2011Q

Item Display	Register Name	Range	Standard Values		Typical Standard Values
			VIDEO	RGB	
0 DLVL	DRIVE LEVEL	0-63	44		44 2 kinds, RGB 3ch gain control
1 SW2	SW2	0,1	0		0 1 kind
2 SW1	SW1	0,1	0		0 1 kind
3 SW0	SW0	0,1	0		0 1 kind
4 SBOF	SUB BRI OFFSET	0-63	23	43	2 kinds. Offset of VIDEO/RGB SUB BRIGHT 0=-31, . . , 63=+31
5 RDOF	R DRIVE OFFSET	0-63	31	31	2 kinds. VIDEO/RGB R DRIVE
6 GDOF	G DRIVE OFFSET	0-63	31	31	2 kinds. VIDEO/RGB G DRIVE
7 BDOF	B DRIVE OFFSET	0-63	31	31	2 kinds. VIDEO/RGB B DRIVE
8 RDMD	R DRIVE OFFSET (color temp. "middle")	0-63	32		32 1 kind. Offset of R color temp. "middle" (center value 31)
9 GDMD	G DRIVE OFFSET (color temp. "middle")	0-63	31		31 1 kind. Offset of G color temp. "middle" (center value 31)
10 BDMD	B DRIVE OFFSET (color temp. "middle")	0-63	28		28 1 kind. Offset of B color temp. "middle" (center value 31)
11 RDLO	R DRIVE OFFSET (color temp. "low")	0-63	34		34 1 kind. Offset of R color temp. "low" (center value 31)
12 GDLD	G DRIVE OFFSET (color temp. "low")	0-63	31		31 1 kind. Offset of G color temp. "low" (center value 31)
13 BDLO	B DRIVE OFFSET (color temp. "low")	0-63	24		24 1 kind. Offset of B color temp. "low" (center value 31)

WB (CXA1315)

Item Display	Register Name	Range	Standard Values		Typical Standard Values
0 RCOI	Red Cut Off	0-255	124 (VIDEO)	124 (RGB)	2 kinds : Red white balance (VIDEO, RGB)
1 RCOI	Green Cut Off	0-255	124 (VIDEO)	124 (RGB)	2 kinds : Green white balance (GCO center)
2 BCOI	Blue Cut Off	0-255	124 (VIDEO)	124 (RGB)	2 kinds : Blue white balance
3 RCOM	Red Cut Off OFFSET (color temp. "middle")	0-255	132		Red W/B of color temp. "middle" (center value 31)
4 GCOM	Green Cut Off OFFSET (color temp. "middle")	0-255	127		Green W/B of color temp. "middle" (center value 31)
5 BCOM	Blue Cut Off OFFSET (color temp. "middle")	0-255	123		Blue W/B of color temp. "middle" (center value 31)
6 RCOL	Red Cut Off OFFSET (color temp. "low")	0-255	138		Red W/B of color temp. "low" (center value 31)
7 RCOL	Green Cut Off OFFSET (color temp. "low")	0-255	127		Green W/B of color temp. "low" (center value 31)
8 BCOL	Blue Cut Off OFFSET (color temp. "low")	0-255	118		Blue W/B of color temp. "low" (center value 31)

BIAS3 (CXA1315)

Item Display	Register Name	Range	Standard Values		Typical Standard Values
0 RBS	RL_Bias	0-255	0 (VIDEO)	0 (RGB)	RL Bias (2 systems of VIDEO, RGB)
1 BLBS	RL_Bias	0-255	0 (VIDEO)	0 (RGB)	BL Bias (2 systems of VIDEO, RGB)
2 RHBS	RL_Bias	0-255	255 (VIDEO)	255 (RGB)	RH Bias (2 systems of VIDEO, RGB)
3 BHBS	BH_Bias	0-255	255 (VIDEO)	255 (RGB)	BH Bias (2 systems of VIDEO, RGB)
4 RLBM	RL_Bias off set MID	0-255	131		RL Bias offset value of color temp. "middle" (center value 31)
5 BLBM	BL_Bias off set MID	0-255	121		BL Bias offset value of color temp. "middle" (center value 31)
6 RHBM	RH_Bias off set MID	0-255	127		RH Bias offset value of color temp. "middle" (center value 31)
7 BHBM	BH_Bias off set MID	0-255	127		BH Bias offset value of color temp. "middle" (center value 31)
8 RLBM	RL_Bias off set LOW	0-255	136		RL Bias offset value of color temp. "low" (center value 31)
9 BLBL	BL_Bias off set LOW	0-255	115		BL Bias offset value of color temp. "low" (center value 31)
10 RHBM	RH_Bias off set LOW	0-255	127		RH Bias offset value of color temp. "low" (center value 31)
11 BHBL	BH_Bias off set LOW	0-255	127		BH Bias offset value of color temp. "low" (center value 31)
12 SLSH	Sample Phase	0-7	3 (VIDEO 4:3), 4 (VIDEO 16:9)	3 (RGB 16:9), 4 (RGB 16:9)	4 kinds of SLSH (VIDEO, RGB) × (NORMAL, FULL)

A_OUT (NVM A2 DATA)

Item Display	Register Name	Range	Standard Values	Typical Standard Values
0 RDON	NTSC RDOF	0-63	31	NVM A2 Data of address 00
1 GDON	NTSC GDOF	0-63	31	Data of address 01
2 BDON	NTSC BDOF	0-63	31	Data of address 02
3 RCON	NTSC RCOI	0-255	124	Data of address 03
4 GCON	NTSC GCOI	0-255	124	Data of address 04
5 BCON	NTSC BCOI	0-255	31	Data of address 05
6 RDOH	HD RDOF	0-63	31	Data of address 06
7 GDON	HD GDOF	0-63	31	Data of address 07
8 BDON	HD BDOF	0-63	31	Data of address 08
9 RCON	HD RCOI	0-255	124	Data of address 0B
10 GCOH	HD GCOI	0-255	124	Data of address 0A
11 BCOH	HD BCOI	0-255	124	Data of address 09

CXA1839

Item Display	Register Name	Range	Standard Values		Typical Standard Values
			VIDEO	RGB	
0 SHUE	SUB-HUE	0-15	8	8	2 kinds (VIDEO, RGB)
1 SBRT	SUB-BRT	0-15	8	8	2 kinds (VIDEO, RGB)
2 R-Y/R	R-Y/R	0-15	0	0	2 kinds (VIDEO, RGB)
3 R-Y/B	R-Y/B	0-15	8	15	2 kinds (VIDEO, RGB)
4 G-Y/R	G-Y/R	0-15	15	15	2 kinds (VIDEO, RGB)
5 G-Y/B	G-Y/B	0-15	8	0	2 kinds (VIDEO, RGB)
6 SPC2	SUB-CON2	0-15	8	8	2 kinds (VIDEO, RGB)
7 SCL2	SUB-COL2	0-15	8	8	2 kinds (VIDEO, RGB)
8 RGB2	RGB2_LEVEL	0-15	11		1 kind
9 SHSP	SUB-SHP	0-3	3/3	1	4 kinds (VIDEO, RGB) × (NORMAL, WIDE)
10 SHPF	SHP-F0	0-3	2/2	1	4 kinds (VIDEO, RGB) × (NORMAL, WIDE)
11 PREL	PRE_OVER	0-3	3/3	3	4 kinds (VIDEO, RGB) × (NORMAL, WIDE)
12 Y-DC	DC-TRAN	0-15	0	0	2 kinds, transmission rate of DC. (VIDEO, RGB)
13 DPIX	DYNAMIC-PIC	0-3	0	0	2 kinds, Auto pedestal. (VIDEO, RGB)
14 CECL	CEC_LEVEL	0-3	3	1	2 kinds, Chroma edge clear. (VIDEO, RGB)
15 RHUE	RGB HUE	0-63	-	31	1 kind, Hue adjustment at RGB input.
16 RCOL	RGB COLOR	0-63	-	31	1 kind, Color adjustment at RGB input.
17 RSHP	RGB SHAPNESS	0-63	-	25	1 kind, Sharpness adjustment at RGB input.
18 SHPP	SHARP PRESEN.	0-63	35	25	1 kind, AI mode, PRESENTATION sharpness value
19 SHPS	SHARP STANDARD	0-63	31	25	1 kind, AI mode, STANDARD sharpness value
20 SHPM	SHARP MOVIE	0-63	27	31	1 kind, AI mode, MOVIE sharpness value

CXD2052 (Digital Chroma Decoder)

Item Display	Register Name	Range	Standard Values		Typical Standard Values
			VIDEO	RGB	
0 ACR	ACR	0-255	53		35h
1 AKO	AKO	0-255	20		24h
2 AKF	AKF	0-255	50		32h
3 PKO	PKO	0-255	252		FCh
4 PKF	PKF	0-255	16		10h
5 OFS	OFS	0-255	128		80h
6 BPF1	BPF1	0-1	0(C)	1(S)	2 kinds of S/COMP
7 BPF2	BPF2	0-1	0(C)	0(S)	2 kinds of S/COMP
8 TRAP	TRAP	0-1	0		0
9 HPF	HFP	0-7	4(VIDEO)		2 kinds of VIDEO/RGB
10 FCP	FCOP	0-1	0		0
11 DCON	DCON	0-1	0		0
12 F2CC	F2CCH	0-1	0		0
13 EDTV	EDTV	0-1	1		1
14 KILL	KILL	0-1	0		0
15 APCO	APCOF	0-1	0		0
16 XFH	XFH	0-1	0		
17 XFH	XFH	0-1	0(C)	0(S)	2 kinds of S/COMP
18 TA	TA	0-31	16		1ch
19 TB	TB	0-63	38(C)	58(C)	2 kinds of S/COMP
20 TO	TO	0-63	42(C)	55(C)	2 kinds of S/COMP
21 TE	TB	0-63	23(C)	55(S)	2 kinds of S/COMP

3C (3-Dimensional Com μ PD6487)

Item Display	Register Name	Range	Standard Values			Typical Standard Values
			Others	PRESENTATION	MOVIE	
0 MS	MSI, MSO	0-3	0			00 00 : Normal, 01 : 2D, 10 : 3D
1 BPF5	BPF5	0-1	0			0 0 : Normal, 1 : Band-pass YC separation
2 YDLL	YDELAYL	0-7	2/2			1 Kind Output delay designation
3 HRD	HRD8-1	0-255	21			21 (2Ah) 21 (2A) : B lock only
4 DYCO	DYCOR	0-15	5/5			1 Kind DY detection coaring level
5 DYGA	DYGAIN	0-15	8/8			1 Kind DY detection gain
6 DCCO	DCCOR	0-15	5/5			1 Kind DC detection coaring level
7 DCGA	DCGAIN	0-15	6/6			1 Kind DC detection gain
8 VTR	VTR1, VTR0	0-3	0			00 00 : Normal, 01 : Standard, 10 : Non-Standard
9 VTRR	VTRR	0-31	7/7			1 Kind VTR detection level
10 LDS	LDSOFF	0-1	0			0 LD still detect selection
11 HSDR	HSDR	0-31	7/7			1 Kind Sync detection level
12 BSDR	BSDR	0-31	7			7 Sync detection level
13 WSCO	WSCOR	0-7	7/7			1 Kind Weak field detection coaring level
14 WSD1	WSDR1	0-15	15/15			1 Kind Weak field detection level 1
15 WSD2	WSDR2	0-15	15/15			1 Kind Weak field detection level 2
16 VAPG	VAPGAIN	0-7	4/4	7/7	0/0	2 Kinds V aperture gain *1
17 VAPI	VAPINV	0-31	12/12	20/20	12/12	2 Kinds V aperture inversion point *1

*1 : 6 kinds of (STANDARD/AV MEMORY, PRESENTATION, MOVIE) × (NORMAL/FULL, OTHERS)

1C (3-Dimensional Com μ PD6486)

Item Display	Register Name	Range	Standard Values			Typical Standard Values
			Others	Presen.	Movie	
0 MS	MS1, MS0	0-3	0			
1 BPF5	BPF5	0-1	0			
2 YDLL	YDELAYL	0-7	2/2			
3 HRD	HRD8-1	0-256	21			
4 DYCO	DYCOR	0-15	5/5			
5 DYGA	DYGAIN	0-15	8/8			
6 DCCO	DCCOR	0-15	5/5			
7 DCGA	DCGAIN	0-15	6/6			
8 VTR	VTR1, VTR0	0-3	0			
9 VTRR	VTRR	0-31	7/7			
10 LDS	LDSOFF	0-1	0			
11 HSDR	HSDR	0-31	7/7			
12 BSDR	BSDR	0-31	7			
13 WSCO	WSCOR	0-7	7/7			
14 WSD1	WSDR1	0-15	15/15			
15 WSD2	WSDR2	0-15	15/15			
16 VAPG	VAPGAIN	0-7	4/4	7/7	0/0	NORMAL, FULL/OTHERS
17 VAPI	VAPINV	0-31	12/12	20/20	12/12	NORMAL, FULL/OTHERS

MID2 (CXD2072Q VIDEO)

Item Display	Register Name	Range	Standard Values				Typical Standard Values
			NORMAL/FULL	ZOOM	SUBTITLE	WIDEZOOM	
0	HSIZ	HSIZEA	88				Every input signal: H size adj. (NTSC)
1	VGAAH	VGAAHS	0				Every input signal polarity + Wide screen: H size adj. (RGB)
2	HPOS	HPOSIA	36				Every input signal: H position adj. (READ)
3	VSIZ	VSIZEA	F0	38	0	0	Every input signal polarity + Wide screen: V size adj.
4	VPOS	VPOSIA	28				Every input signal: V position adj. (READ)
5	HPHS	HPHASA	44				Every input signal polarity + Wide screen: H posi adj. (WRITE)
6	VPHS	VPHASA	0A	17	17	0F	Every input signal polarity + Wide screen: V posi adj. (WRITE)
7	WONA	WONA	0				Every input signal: MOVIE/STILL switching
8	OSCA	OSCA	1				Every input signal: Masking range switching
9	DLYA	DELAYA	3				Every input signal: Color difference delay adj. (INPUT)
10	HVSW	HVSW	2				Every input signal: Output Sync signal switching
11	YSDY	YSDY	2				Every input signal: YS delay adj.
12	DLY	DELAY	4				Every input signal: Color difference delay adj. (OUTPUT)
13	HBLK	HBLK	89				Every input signal: H blanking adj.
14	VBLK	VBLK	1F				Every input signal: V blanking adj.
15	IPVA	IPVA	0				Every input signal: Vertical linear interpolation
16	OFST	OFFSET	0				Every input signal: Linear interpolation offset setting
17	VSCA	VSCA	0	1	1	1	Every input signal: A ch vertical size
18	OSVA	OSVA	1				Every input signal: A ch vertical offset
19	PLL1	PLL1	0				Every input signal: PLL 1 frequency dividing ratio setting
20	YUV	YUV	0				Every input signal: YUV signal sampling ratio
21	REF	REF	0				Every input signal: V size reference value
22	CLPD	CLPDA	28				Every input signal: A ch clamp position adj.
23	HPH0	bit 0 of HPHASA	0				Every input signal polarity + Wide screen: H posi adj. (WRITE)
24	VPH0	bit 0 of VPHASA	0				Every input signal polarity + Wide screen: V posi adj. (WRITE)
25	HCOF	H CENT OF.	-				Every input signal: H center offset
26	H0OF	bit 0 of H CENT OF.	-				Every input signal: H center offset (bit 0)
27	VCOF	V CENT OF.	-				Every input signal: V center offset
28	V0OF	bit 0 of V CENT OF.	-				Every input signal: V center offset (bit 0)
29	HSOF	H SIZE OF.	-				Every input signal: H size offset
30	VSOF	V SIZE OF.	-				Every input signal: V size offset
31	HPR3	HPOSIA REF3	-				HPOSIA value when REF=3 of user preset signal
32	HPR4	HPOSIA REF4	-				HPOSIA value when REF=4 of user preset signal
33	HPR5	HPOSIA REF5	-				HPOSIA value when REF=5 of user preset signal
34	SCOF	V SCROLL OF.	-	0A	0A	0A	Every wide screen: V scroll offset
35	S0OF	bit 0 of V SCROLL OF.	-	0	0	0	Every wide screen: V scroll offset (bit 0)
36	SCRS	V SCROLL Standard value	-	17	17	0F	Every wide screen: V scroll standard value
37	SORS	bit 0 of V SCROLL Standard value	-	0	0	0	Every wide screen: V scroll standard value (bit 0)

MID2 (CXD2072Q RGB (1))

Item Display	Register Name	Range	Standard Values					Typical Standard Values
			VGAT350	VGAG	W-VGA	VGA72	VGA75	
0	HSIZ	HSIZEA	A0					Every input signal: H size adj. (NTSC)
1	VGAAH	VGAAHS	2F	30	2E	2F	2B	Every input signal polarity + Wide screen: H size adj. (RGB)
2	HPOS	HPOSIA	2E	2E	2D	2E	2A	Every input signal: H position adj. (READ)
3	VSIZ	VSIZEA	3					Every input signal polarity + Wide screen: V size adj.
4	VPOS	VPOSIA	38	1E	1E	1E	1E	Every input signal: V position adj. (READ)
5	HPHS	HPHASA	42	42	43	4E	52	Every input signal polarity + Wide screen: H posi adj. (WRITE)
6	VPHS	VPHASA	3	8	8	6	0	Every input signal polarity + Wide screen: V posi adj. (WRITE)
7	WONA	WONA	0					Every input signal: MOVIE/STILL switching
8	OSCA	OSCA	1					Every input signal: Masking range switching
9	DLYA	DELAYA	3					Every input signal: Color difference delay adj. (INPUT)
10	HVSW	HVSW	1					Every input signal: Output Sync signal switching
11	YSDY	YSDY	1					Every input signal: YS delay adj.
12	DLY	DELAY	4					Every input signal: Color difference delay adj. (OUTPUT)
13	HBLK	HBLK	A0					Every input signal: H blanking adj.
14	VBLK	VBLK	0A	30	30	30	30	Every input signal: V blanking adj.
15	IPVA	IPVA	0					Every input signal: Vertical linear interpolation
16	OFST	OFFSET	0					Every input signal: Linear interpolation offset setting
17	VSCA	VSCA	1					Every input signal: A ch vertical size
18	OSVA	OSVA	1					Every input signal: A ch vertical offset
19	PLL1	PLL1	4	4	4	5	5	Every input signal: PLL 1 frequency dividing ratio setting
20	YUV	YUV	1					Every input signal: YUV signal sampling ratio
21	REF	REF	5					Every input signal: V size reference value
22	CLPD	CLPDA	6A					Every input signal: A ch clamp position adj.
23	HPH0	bit 0 of HPHASA	0					Every input signal polarity + Wide screen: H posi adj. (WRITE)
24	VPH0	bit 0 of VPHASA	0					Every input signal polarity + Wide screen: posi adj. (WRITE)
25	HCOF	H CENT OF.	26					Every input signal: H center offse
26	H0OF	bit 0 of H CENT OF.	0					Every input signal: H center offset (bit 0)
27	VCOF	V CENT OF.	0					Every input signal: V center offset
28	V0OF	bit 0 of V CENT OF.	0					Every input signal: V center offset (bit 0)
29	HSOF	H SIZE OF.	1F	20	20	1F	1B	Every input signal: H size offset
30	VSOF	V SIZE OF.	EB					Every input signal: V size offset
31	HPR3	HPOSIA REF3	28					HPOSIA value when REF=3 of user preset signal
32	HPR4	HPOSIA REF4	25					HPOSIA value when REF=4 of user preset signal
33	HPR5	HPOSIA REF5	28					HPOSIA value when REF=5 of user preset signal
34	SCOF	V SCROLL OF.	-					Every wide screen: V scroll offset
35	S0OF	bit 0 of V SCROLL OF.	-					Every wide screen: V scroll offset (bit 0)
36	SCRS	V SCROLL Standard value	-					Every wide screen: V scroll standard value
37	SORS	bit 0 of V SCROLL Standard value	-					Every wide screen: V scroll standard value (bit 0)

MID2 (CXD2072Q RGB (2))

Item Display	Register Name	Range	Standard Values					Typical Standard Values
			VGA85	SVGA56	SVGA60	W-SVGA	SVGA72	
0 HSIZ	HSIZEA	0-255	A0					Every input signal: H size adj. (NTSC)
1 VGAH	VGAHS	0-127	2F	26	1A	18	1F	Every input signal polarity + Wide screen: H size adj. (RGB)
2 HPOS	HPOSIA	0-255	2E	2A	27	27	28	Every input signal: H position adj. (READ)
3 VSIZ	VSIZEA	0-255	3	F0	F0	F0	F0	Every input signal polarity + Wide screen: V size adj.
4 VPOS	VPOSIA	0-255	1D	1F	1F	1F	1F	Every input signal: V position adj. (READ)
5 HPHS	HPHASA	0-255	3D	45	48	4C	3D	Every input signal polarity + Wide screen: H posi adj. (WRITE)
6 VPHS	VPHASA	0-255	4	7	8	8	9	Every input signal polarity + Wide screen: V posi adj. (WRITE)
7 WONA	WONA	0-1	0					Every input signal: MOVIE/STILL switching
8 OSCA	OSCA	0-1	1					Every input signal: Masking range switching
9 DLYA	DELAYA	0-7	3					Every input signal: Color difference delay adj. (INPUT)
10HVSW	HVSW	0-3	1					Every input signal: Output Sync signal switching
11YSDY	YSDY	0-7	1					Every input signal: YS delay adj.
12DLY	DELAY	0-7	4					Every input signal: Color difference delay adj. (OUTPUT)
13HBLK	HBLK	0-255	A0					Every input signal: H blanking adj.
14VBLK	VBLK	0-255	30					Every input signal: V blanking adj.
15IPVA	IPVA	0-1	0					Every input signal: Vertical linear interpolation
16OFST	OFFSET	0-255	0					Every input signal: Linear interpolation offset setting
17VSCA	VSCA	0-1	1	0	0	0	0	Every input signal: A ch vertical size
18OSVA	OSVA	0-1	1					Every input signal: A ch vertical offset
19PLL1	PLL1	0-7	5	4	4	4	4	Every input signal: PLL 1 frequency dividing ratio setting
20YUV	YUV	0-3	1					Every input signal: YUV signal sampling ratio
21REF	REF	0-7	5	2	2	2	2	Every input signal: V size reference value
22CLPD	CLPDA	0-255	6A					Every input signal: A ch clamp position adj.
23HPH0	bit 0 of HPHASA	0-1	1	1	0	0	0	Every input signal polarity + Wide screen: H posi adj. (WRITE)
24VPH0	bit 0 of VPHASA	0-1	0	0	1	1	1	Every input signal polarity + Wide screen: V posi adj. (WRITE)
25HCOF	H CENT OF.	0-63	26					Every input signal: H center offset
26H0OF	bit 0 of H CENT OF.	0-1	1	1	0	0	0	Every input signal: H center offset (bit 0)
27VCOF	V CENT OF.	0-63	0					Every input signal: V center offset
28V0OF	bit 0 of V CENT OF.	0-1	0	0	1	1	1	Every input signal: V center offset (bit 0)
29HSOF	H SIZE OF.	0-63	1F	16	0A	0A	0F	Every input signal: H size offset
30VSOF	V SIZE OF.	0-255	EB	E7	E7	E7	E7	Every input signal: V size offset
31HPR3	HPOSIA REF3	0-255	28					HPOSIA value when REF=3 of user preset signal
32HPR4	HPOSIA REF4	0-255	25					HPOSIA value when REF=4 of user preset signal
33HPR5	HPOSIA REF5	0-255	28					HPOSIA value when REF=5 of user preset signal
34SCOF	V SCROLL OF.	0-31	-					Every wide screen: V scroll offset
35S0OF	bit 0 of V SCROLL OF.	0-1	-					Every wide screen: V scroll offset (bit 0)
36SCRS	V SCROLL Standard value	0-63	-					Every wide screen: V scroll standard value
37S0RS	bit 0 of V SCROLL Standard value	0-1	-					Every wide screen: V scroll standard value(bit 0)

MID2 (CXD2072Q RGB (3))

Item Display	Register Name	Range	Standard Values					Typical Standard Values
			SVGA75	XGA60	W-XGA	MAC13	MAC16	
0 HSIZ	HSIZEA	0-255	A0					Every input signal: H size adj. (NTSC)
1 VGAH	VGAHS	0-127	1A	1D	1C	2F	9	Every input signal polarity + Wide screen: H size adj. (RGB)
2 HPOS	HPOSIA	0-255	28	26	26	2E	24	Every input signal: H position adj. (READ)
3 VSIZ	VSIZEA	0-255	F0	F0	F0	3	F0	Every input signal polarity + Wide screen: V size adj.
4 VPOS	VPOSIA	0-255	1F	1F	1F	1E	1F	Every input signal: V position adj. (READ)
5 HPHS	HPHASA	0-255	51	4C	4C	4A	59	Every input signal polarity + Wide screen: H posi adj. (WRITE)
6 VPHS	VPHASA	0-255	7	8	8	0B	0F	Every input signal polarity + Wide screen: V posi adj. (WRITE)
7 WONA	WONA	0-1	0					Every input signal: MOVIE/STILL switching
8 OSCA	OSCA	0-1	1					Every input signal: Masking range switching
9 DLYA	DELAYA	0-7	3					Every input signal: Color difference delay adj. (INPUT)
10HVSW	HVSW	0-3	1					Every input signal: Output Sync signal switching
11YSDY	YSDY	0-7	1					Every input signal: YS delay adj.
12DLY	DELAY	0-7	4					Every input signal: Color difference delay adj. (OUTPUT)
13HBLK	HBLK	0-255	A0					Every input signal: H blanking adj.
14VBLK	VBLK	0-255	30					Every input signal: V blanking adj.
15IPVA	IPVA	0-1	0					Every input signal: Vertical linear interpolation
16OFST	OFFSET	0-255	0					Every input signal: Linear interpolation offset setting
17VSCA	VSCA	0-1	0	0	0	1	0	Every input signal: A ch vertical size
18OSVA	OSVA	0-1	1					Every input signal: A ch vertical offset
19PLL1	PLL1	0-7	4	4	4	6	4	Every input signal: PLL 1 frequency dividing ratio setting
20YUV	YUV	0-3	1					Every input signal: YUV signal sampling ratio
21REF	REF	0-7	2	4	4	5	3	Every input signal: V size reference value
22CLPD	CLPDA	0-255	6A	6A	6A	40	6A	Every input signal: A ch clamp position adj.
23HPH0	bit 0 of HPHASA	0-1	1	0	0	0	1	Every input signal polarity + Wide screen: H posi adj. (WRITE)
24VPH0	bit 0 of VPHASA	0-1	0	1	1	1	0	Every input signal polarity + Wide screen: V posi adj. (WRITE)
25HCOF	H CENT OF.	0-63	26	26	26	26	2E	Every input signal: H center offset
26H0OF	bit 0 of H CENT OF.	0-1	1	0	0	0	1	Every input signal: H center offset (bit 0)
27VCOF	V CENT OF.	0-63	0					Every input signal: V center offset
28V0OF	bit 0 of V CENT OF.	0-1	0	1	1	1	0	Every input signal: V center offset (bit 0)
29HSOF	H SIZE OF.	0-63	0A	0D	0D	1F	0	Every input signal: H size offset
30VSOF	V SIZE OF.	0-255	E7	E7	E7	EB	E7	Every input signal: V size offset
31HPR3	HPOSIA REF3	0-255	28					HPOSIA value when REF=3 of user preset signal
32HPR4	HPOSIA REF4	0-255	25					HPOSIA value when REF=4 of user preset signal
33HPR5	HPOSIA REF5	0-255	28					HPOSIA value when REF=5 of user preset signal
34SCOF	V SCROLL OF.	0-31	-					Every wide screen: V scroll offset
35S0OF	bit 0 of V SCROLL OF.	0-1	-					Every wide screen: V scroll offset (bit 0)
36SCRS	V SCROLL Standard value	0-63	-					Every wide screen: V scroll standard value
37S0RS	bit 0 of V SCROLL Standard value	0-1	-					Every wide screen: V scroll standard value(bit 0)

MID2 (CXD2072Q RGB (4))

Item Display	Register Name	Range	Standard Values					Typical Standard Values
			VGAT85	OTHERS	REF=3	REF=4	REF=5	
0 HSIZ	HSIZEA	0-255	A0					Every input signal: H size adj. (NTSC)
1 VGAH	VGAHS	0-127	20		1E	1E	2E	Every input signal polarity + Wide screen: H size adj. (RGB)
2 HPOS	HPOSIA	0-255	26		27	26	2E	Every input signal: H position adj. (READ)
3 VSIZ	VSIZEA	0-255	3		F0	F0	3	Every input signal polarity + Wide screen: V size adj.
4 VPOS	VPOSIA	0-255	3A		1E	1E	1E	Every input signal: V position adj. (READ)
5 HPHS	HPHASA	0-255	41		48	4C	48	Every input signal polarity + Wide screen: H posi adj. (WRITE)
6 VPHS	VPHASA	0-255	6		2	8	5	Every input signal polarity + Wide screen: V posi adj. (WRITE)
7 WONA	WONA	0-1	0					Every input signal: MOVIE/STILL switching
8 OSCA	OSCA	0-1	1					Every input signal: Masking range switching
9 DLYA	DELAYA	0-7	3					Every input signal: Color difference delay adj. (INPUT)
10HVS	HVS	0-3	1					Every input signal: Output Sync signal switching
11YSDY	YSDY	0-7	1					Every input signal: YS delay adj.
12DLY	DELAY	0-7	4					Every input signal: Color difference delay adj. (OUTPUT)
13HBLK	HBLK	0-255	A0					Every input signal: H blanking adj.
14VBLK	VBLK	0-255	0C		30	30	30	Every input signal: V blanking adj.
15IPVA	IPVA	0-1	0					Every input signal: Vertical linear interpolation
16OFST	OFFSET	0-255	0					Every input signal: Linear interpolation offset setting
17VSCA	VSCA	0-1	1		0	0	1	Every input signal: A ch vertical size
18OSVA	OSVA	0-1	1					Every input signal: A ch vertical offset
19PLL1	PLL1	0-7	4					Every input signal: PLL 1 frequency dividing ratio setting
20YUV	YUV	0-3	1					Every input signal: YUV signal sampling ratio
21REF	REF	0-7	5		3	4	5	Every input signal: V size reference value
22CLPD	CLPDA	0-255	6A					Every input signal: A ch clamp position adj.
23HPH0	bit 0 of HPHASA	0-1	1		0	0	0	Every input signal polarity + Wide screen: H posi adj. (WRITE)
24HPH0	bit 0 of VPHASA	0-1	0					Every input signal polarity + Wide screen: V posi adj. (WRITE)
25HCOF	H CENT OF.	0-63	26		33	33	33	Every input signal: H center offset
26H0OF	bit 0 of H CENT OF.	0-1	1		0	0	0	Every input signal: H center offset (bit 0)
27VCOF	V CENT OF.	0-63	0					Every input signal: V center offset
28V0OF	bit 0 of V CENT OF.	0-1	0					Every input signal: V center offset (bit 0)
29HSOF	H SIZE OF.	0-63	10		18	18	18	Every input signal: H size offset
30VSOF	V SIZE OF.	0-255	EB		E7	E7	EB	Every input signal: V size offset
31HPR3	HPOSIA REF3	0-255	28					HPOSIA value when REF=3 of user preset signal
32HPR4	HPOSIA REF4	0-255	25					HPOSIA value when REF=4 of user preset signal
33HPR5	HPOSIA REF5	0-255	28					HPOSIA value when REF=5 of user preset signal
34SCOF	V SCROLL OF.	0-31	-					Every wide screen: V scroll offset
35S0OF	bit 0 of V SCROLL OF.	0-1	-					Every wide screen: V scroll offset (bit 0)
36SCRS	V SCROLL Standard value	0-63	-					Every wide screen: V scroll standard value
37S0RS	bit 0 of V SCROLL Standard value	0-1	-					Every wide screen: V scroll standard value(bit 0)

AP (TA8776N)

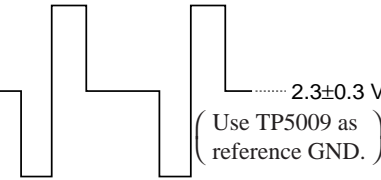
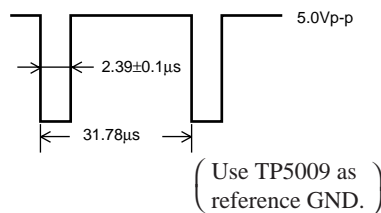
Item Display	Register Name	Range	Standard Values	Typical Standard Values
0 SBAS	SUB_BASS	0-63	10	10
1 STRE	SUB_TRABLE	0-63	2	2

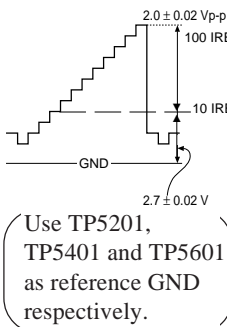
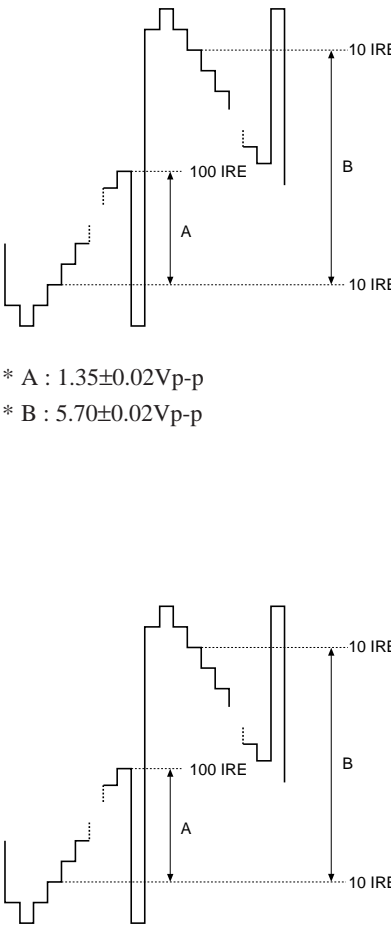
OP (Others)

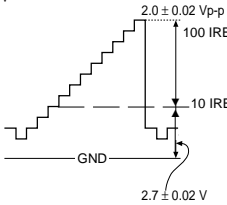
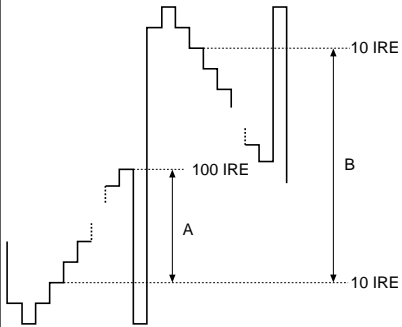
Item Display	Register Name	Range	Standard Values	Typical Standard Values
0 OSDH	Display H Position	0-63	10 (VIDEO) 7(RGB)	2 Kinds (VIDEO, RGB)
1 OSDV	Display V Position	0-63	7 (VIDEO) 7(RGB)	2 Kinds (VIDEO, RGB)
2 ASHT	Auto Shut Off	0,1	Not used	0: OFF, 1: ON
3 CPWR	CH Power ON		Not used	Not used
4 AGCH	AGC Voltage High	0-15	Not used	Not used
5 AGCL	AGC Voltage Low	0-15	Not used	Not used
6 DBSS	DBS Category Yes/No		Not used	Not used
7 EDCK	EDTV FULL Mode Detection	0,1	Not used	Not used
8 AION	AI AUTO	0,1	Not used	Not used
9 K	Picture Adjusting Variable K	0-7	1	Don't set "0" (Actual value is 1/8~7/8)
10 L	Picture Adjusting Variable L	0-7	0	0~7 is converted into 1~8 in actual use.
11 LENS	Display only	0	-	Lens focus adj.
12 PANEL	0:Green, 1:Red, 2:Blue, 3:White	0-3	-	Panel position adj.
13 WHITE	APL	0-1	-	White balance adj. (0: GAIN, 1: BIAS)
14 WIND	Display only	0	-	Window signal
15 STEP	Display only	0		00: Normal, 01: Pattern 1, 02: Pattern 2
16 EDFL	EDTV FULL Detection ON	0,1	Not used	Not used
17 BC	g_bs_search [0]	1-15	Not used	Not used
18 TIME	Lamp Counting Timer			Current time count and 0 time are displayed alternately with UP/DOWN
19 FMTL	fh of distinction difference range	0		$\pm ((3+FHTL) \times 0.2)$ kHz
20 FVTL	fv of distinction difference range	0		$\pm (1.0+FVTL)$ Hz
21 HV1	Threshold of scanning line distinction (low)	0-15		$(505+ (5 \times HV1))$ lines
22 HV2	Threshold of scanning line distinction (high)	0-15		$(555+ (5 \times HV2))$ lines
23 MINH	fh of the frequency correspond to MIN	0-31		$20+ ((3+FHTL) \times 0.2)$ kHz
24 MAXH	fh of the frequency correspond to MAX	0-31		$42+ ((3+FHTL) \times 0.2)$ kHz
25 MINV	fv of the frequency correspond to MIN	0-15		$(42+MINV)$ Hz
26 MAXV	fv of the frequency correspond to MAX	0-15		$(77+MAXV)$ Hz
27 FHAG	Equivalence frequency of fh changed detection	0-15		FHAG (20×FHAGms)
28 FVAG	Equivalence frequency of fv changed detection	0-15		FHAG (20×FVAGms)
29 NSAG	Equivalence frequency of non-signal detection (on signal)	0-15		Not used
30 FHMJ	fh difference range of before the signal distinction	0-7		$\pm ((1+FHMJ) \times 0.2)$ kHz
31 FVMJ	fv difference range of before the signal distinction	0-7		$\pm ((3+FVMJ))$

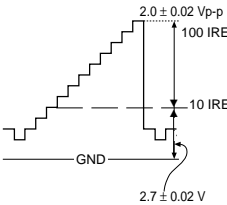
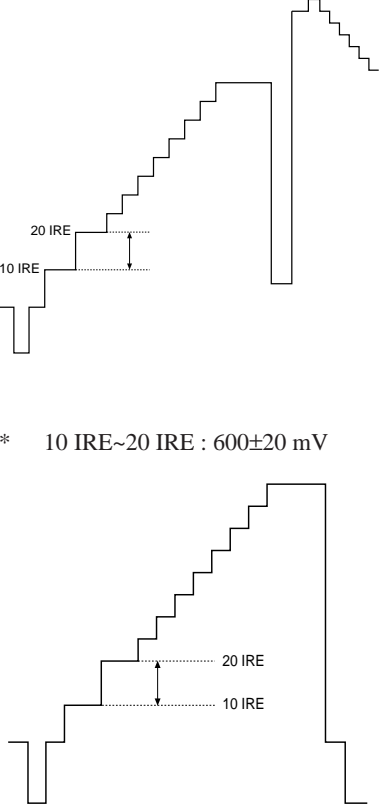
TP (Model Discrimination)

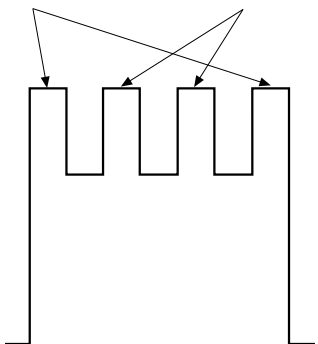
Item Display	Register Name	Range	Standard Values	Typical Standard Values
0 WIDE	HH	0,1	Not used	
1 TIME	TIMER	0,1	0,1	Fan stop time switching 0: 10 min (normal), 1: 10 sec
2 KL37	KL-W7000 model	0,1	0,1	0: KL-W9000 1: KL-W7000

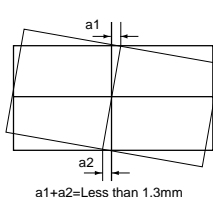
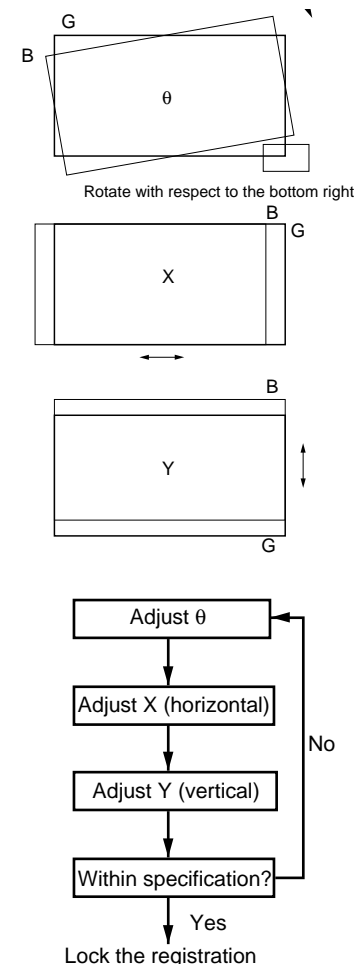
Adjustment Items and Procedure	Tools and Signals	Test Points	Adjustment Places	Illustration Waveforms and Values
<p>C Board Adjustment</p> <p>1. PLL fo adjustment</p> <p>1) WIDE mode</p> <ol style="list-style-type: none"> Select WIDE mode. Open the CN5202 pin 1, H.SYNC input. Connect *IC5004 pin 2 to the GND (*TP5009) via 100Ω resistance. Connect *frequency counter to the pin 1 of *IC5004. Adjust *L5002 so as to satisfy the *specified value. Input H.SYNC for NT double speed, and confirm the waveform at the *TP with *oscilloscope. <p>2) NORMAL mode</p> <ol style="list-style-type: none"> Select NORMAL mode. Open the CN5202 pin 1, H.SYNC input. Connect *IC5004 pin 2 to the GND (*TP5009) via 100Ω resistance. Connect *frequency counter to the pin 1 of *IC5004. Adjust *L5004 so as to satisfy the *specified value. Input H.SYNC for NT double speed Confirm the waveform at the *TP5004 with *oscilloscope. 	<p>* NTSC signal</p> <p>* Frequency counter</p> <p>* Double speed NTSC</p> <p>* Oscilloscope</p> <p>* NTSC signal</p> <p>* Frequency counter</p> <p>* Double speed NTSC</p> <p>* Oscilloscope</p>	<p>* IC5004 pin 2</p> <p>* TP5009 Jig land</p> <p>* IC5004</p> <p>* TP5007 (RPD2)</p> <p>* IC5004 pin 2</p> <p>* IC5009</p> <p>* IC5004 pin 1</p> <p>* TP5007 (RPD1)</p>	<p>* L5002</p> <p>* L5004</p>	<p>* 13.67±0.10MHz</p> <p>*  </p> <p>* 10.22±0.05MHz</p> <p>*  </p>

Adjustment Items and Procedure	Tools and Signals	Test Points	Adjustment Places	Illustration Waveforms and Values
<p>2. IC Level Adjustment</p> <ol style="list-style-type: none"> Using *I²C bus encoder, set the NT-WIDE mode. Enter NT double speed 10-step signal of bias 2.2V and amplitude 1.8Vp-p to the CN5201 pins 2~4. <ol style="list-style-type: none"> R channel <ol style="list-style-type: none"> Using *DC power, apply 0V to *TP5211. Connect *oscilloscope to *TP5203, and adjust *RV5205 so that 10 IRE ~ 100 IRE (A) becomes *1.35±0.02Vp-p. Adjust *RV5201 so that the forward 10 IRE ~ reverse 10 IRE (B) becomes *5.70±0.02Vp-p at *TP5203. Confirm that a difference in voltage amplitude of forward 10 IRE ~ 100 IRE and forward 10 IRE ~ reverse 10 IRE between waveform at *TP5202,*TP5204 and waveform at *TP5203 is within ±150mV. G channel <ol style="list-style-type: none"> Using *DC power, apply 0V to *TP5411. Connect *oscilloscope to *TP5403, and adjust *RV5407 so that 10 IRE ~ 100 IRE (A) becomes *1.35±0.02Vp-p. Adjust *RV5403 so that the forward 10 IRE ~ reverse 10 IRE (B) becomes *6.10±0.02Vp-p at *TP5403. Confirm that a difference in voltage amplitude of forward 10 IRE ~100 IRE and forward 10 IRE~ reverse 10 IRE between waveform at *TP5602, *5604 and waveform at *TP5603 is within ±150mV. 	<p>*I²C bus encoder *</p>  <p>(Use TP5201, TP5401 and TP5601 as reference GND respectively.)</p> <p>* DC power *</p> <p>* Oscilloscope</p> <p>* DC power * Oscilloscope</p>	<p>* TP5211 [RLBS] TP5207 is ref. GND * TP5203 [R-SIG2] * TP5203 [R-SIG2]</p> <p>* TP5411 [GLBS] TP5407 is ref. GND * TP5202 [R-SIG1] * TP5204 [R-SIG3] * TP5203 [R-SIG2]</p> <p>* TP5403 [G-SIG2] * TP5403 [G-SIG2]</p> <p>* TP5402 [G-SIG1] * TP5404 [G-SIG3] * TP5403 [G-SIG2]</p>	<p>* RV5205 [R. GAIN] * RV5201 [R. BIAS]</p> <p>* RV5407 [G. GAIN] * RV5403 [G. BIAS]</p>	 <p>* A : 1.35±0.02Vp-p * B : 5.70±0.02Vp-p</p> <p>* A : 1.35±0.02Vp-p * B : 6.10±0.02Vp-p</p>

Adjustment Items and Procedure	Tools and Signals	Test Points	Adjustment Places	Illustration Waveforms and Values
<p>3) B channel</p> <ol style="list-style-type: none"> Using *DC power, apply 0V to *TP5611. Connect *oscilloscope to *TP5603, and adjust *RV5605 so that 10 IRE ~ 100 IRE (A) becomes $*1.35 \pm 0.02V_{p-p}$. Adjust *RV5601 so that the forward 10 IRE ~ reverse 10 IRE (B) becomes $*5.90 \pm 0.02V_{p-p}$ at *TP5603. Confirm that a difference in voltage amplitude of forward 10 IRE ~ 100 IRE and forward 10 IRE ~ reverse 10 IRE between waveform at *TP5602, *TP5604 and waveform at *TP5603 is within $\pm 150mV$. <p>4. Vcom Adjustment</p> <ul style="list-style-type: none"> *Using *I²C bus encoder, set the NT-WIDE mode. *Enter NT double speed 10-step signal of *bias 2.2V and amplitude 1.8Vp-p to the CN5201 pins 2~4. <ol style="list-style-type: none"> Measure voltage at the *TP5203 with digital voltmeter. Adjust *RV5202 so that the voltage at *TP5205 becomes $*(Value\ in\ 1) - 0.60 \pm 0.02V$. Measure voltage at the *TP5403 with digital voltmeter. 	<p>* DC power</p> <p>* Oscilloscope</p> <p>*I²C bus encoder</p>  <p>(Use TP5201, TP5401 and TP5601 as reference GND respectively.)</p> <p>* Voltmeter</p> <p>* Voltmeter</p>	<p>* TP5611 [BLBS] * TP5607 is Ref. GND * TP5603 [B-SIG2]</p> <p>* TP5603 [B-SIG2]</p> <p>* TP 5602 [B-SIG1] * TP5604 [B-SIG3] * TP5603 [B-SIG2]</p> <p>* TP5203 [Rch OUT] * TP5205 [R-Vcom OUT] * TP5403 [Gch OUT]</p>	<p>* RV5605 [B. GAIN]</p> <p>* RV5601 [B. BIAS]</p> <p>* RV5202 [R.VCOM]</p>	 <p>* A : $1.35 \pm 0.02V_{p-p}$</p> <p>* B : $5.90 \pm 0.02V_{p-p}$</p> <p>* (Value in 1) - $0.60 \pm 0.02V$</p>

Adjustment Items and Procedure	Tools and Signals	Test Points	Adjustment Places	Illustration Waveforms and Values
<p>3. r Curve Adjustment</p> <ul style="list-style-type: none"> • C board input signal level setting <ol style="list-style-type: none"> 1. Using *I²C bus encoder, set the NT-WIDE mode. 2. Enter *NT double speed (10 step) signal of bias 2.2V and amplitude 1.8Vp-p to the CN5201 pins 1~3. <ul style="list-style-type: none"> • After adjusting the amplitude of 1.8V, adjust the bias level of 2.2V. • R channel <ol style="list-style-type: none"> 1. Connect *oscilloscope to *TP5203. 2. *DC power, apply 3.60±0.02V to *TP5211. 3. Adjust *RV5203 so that 10 IRE ~ 20 IRE becomes *600±20mV. Adjustment is no good when 0 IRE ~10 IRE voltage is below 100 mV. 4. Confirm that forward 10 IRE ~ reverse 10 IRE voltage is over 6.5V. • G channel <ol style="list-style-type: none"> 1. Connect *oscilloscope to *TP5403. 2. *DC power, apply 3.60±0.02V to *TP5411. 3. Adjust *RV so that 10 IRE ~ 20 IRE becomes *700±20mV. 4. Stop the voltage application to *TP5411. 	<p>* I²C bus encoder *</p>  <p>(Use TP5201, TP5401 and TP5601 as reference GND respectively.)</p> <p>* Oscilloscope * DC power</p> <p>*TP5411 [GLBS]</p>	<p>* TP5203 [R-SIG2] * TP5211 [RLBS] * TP5207 is Ref. GND</p> <p>* TP5403 [R-SIG2] * TP5411 [GLBS]</p> <p>*RV5405 [GL.GAIN]</p>	<p>*RV5403 [RL. GAIN]</p>	 <p>* 10 IRE~20 IRE : 600±20 mV</p> <p>* 10 IRE~20 IRE : 600±20 mV</p>

Adjustment Items and Procedure	Tools and Signals	Test Points	Adjustment Places	Illustration Waveforms and Values
<p>4. In the SERVICE mode, adjust *CXA1839 No.6 SPC2 so that 0 IRE ~ 100 IRE becomes almost 2.0Vp-p.</p> <p>5. In the same manner, adjust *CXA1839 No.1 SBRT so that the 0IRE level becomes 2.8Vdc.</p> <p>6. Save the data.</p> <p>1. Hue and Color Adjustment (NTSC)</p> <p>1. Enter 75% Full Field Color Bar from the RGB1 input.</p> <p>2. Connect *oscilloscope to *TP4003.</p> <p>3. In the SERVICE mode, adjust *CXA1839 No.7 SCL2 so that the peak level of two pulses on both sides becomes almost equal.</p> <p>4. In the same manner, adjust *CXA1839 No.0 SHUE so that the peak level of central two pulses becomes almost equal.</p> <p>5. Save the data.</p>	<p>* 75% Full Field Color Bar</p> <p>* Oscilloscope</p>	<p>* TP4003 [2B]</p>	<p>* CXA1839 No6. SPC2</p> <p>* CSA1839 No1. SBRT</p> <p>* CXA1839 No7. SCL2</p> <p>* CXA1839 No0. SHUE</p> <p>* CXA1839 No7. SCL2</p>	<p>* 0 IRE-100IRE : 2.0Vp-p</p> <p>* 0 IRE : 2.8Vdc</p> <p>* Adjust No.7 SCL2 to attain same level</p> <p>* Adjust No.0 SHUE to attain same level</p> 

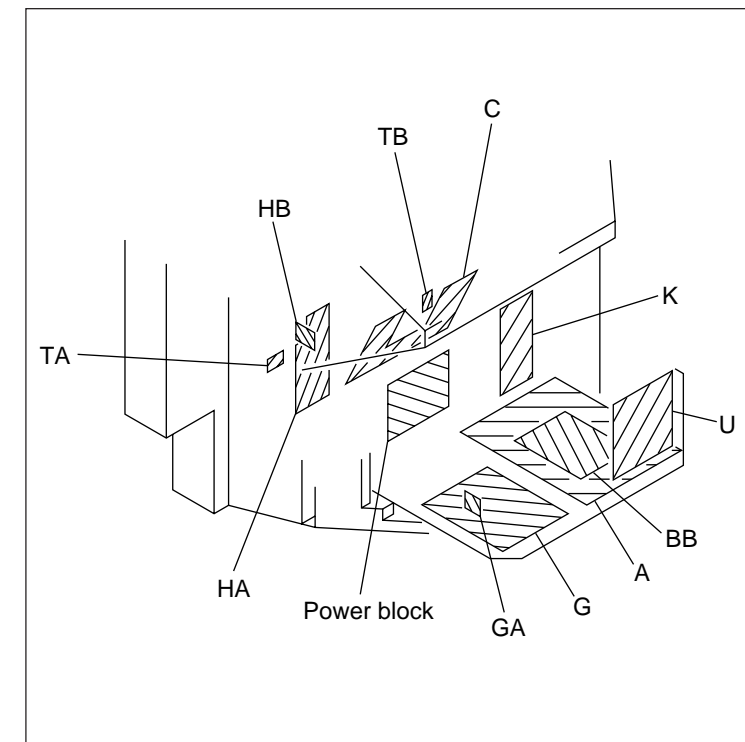
Adjustment Items and Procedure	Tools and Signals	Test Points	Adjustment Places	Illustration Waveforms and Values
<p>Registration Adjustment</p> <p>Preparation</p> <ul style="list-style-type: none"> Projected picture size 49.1 inch Projection distance 726.2 mm Aspect ratio 16:9 Picture quality adjusting menu ... Standard <p>Note: To make the registration adjustment The registration locking blocks are fixed with an adhesive, thus requiring the registration adjusting block kit for service (4-047-337-01).</p> <ul style="list-style-type: none"> Tools and Kit Hex. wrench keys (2mm, 5mm) <ol style="list-style-type: none"> Enter G monochrome crosshatch signal and also B monochrome crosshatch signal, then adjust registration between G and B. Adjusting regi. adjusting screws in the order of $\theta \rightarrow X \rightarrow Y$, overlap the B picture on the G picture as shown in figure. Enter all black signal to the B panel and also R monochrome crosshatch signal, then adjust the registration between R and G. Tighten tentatively the registration locking screws on the R and B panels, and fix the registration blocks A and B with an adhesive. Tighten the regi. locking screws. <p>To replace G panel</p> <ol style="list-style-type: none"> Attach the G panel. Enter G monochrome crosshatch signal. Confirm that the center vertical line of crosshatch and that of screen almost coincide. Loosen two screws on the θ G panel, insert an adjusting rod into a θ adjusting hole and rotate it to adjust the θ within specification. Adjust registration of R and B. 	<p>NTSC signal generator</p>		<p>θ adjusting screw</p> <p>X adjusting screw</p> <p>Y adjusting screw</p> 	

Adjustment Items and Procedure	Tools and Signals	Test Points	Adjustment Places	Illustration Waveforms and Values
<p>White Balance Adjustment</p> <p>Preparation Set as follows. PIX : 90% BRT = CENT H WHITE = OFF</p> <p>1. NTSC and RGB mode color temperature ... HIGH</p> <p>1) Set the color temperature to "H", and enter *30 IRE flat field signal to the input, and select the SERVICE mode.</p> <p>2) White balance in SERVICE mode Adjust *RCOI and BCOI to satisfy the specification. (WB: For GCOI, fix to 31)</p> <p>3) Enter *70 IRE flat field signal to the input, and select the SERVICE mode. Adjust *CXA2011 No.5 RDOF and No.7 BDOF to satisfy the specification. (Fix CXA2011 No.6 GDOF to 31)</p> <p>4) Repeating the steps 2) and 3), adjust so that 30 IRE and 70 IRE satisfy the specification.</p> <p>5) Enter *10 IRE flat field signal to the input, and select the SERVICE mode. Adjust *BIAS3 No.00 RLBS and No.01 BLBS to satisfy the specification.</p> <p>6) In the SERVICE mode, set CXA1839 No.12 Y-DC to "1", and CXA1839 No.13 DPIX to "2".</p> <p>7) Enter 10-step signal to the input, and confirm that the color at each step of 0 IRE to 100 IRE is homogeneous and not extremely different from other parts.</p> <p>8) Save the data.</p>	<p>NTSC signal generator</p> <p>Color & chromaticity meter (Minolta CS-100)</p> <p>* NTSC 30 IRE</p> <p>* NTSC 70 IRE</p> <p>* NTSC 10 IRE</p> <p>*NTSC 10 STEP</p>	<p>WB meter</p>	<p>* SERVICE mode WB RCOI WB BCOI * SERVICE mode CXA2011 No. 5 RDOF CXA2011 No. 7 BDOF</p> <p>* SERVICE mode BIAS3 No00. RLBS BIAS3 No01. BLBS * SERVICE mode CXA1839 No. 12 Y-DC CXA1839 No. 13 DPX</p>	<p>(NTSC 30 IRE) W7000 W9000 *X : 0.257 ±0.005 0.257±0.005 Y : 0Z.281±0.005 0.281±0.005</p> <p>(VGA 30 IRE) W7000 W9000 *X : 0.248 ±0.005 0.248±0.005 Y : 0.265±0.005 0.265±0.005</p> <p>(NTSC 70 IRE) W7000 W9000 *X : 0.267 ±0.003 0.267±0.003 Y : 0.293 ±0.003 0.293±0.003</p> <p>(VGA 70 IRE) W7000 W9000 *X : 0.251 ±0.003 0.251±0.003 Y : 0.276 ±0.003 0.276±0.003</p> <p>(NTSC 10 IRE) W7000 W9000 *X : 0.276 0.266 Y : 0.289 0.265</p> <p>(VGA 10 IRE) W7000 W9000 *X : 0.271 0.253 Y : 0.275 0.263</p>
<p>Lens Focus Adjustment</p> <p>1) Loosen a focus locking screw.</p> <p>2) Adjust the lens focus.</p>				

MEMO

MEMO

4-2. CIRCUIT BOARDS LOCATION



4-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- 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.
- Δ : internal component.
- : panel designation, and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- \perp : 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.
- : B + bus.
- : B - bus.
- : Signal path.

Reference information

- RESISTOR : RN METAL FILM
: RC SOLID
: FPRD 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 Δ are critical for safety. Replace only with part number specified.

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

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

Device	Printed symbol	Terminal name	Circuit
① Transistor		Collector Base Emitter	
② Transistor		Collector Base Emitter	
③ Diode		Cathode Anode	
④ Diode		Cathode Anode (NC)	
⑤ Diode		Cathode Anode (NC)	
⑥ Diode		Common Anode Cathode	
⑦ Diode		Common Anode Cathode	
⑧ Diode		Common Anode Anode	
⑨ Diode		Common Anode Anode	
⑩ Diode		Common Cathode Cathode	
⑪ Diode		Common Cathode Cathode	
⑫ Transistor (FET)		Drain Source Gate	
⑬ Transistor (FET)		Drain Source Gate	
⑭ Transistor (FET)		Source Drain Gate	
⑮ Transistor		Emitter Collector Base	
⑯ Transistor		C1/B1/E1 E2/B2/C1	
⑰ Transistor		C1/B2/E2 E1/B1/C2	
⑱ Transistor		C1/B2/E2 E1/B1/C2	
⑲ Transistor		C1/B2/E2 E1/B1/C2	
⑳ Transistor		E2/B1/E1 C2 (C1/B2)	
㉑ Transistor		(B2) B1 E1 E2 C1 C2	
㉒ Transistor		(B2) E2 E1 B1 C2 C1	
—		Discrete semiconductor	

(Chip semiconductors that are not actually used are included.) Ver.1.4

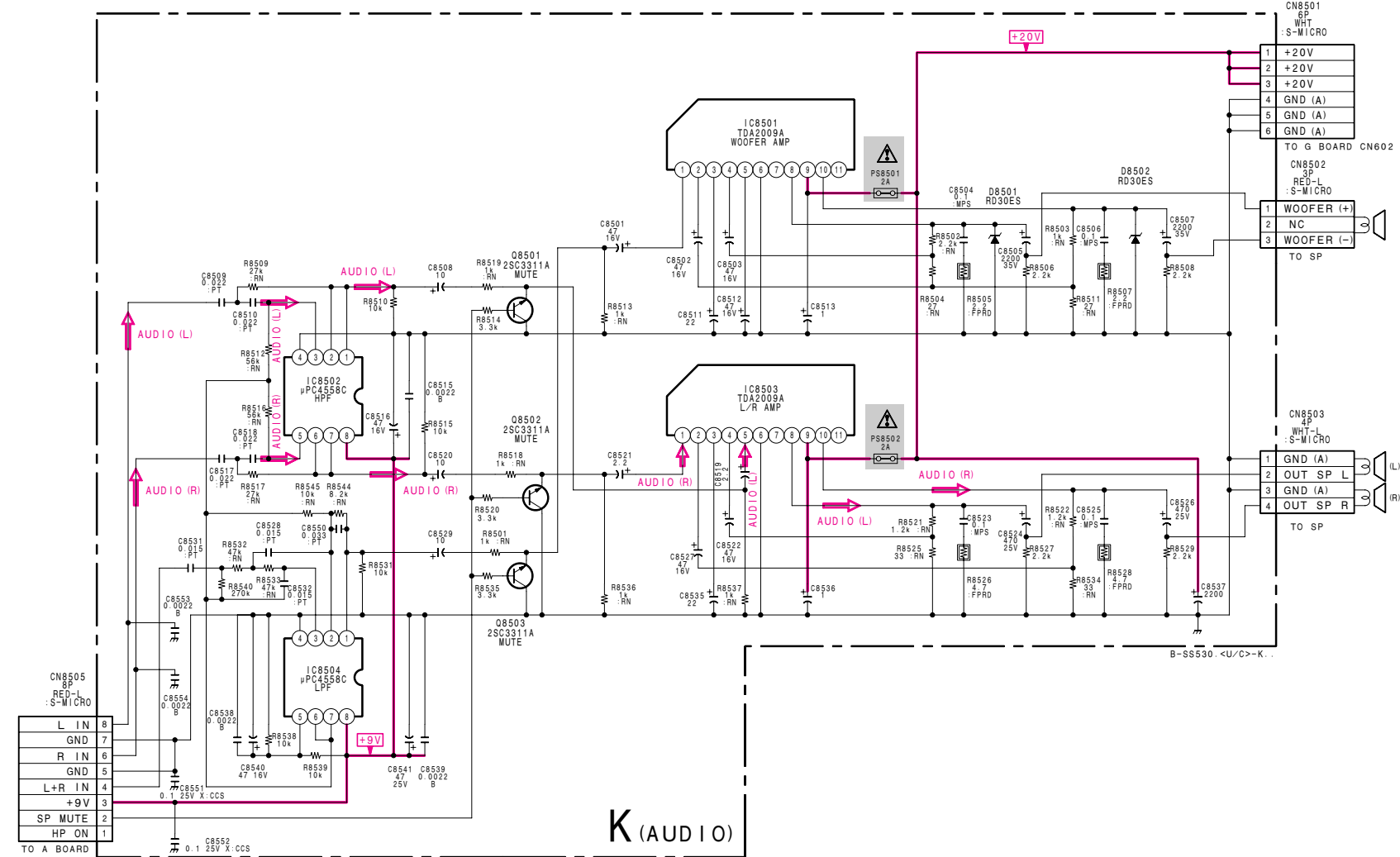
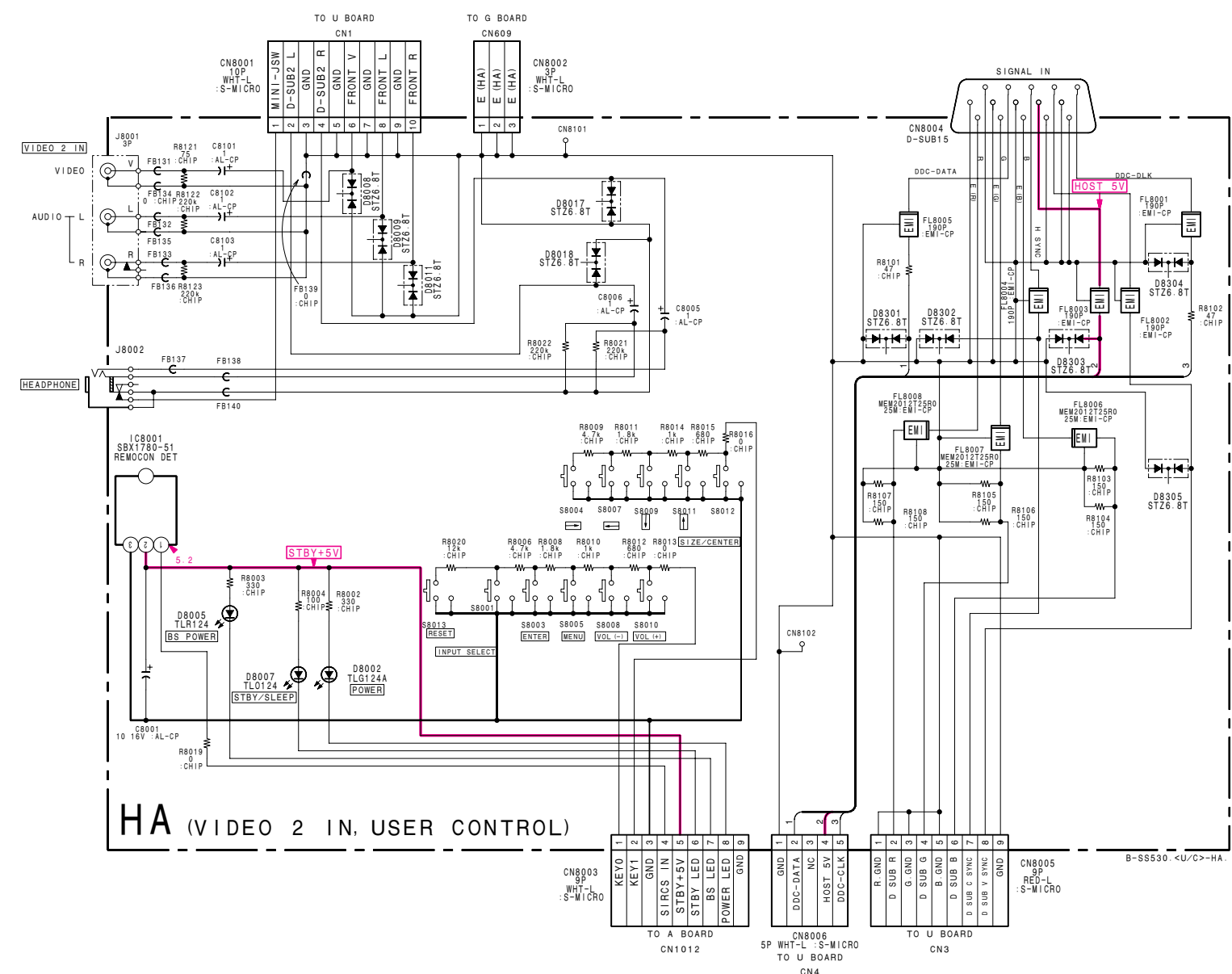
(1) Schematic Diagrams of HA, HB, K, TA and TB Boards

KL-W7000/W9000
RM-Y980

KL-W7000/W9000
RM-Y980

KL-W7000/W9000
RM-Y980

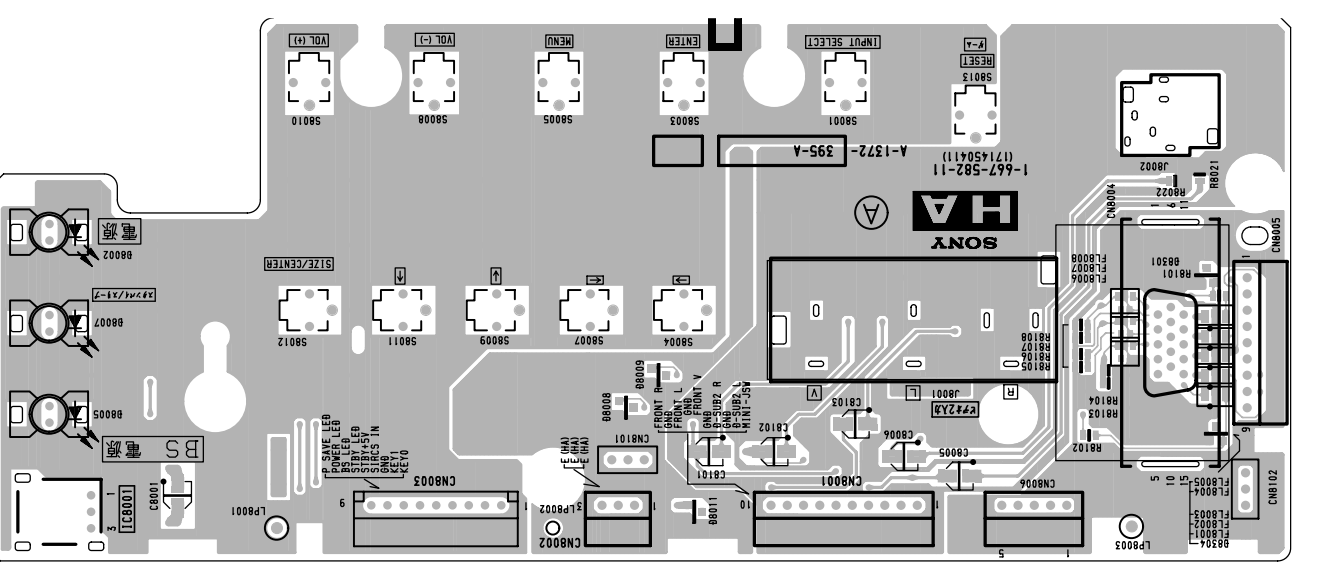
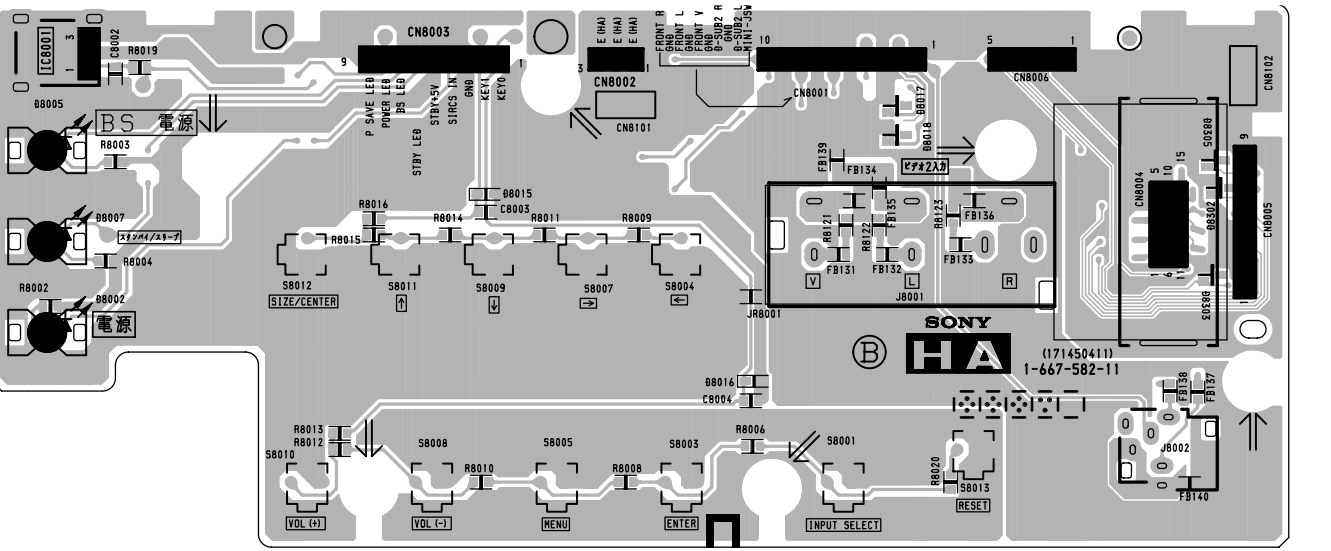
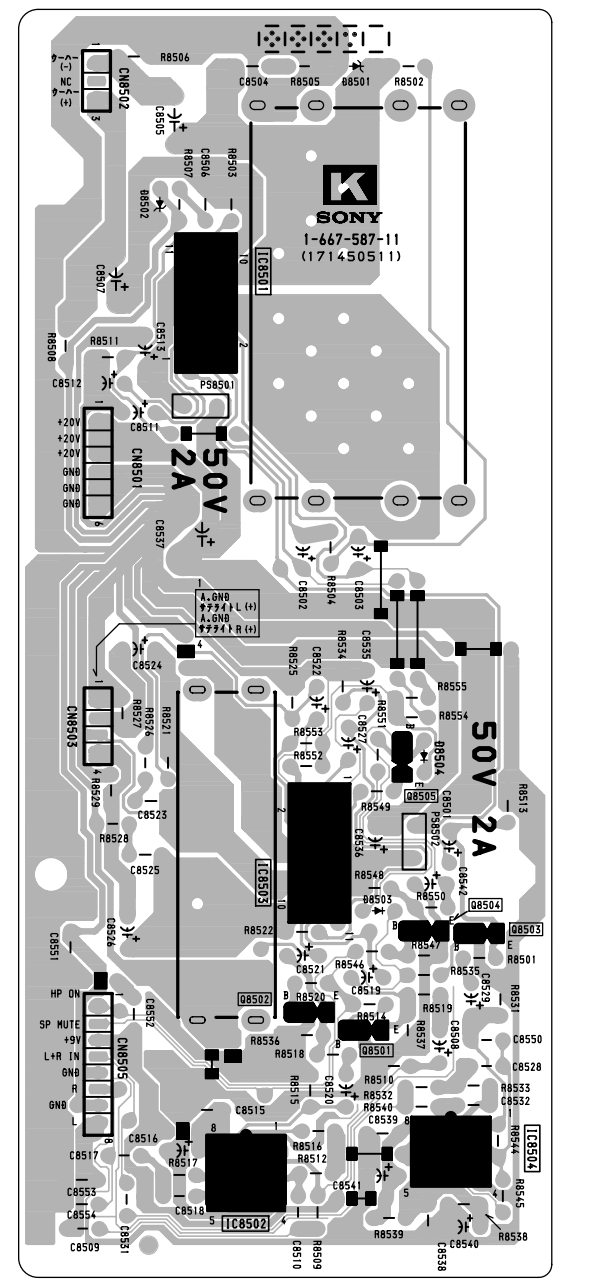
KL-W7000/W9000
RM-Y980



— K BOARD —

— HA BOARD (Conductor Side) —

— HA BOARD (Component Side) —



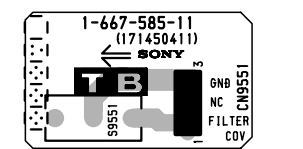
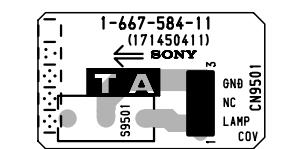
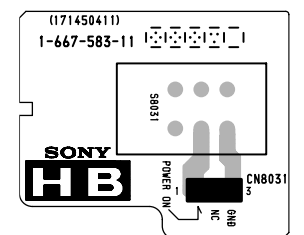
• K BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	
IC8501	1	1.5	IC8504	1	4.8	
	2	0.9		2	4.8	
	3	12.2		3	4.7	
	4	0.9		5	4.8	
	5	1.5	6	4.8		
	8	10.5	7	4.8		
10	10.6	Q8501	B	0.5		
IC8502	1		4.8	Q8502	B	0.5
	2		4.8		E	0
	3		4.8	Q8503	B	0.5
	5	4.8	E		0	
6	4.8					
7	4.8					
IC8503	1	1.5				
	2	0.9				
	3	12.2				
	4	0.9				

— HB BOARD —

— TA BOARD —

— TB BOARD —

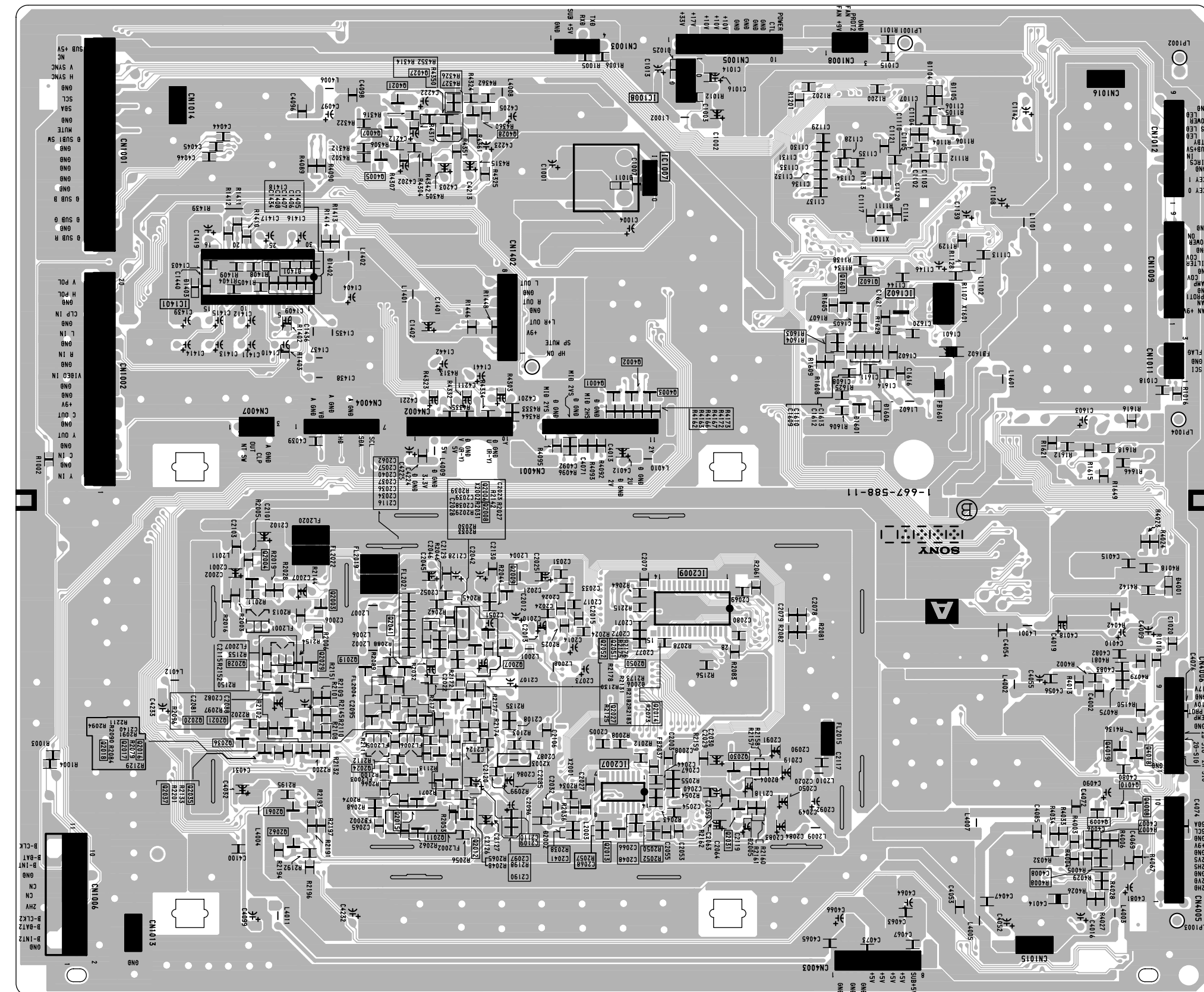


HA BOARD
Terminal name of semiconductors
in silk screen printed circuit (*):

Ref.	*
D8017, D8018, D8302, D8303, D8305	⊗
D8008, D8009, D8011, D8301, D8304	⊙

*: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 54)

— A BOARD (Conductor Side) —



• A BOARD SEMICONDUCTOR LOCATION

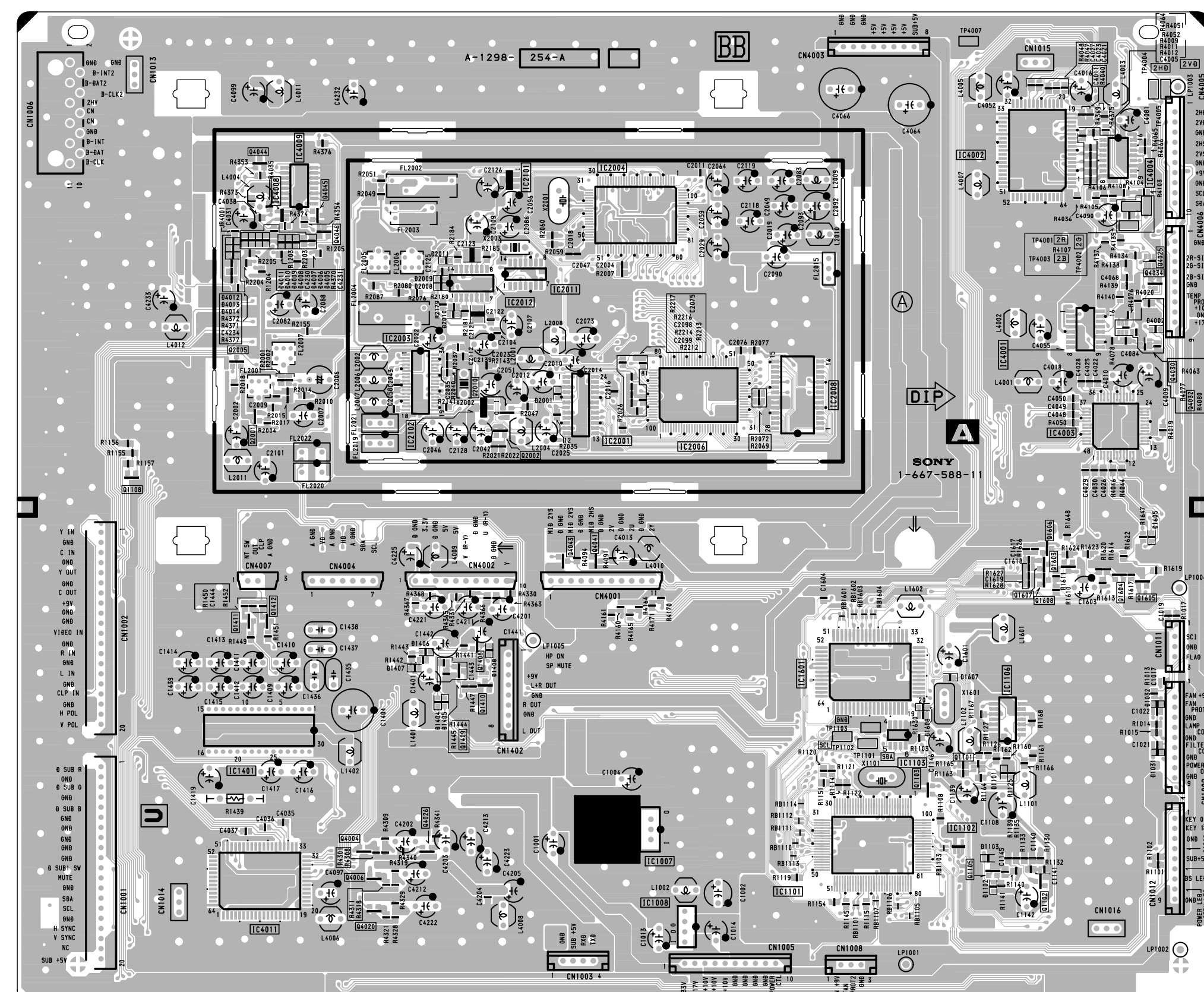
IC	(Conductor Side)	(Component Side)	
IC1007	E-3	E-4	⊙
IC1008	E-3	E-4	⊙
IC1101		E-5	⊙
IC1102		E-5	⊙
IC1103		D-5	⊙
IC1106		D-5	⊙
IC1401	D-5	D-2	⊙
IC1601		D-5	⊙
IC1602	D-2		⊙
IC2001		B-3	⊙
IC2003		B-2	⊙
IC2004		A-3	⊙
IC2006		A-3	⊙
IC2007	B-3	B-3	⊙
IC2008		B-4	⊙
IC2009	B-3	B-4	⊙
IC2011		B-3	⊙
IC2012		B-3	⊙
IC2101		A-3	⊙
IC2102		B-3	⊙
IC4001		B-6	⊙
IC4002		A-5	⊙
IC4003		C-6	⊙
IC4004		A-6	⊙
IC4008		A-2	⊙
IC4009		A-2	⊙
IC4011		E-2	⊙
Q2041		B-4	⊙
Q2050		B-4	⊙
Q2051		B-4	⊙
Q2052		B-4	⊙
Q2061		A-5	⊙
Q2062		A-5	⊙
Q4001		C-3	⊙
Q4002		C-3	⊙
Q4003		C-3	⊙
Q4004		E-2	⊙
Q4005		E-5	⊙
Q4006		E-2	⊙
Q4007		E-5	⊙
Q4008		A-1	⊙
Q4009		A-1	⊙
Q4010		A-1	⊙
Q4018		B-1	⊙
Q4019		B-1	⊙
Q4020		E-2	⊙
Q4021		E-4	⊙
Q4025		B-6	⊙
Q4026		E-3	⊙
Q4027		E-4	⊙
Q4028		E-4	⊙
Q4034		B-6	⊙
Q4041		C-3	⊙
Q4043		C-3	⊙
Q4044		A-2	⊙
Q4045		A-2	⊙

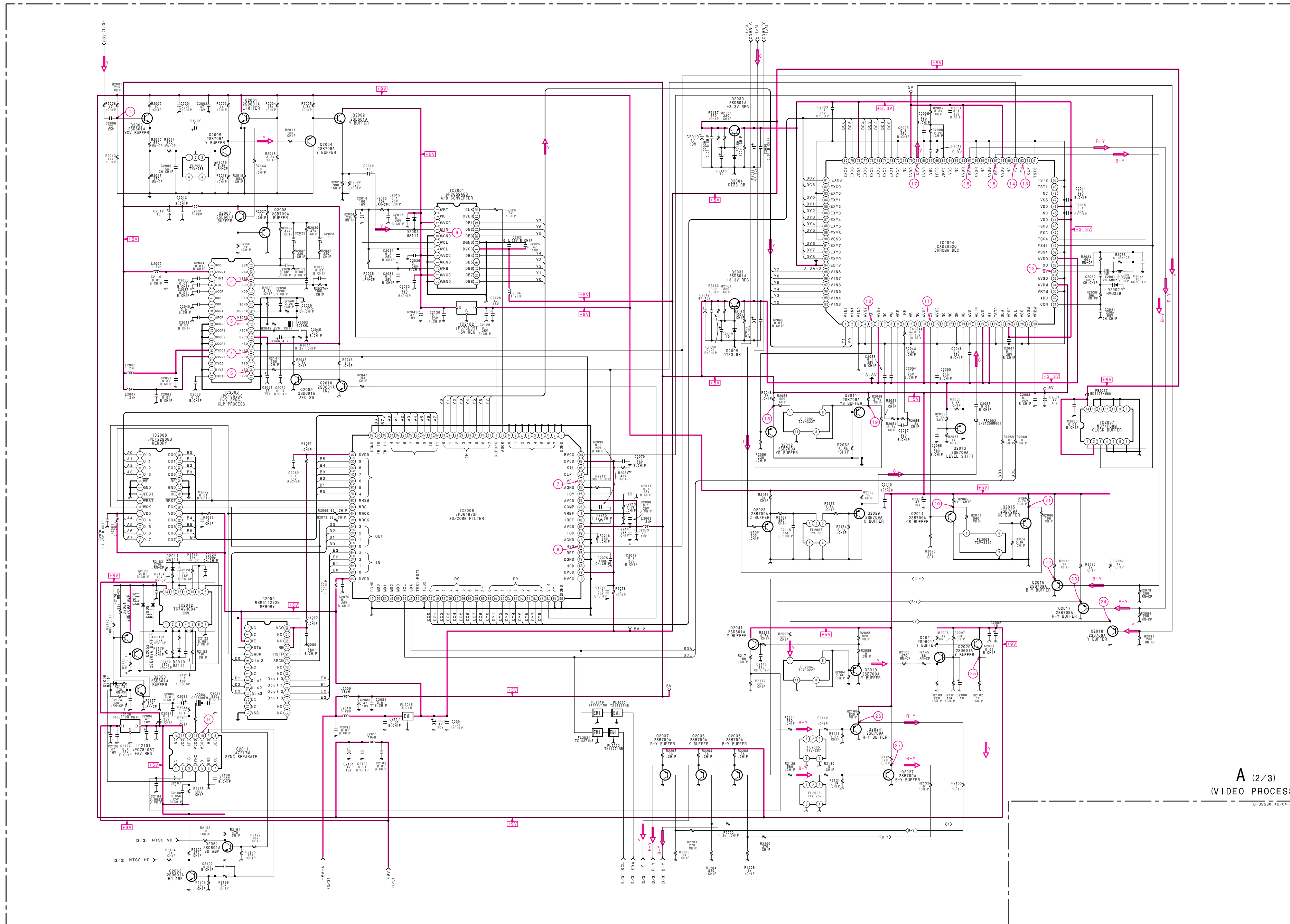
TRANSISTOR	(Conductor Side)	(Component Side)	
Q1101		D-5	⊙
Q1102		E-6	⊙
Q1103		D-5	⊙
Q1105		E-5	⊙
Q1108		C-1	⊙
Q1408		D-3	⊙
Q1409		D-3	⊙
Q1601		D-3	⊙
Q1602	D-2		⊙
Q1603		C-6	⊙
Q1604		C-6	⊙
Q1605		C-6	⊙
Q1606		C-6	⊙
Q1607		C-6	⊙
Q1608		C-6	⊙
Q2001		C-2	⊙
Q2002		C-3	⊙
Q2003	B-5		⊙
Q2004	C-5		⊙
Q2005		B-2	⊙
Q2008	B-4		⊙
Q2009	B-4		⊙
Q2010	B-4		⊙
Q2010	B-3		⊙
Q2011	A-4		⊙
Q2012	A-4		⊙
Q2013	A-3		⊙
Q2014	B-4		⊙
Q2015	A-4		⊙
Q2016	B-4		⊙
Q2017	B-4		⊙
Q2018	B-5		⊙
Q2019	B-5		⊙
Q2020	B-5		⊙
Q2021	B-5		⊙
Q2024	B-4		⊙
Q2027	B-4		⊙
Q2028	B-5		⊙
Q2029	B-5		⊙
Q2030	B-3		⊙
Q2031	A-3		⊙
Q2035	B-5		⊙
Q2036	B-5		⊙
Q2037	B-5		⊙
D1011		E-3	⊙
D1023		E-3	⊙
D1031		E-3	⊙
D1032		E-3	⊙
D1102		D-6	⊙
D1103		D-6	⊙
D1104		E-5	⊙
D1104		E-2	⊙
D1105		E-2	⊙
D1401		D-5	⊙
D1402		D-5	⊙
D1405		D-3	⊙
D1406		D-3	⊙
D1407		D-2	⊙
D1408		D-3	⊙
D1601		C-2	⊙
D1606		C-2	⊙
D1606		C-6	⊙
D2001		B-3	⊙
D2002		A-4	⊙
D2004		B-3	⊙
D2005		A-3	⊙
D2006		B-4	⊙
D2008		B-3	⊙
D2009		B-3	⊙
D2010		B-3	⊙
D2011		B-3	⊙
D4001		C-1	⊙
D4002		B-6	⊙
D4005		B-2	⊙
D4006		B-2	⊙
D4007		B-2	⊙
D4008		B-2	⊙
D4009		B-2	⊙
D4010		B-2	⊙
D4011		B-2	⊙
D4012		B-2	⊙

CRYSTAL	(Conductor Side)	(Component Side)	
X1101	D-2	D-5	⊙
X1601	D-2	D-5	⊙
X2001	A-4	A-3	⊙
X2002	B-4	B-3	⊙
X2003	B-4	B-3	⊙

*: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 54)

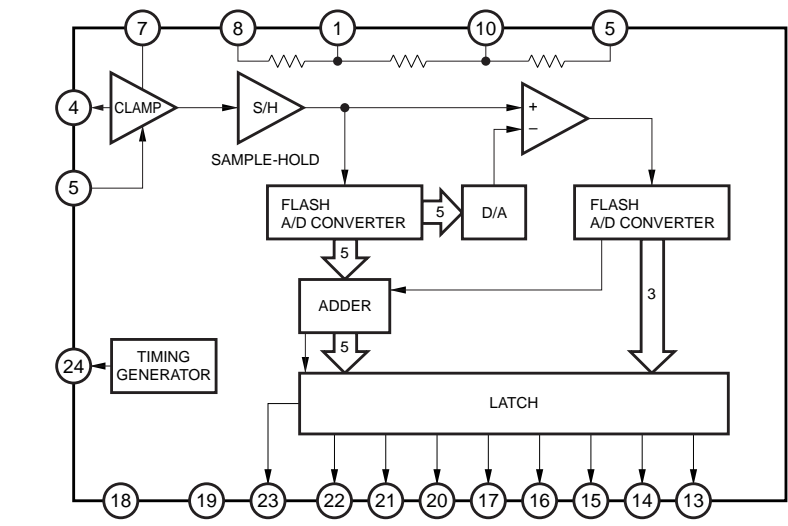
— A BOARD (Component Side) —



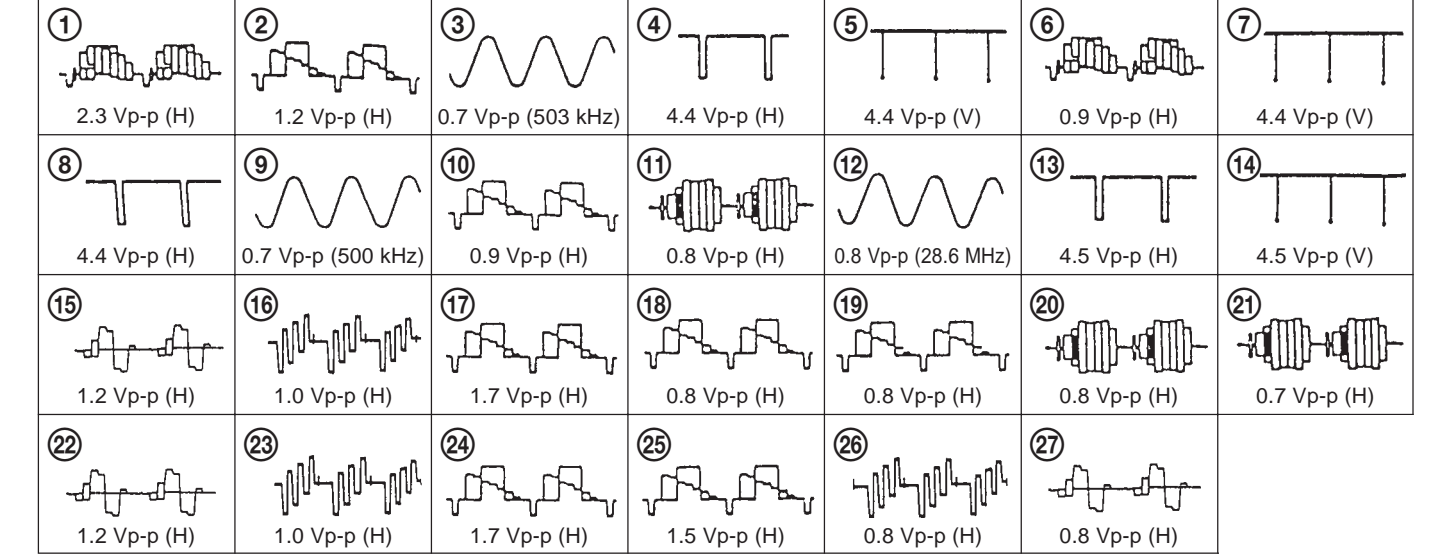


A (2/3)
(VIDEO PROCESS)

• IC2001 µPC659AGS



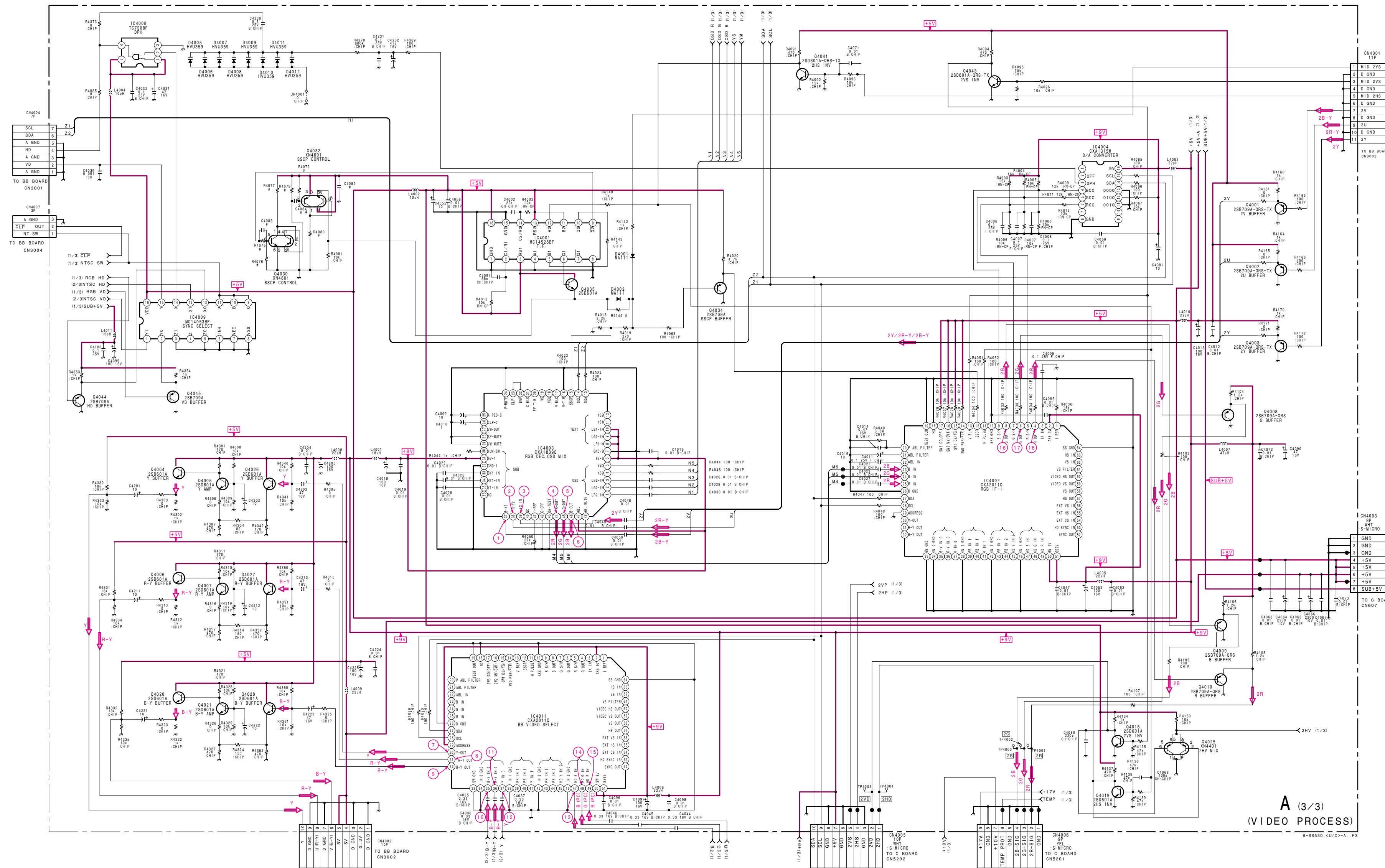
• A (2/3) BOARD WAVEFORMS



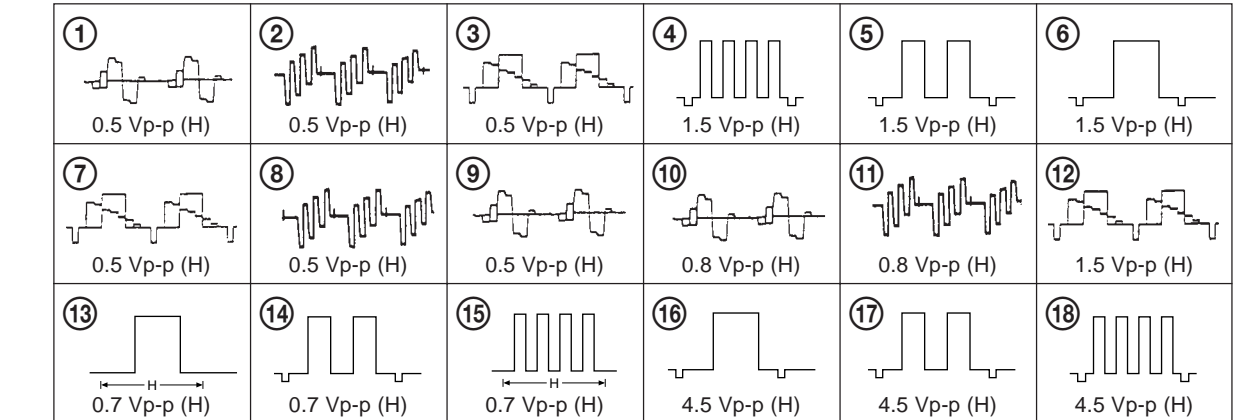
• A (2/3) BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]
IC2001	1	3.5	96	1.8	3	2.7	Q2011	B	1.1		
	4	2.9	97	2.3	4	2.7		E	1.8		
	6	0.4	98	3.0	5	5.4	Q2012	B	0.5		
	7	2.8	99	2.5	9	1.3		E	1.2		
	10	2.5	100	2.3	11	3.5	Q2013	B	1.2		
	13	2.0			12	2.8		E	1.9		
	14	2.1	IC2006	10	2.3	13	2.1	Q2014	B	0.6	
	15	2.3			11	2.6		E	1.8		
	16	2.5			12	1.6	Q2015	B	1.3		
	17	3.0			13	1.8		E	1.6		
	20	2.3			15	3.0	Q2016	B	1.2		
	21	1.8			16	2.3		E	1.8		
	22	1.6			17	2.3	Q2017	B	1.2		
	24	2.3			18	2.1		E	1.8		
IC2003	3	2.8			19	2.0	Q2018	B	0.9		
	4	3.4			20	1.8		E	1.6		
	5	0			21	2.1	Q2019	B	1.4		
	7	3.7			22	2.8		E	2.2		
	9	2.8			23	2.9	Q2020	B	4.4		
	18	3.9			24	2.7		E	3.7		
	20	4.5			25	2.7	Q2021	B	2.2		
	22	0.4			26	2.7		C	4.4		
	23	4.3			27	2.9	Q2022	B	1.5		
	26	3.5			28	1.5	Q2024	B	1.7		
	27	3.0			29	1.6		E	2.4		
	28	4.1			30	2.7	Q2027	B	1.7		
	29	4.1			31	3.3		E	2.4		
	33	4.4			32	2.5	Q2028	B	2.8		
	34	3.2			33	3.3		E	3.5		
	36	3.2			34	2.5	Q2029	B	3.0		
					35	2.4		E	2.3		
					36	2.3	Q2030	B	4.3		
					37	2.8		E	3.6		
					38	5.4	Q2031	B	3.6		
IC2004	1	2.1			39	0		E	4.3		
	2	2.0			40	1.3	Q2027	B	1.7		
	5	0.5			41	1.3		E	2.4		
	8	1.7			42	3.0	Q2028	B	2.8		
	9	1.2			43	2.8		E	3.5		
	10	1.2			44	2.6	Q2029	B	3.0		
	11	0.6			45	2.6		E	2.3		
	14	0.6			46	3.5	Q2030	B	4.3		
	19	2.7			47	3.3		E	3.6		
	25	5.4			48	2.9	Q2031	B	3.6		
	27	5.4			49	2.7		E	4.3		
	31	2.5			50	5.4	Q2027	B	1.7		
	36	1.9			51	5.4		E	2.4		
	37	2.1			52	5.4	Q2028	B	2.8		
	40	2.0			60	2.6		E	3.5		
	41	1.7			61	2.5	Q2031	B	3.6		
	56	5.4			62	2.5		E	4.3		
	57	1.2			63	2.5	Q2035	B	1.7		
	61	1.1			64	2.5		E	2.3		
	64	3.0			65	2.5	Q2036	B	1.2		
	65	2.2			67	2.5		E	1.9		
	66	2.2			68	2.8	Q2002	B	2.6		
	67	0.6			69	2.6		E	1.9		
	69	0.9			70	2.6	Q2037	B	1.6		
	73	2.7			71	2.6		E	2.3		
	74	2.6			72	3.0	Q2003	B	3.3		
	75	2.5			73	2.4		E	2.6		
	76	2.5			74	3.0	Q2041	B	2.1		
	78	3.6			75	2.7		E	1.5		
	79	2.6			76	2.4	Q2004	B	1.9		
	80	2.6			77	2.6		E	2.6		
	81	2.5			78	2.4	Q2005	B	1.2		
	82	2.9			79	1.8		E	2.7		
	84	2.7			80	0	Q2051	B	4.4		
	85	2.7			81	1.7		E	5.0		
	86	2.6			82	2.5	Q2007	B	2.3		
	87	3.0			83	2.5		E	1.6		
	88	2.4			84	4.3	Q2008	B	1.6		
	89	3.0			85	4.5		E	2.3		
	91	2.7			86	4.5	Q2009	B	0.8		
	92	2.3			87	3.0		C	0		
	93	1.8			88	2.0	Q2010	B	0		
	95	1.6			89	2.0		C	0.8		
					90	2.0	Q2008	B	0.8		
					91	1.7		C	0		
					92	2.0	Q2010	B	0		
					93	2.3		C	0.8		
					94	2.9					
					95	1.6					

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

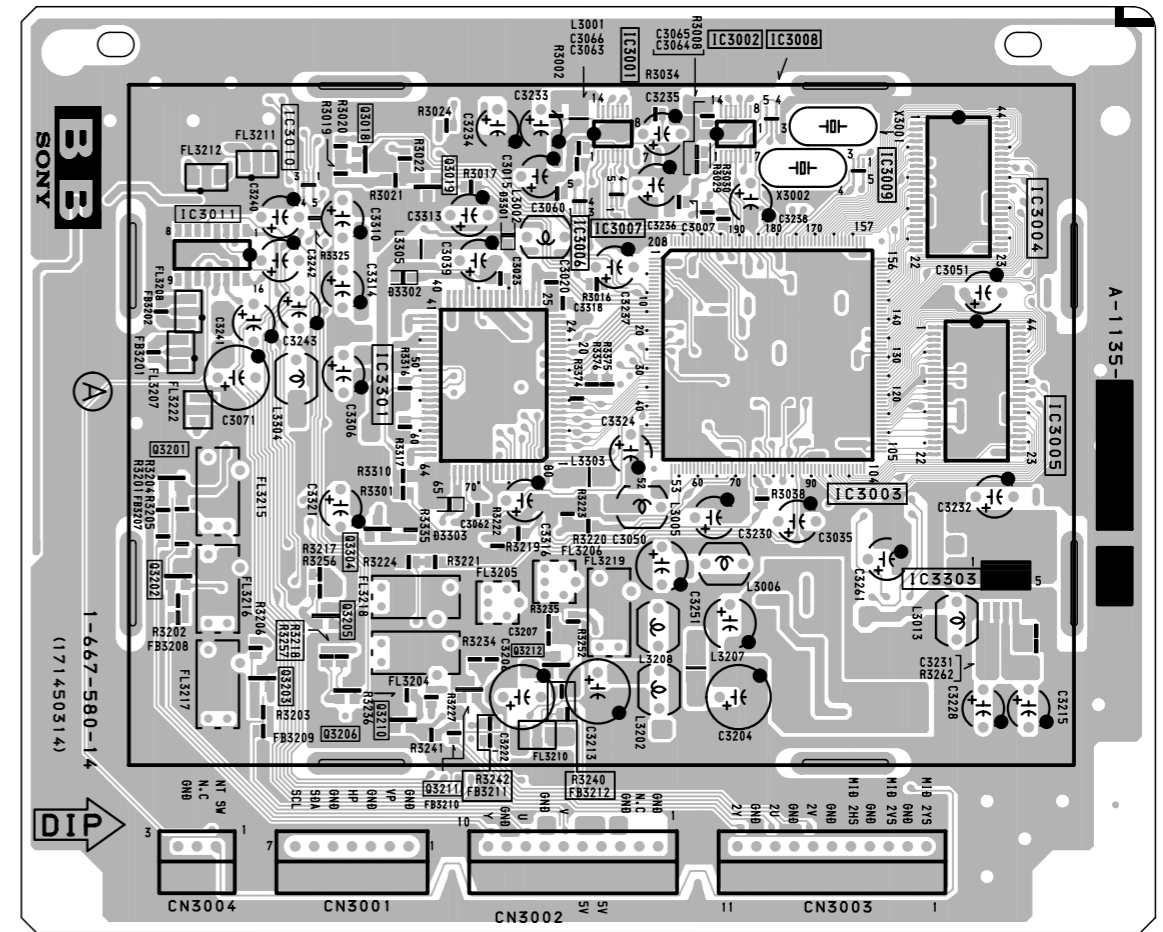
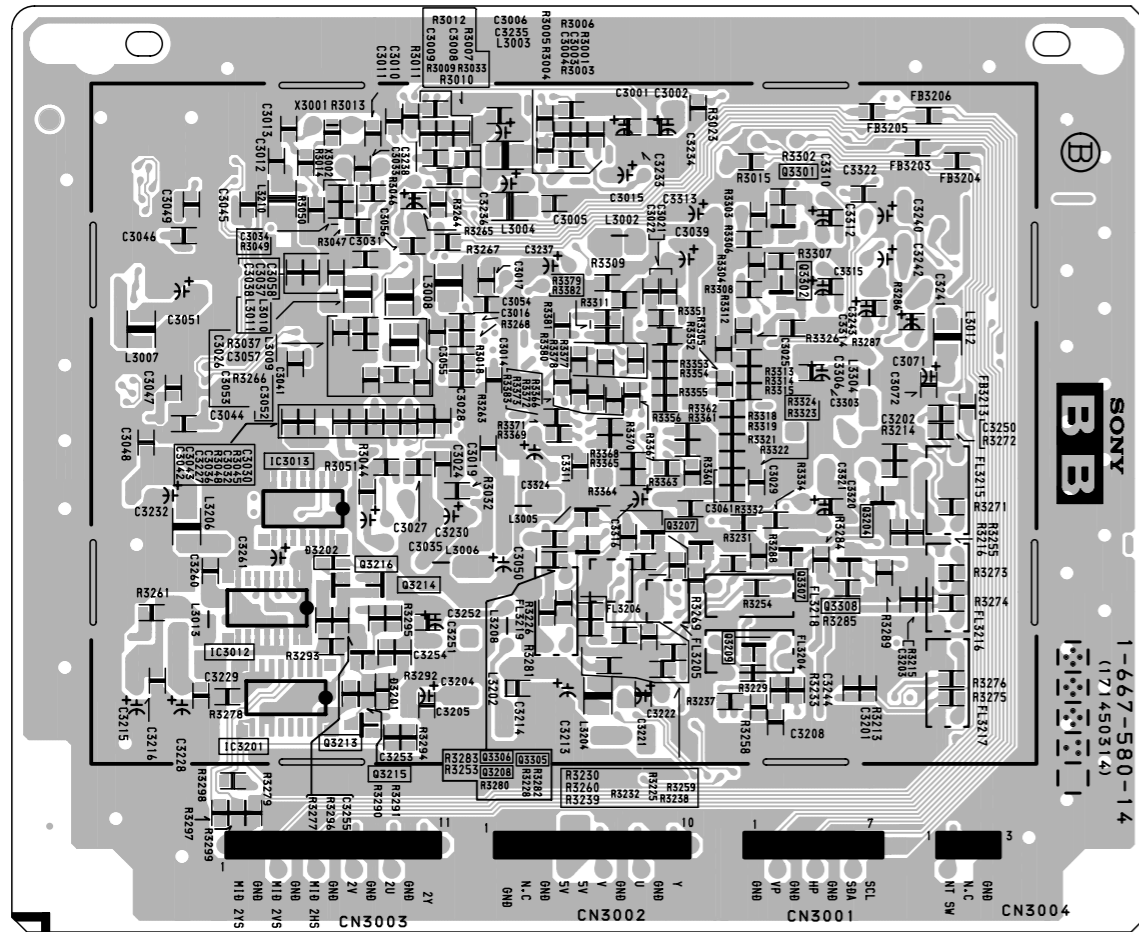


• A (3/3) BOARD WAVEFORMS



• A (3/3) BOARD VOLTAGE LIST

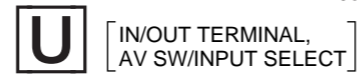
Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]																																																																																																																																																																																																																																																																																																											
IC4001	2	4.9	IC4002	22	0.5	IC4003	36	4.3	Q4020	B	6.4																																																																																																																																																																																																																																																																																																											
	9	5.5		25	4.5		37	4.3		12	1.1	26	4.7	47	4.4	47	4.4	E	5.8	IC4002	1	2.9	30	9.1	48	4.4	48	4.4	Q4021	B	3.3	3	3.4	33	4.8	49	4.4	49	4.4	C	6.4	4	2.1	34	4.8	Q4002	B	1.8	Q4025	B1	5.1	5	3.5	35	4.8	E	2.4	37	4.8	E	5.1	6	2.3	38	4.8	Q4003	B	1.8	B2	5.1	7	3.8	39	4.8	E	2.4	41	2.7	E2	5.4	8	2.5	41	2.7	44	3.0	44	3.0	Q4004	A	6.8	9	4.0	45	2.9	46	3.0	46	3.0	E	0	11	1.0	46	3.0	Q4005	B	3.3	Q4026	B	3.4	12	1.3	47	9.4	Q4006	B	6.4	Q4027	B	2.2	13	0.5	IC4004	4	5.3	Q4007	B	3.2	Q4028	B	3.3	14	5.6	5	4.8	6	3.5	6	3.5	E	2.6	15	5.6	17	5.6	14	5.4	14	5.4	Q4008	B	2.3	16	5.6	15	5.4	15	5.4	Q4009	B	3.0	Q4030	B1	1.1	17	5.6	21	9.4	IC4009	1	0.4	Q4007	B	3.2	C1	0.5	20	0	22	2.5	2	0.3	2	0.3	C	6.4	E1	0.5	IC4003	1	6.6	23	3.6	9	0	9	0	B2	0	2	6.6	24	3.6	10	0	10	0	C2	0.5	3	6.6	24	3.6	11	0	11	0	E2	0	4	0.2	25	3.6	12	0.8	12	0.8	Q4032	B1	5.6	5	0	27	5.3	13	0.4	13	0.4	C1	5.6	6	9.6	28	5.4	14	0.8	14	0.8	E1	5.6	13	5.4	28	5.0	15	0.3	15	0.3	B2	0.3	14	5.4	30	6.7	IC4010	B	2.2	Q4010	B	2.2	C2	0.4	15	0.6	31	6.6	31	6.6	31	6.6	C	5.4	E2	0.4			32	6.1	Q4018	B	0.5	Q4018	B	0.5	Q4034	B	0.7			35	4.3	35	4.3	35	4.3	C	5.1	E	1.3
	25	4.5		37	4.3		12	1.1		26	4.7	47	4.4	47	4.4	E	5.8	IC4002	1		2.9	30	9.1	48	4.4	48	4.4	Q4021	B	3.3	3	3.4	33	4.8	49	4.4	49	4.4	C	6.4	4	2.1	34	4.8	Q4002	B	1.8	Q4025	B1	5.1	5	3.5	35	4.8	E	2.4	37	4.8	E	5.1	6	2.3	38	4.8	Q4003	B	1.8	B2	5.1	7	3.8	39	4.8	E	2.4	41	2.7	E2	5.4	8	2.5	41	2.7	44	3.0	44	3.0	Q4004	A	6.8	9	4.0	45	2.9	46	3.0	46	3.0	E	0	11	1.0	46	3.0	Q4005	B	3.3	Q4026	B	3.4	12	1.3	47	9.4	Q4006	B	6.4	Q4027	B	2.2	13	0.5	IC4004	4	5.3	Q4007	B	3.2	Q4028	B	3.3	14	5.6	5	4.8	6	3.5	6	3.5	E	2.6	15	5.6	17	5.6	14	5.4	14	5.4	Q4008	B	2.3	16	5.6	15	5.4	15	5.4	Q4009	B	3.0	Q4030	B1	1.1	17	5.6	21	9.4	IC4009	1	0.4	Q4007	B	3.2	C1	0.5	20	0	22	2.5	2	0.3	2	0.3	C	6.4	E1	0.5	IC4003		1	6.6	23	3.6	9	0	9	0	B2	0	2	6.6	24	3.6	10	0	10	0	C2	0.5	3	6.6	24	3.6	11	0	11	0	E2	0	4	0.2	25	3.6	12	0.8	12	0.8	Q4032	B1	5.6	5	0	27	5.3	13	0.4	13	0.4	C1	5.6	6	9.6	28	5.4	14	0.8	14	0.8	E1	5.6	13	5.4	28	5.0	15	0.3	15	0.3	B2	0.3	14	5.4	30	6.7	IC4010	B	2.2	Q4010	B	2.2	C2	0.4	15	0.6	31	6.6	31	6.6	31	6.6	C	5.4	E2	0.4			32	6.1	Q4018	B	0.5	Q4018	B	0.5	Q4034	B	0.7			35	4.3	35	4.3	35	4.3	C	5.1	E	1.3
	37	4.3																																																																																																																																																																																																																																																																																																																				
12	1.1	26	4.7	47	4.4	47	4.4	E	5.8																																																																																																																																																																																																																																																																																																													
IC4002	1	2.9	30	9.1	48	4.4	48	4.4	Q4021	B	3.3																																																																																																																																																																																																																																																																																																											
	3	3.4	33	4.8	49	4.4	49	4.4	C	6.4																																																																																																																																																																																																																																																																																																												
	4	2.1	34	4.8	Q4002	B	1.8	Q4025	B1	5.1																																																																																																																																																																																																																																																																																																												
	5	3.5	35	4.8	E	2.4	37	4.8	E	5.1																																																																																																																																																																																																																																																																																																												
	6	2.3	38	4.8	Q4003	B	1.8	B2	5.1																																																																																																																																																																																																																																																																																																													
	7	3.8	39	4.8	E	2.4	41	2.7	E2	5.4																																																																																																																																																																																																																																																																																																												
	8	2.5	41	2.7	44	3.0	44	3.0	Q4004	A	6.8																																																																																																																																																																																																																																																																																																											
	9	4.0	45	2.9	46	3.0	46	3.0	E	0																																																																																																																																																																																																																																																																																																												
	11	1.0	46	3.0	Q4005	B	3.3	Q4026	B	3.4																																																																																																																																																																																																																																																																																																												
	12	1.3	47	9.4	Q4006	B	6.4	Q4027	B	2.2																																																																																																																																																																																																																																																																																																												
	13	0.5	IC4004	4	5.3	Q4007	B	3.2	Q4028	B	3.3																																																																																																																																																																																																																																																																																																											
	14	5.6	5	4.8	6	3.5	6	3.5	E	2.6																																																																																																																																																																																																																																																																																																												
	15	5.6	17	5.6	14	5.4	14	5.4	Q4008	B	2.3																																																																																																																																																																																																																																																																																																											
	16	5.6	15	5.4	15	5.4	Q4009	B	3.0	Q4030	B1	1.1																																																																																																																																																																																																																																																																																																										
	17	5.6	21	9.4	IC4009	1	0.4	Q4007	B	3.2	C1	0.5																																																																																																																																																																																																																																																																																																										
	20	0	22	2.5	2	0.3	2	0.3	C	6.4	E1	0.5																																																																																																																																																																																																																																																																																																										
IC4003	1	6.6	23	3.6	9	0	9	0	B2	0																																																																																																																																																																																																																																																																																																												
	2	6.6	24	3.6	10	0	10	0	C2	0.5																																																																																																																																																																																																																																																																																																												
	3	6.6	24	3.6	11	0	11	0	E2	0																																																																																																																																																																																																																																																																																																												
	4	0.2	25	3.6	12	0.8	12	0.8	Q4032	B1	5.6																																																																																																																																																																																																																																																																																																											
	5	0	27	5.3	13	0.4	13	0.4	C1	5.6																																																																																																																																																																																																																																																																																																												
	6	9.6	28	5.4	14	0.8	14	0.8	E1	5.6																																																																																																																																																																																																																																																																																																												
	13	5.4	28	5.0	15	0.3	15	0.3	B2	0.3																																																																																																																																																																																																																																																																																																												
	14	5.4	30	6.7	IC4010	B	2.2	Q4010	B	2.2	C2	0.4																																																																																																																																																																																																																																																																																																										
15	0.6	31	6.6	31	6.6	31	6.6	C	5.4	E2	0.4																																																																																																																																																																																																																																																																																																											
		32	6.1	Q4018	B	0.5	Q4018	B	0.5	Q4034	B	0.7																																																																																																																																																																																																																																																																																																										
		35	4.3	35	4.3	35	4.3	C	5.1	E	1.3																																																																																																																																																																																																																																																																																																											



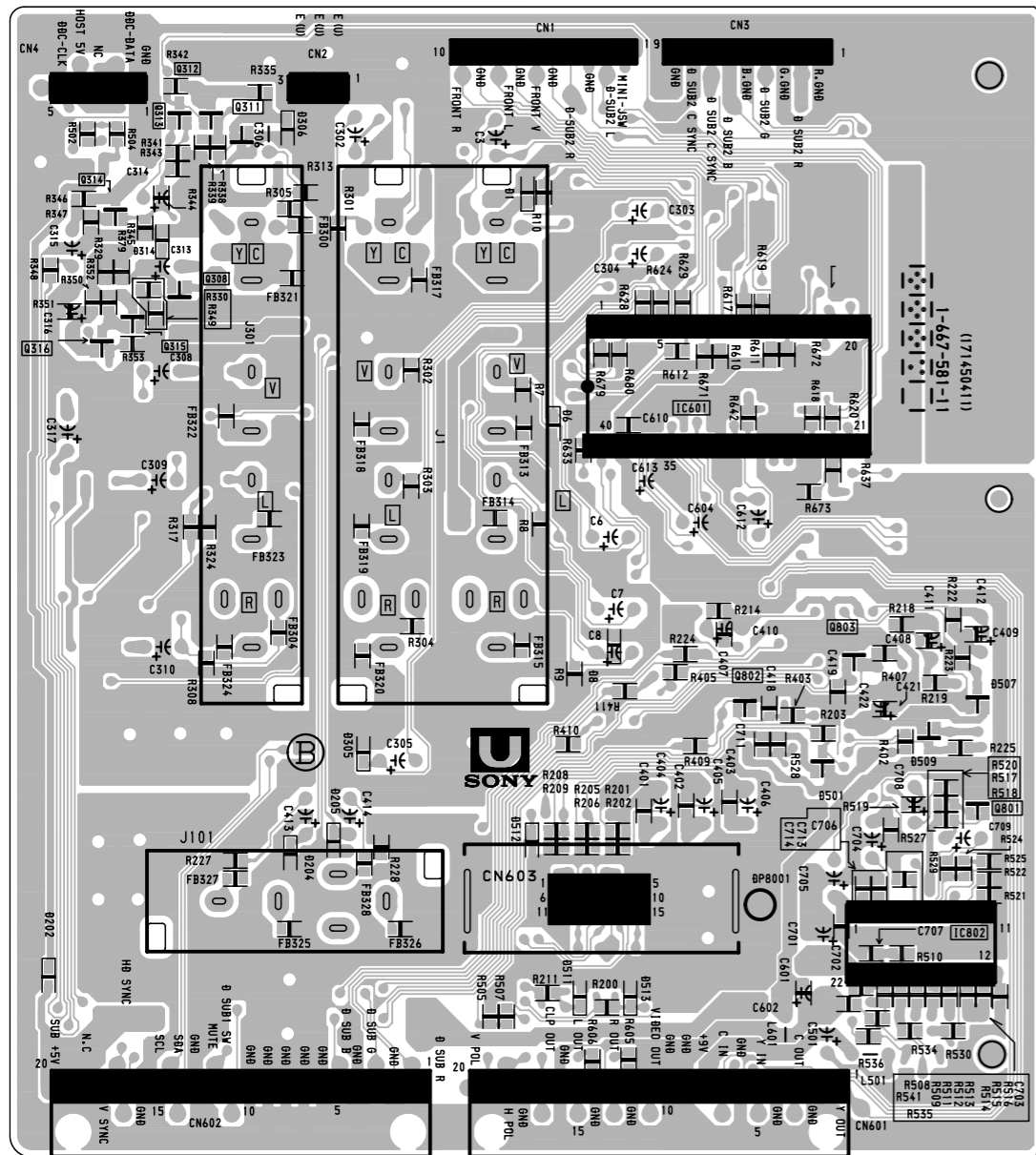
BB BOARD
Terminal name of semiconductors
in silk screen printed circuit (*)

Ref.	*
Q3204, Q3207-Q3209, Q3305-D3308	①
Q3018, Q3019, Q3201-Q3203, Q3205, Q3206, Q3210-Q3212	②

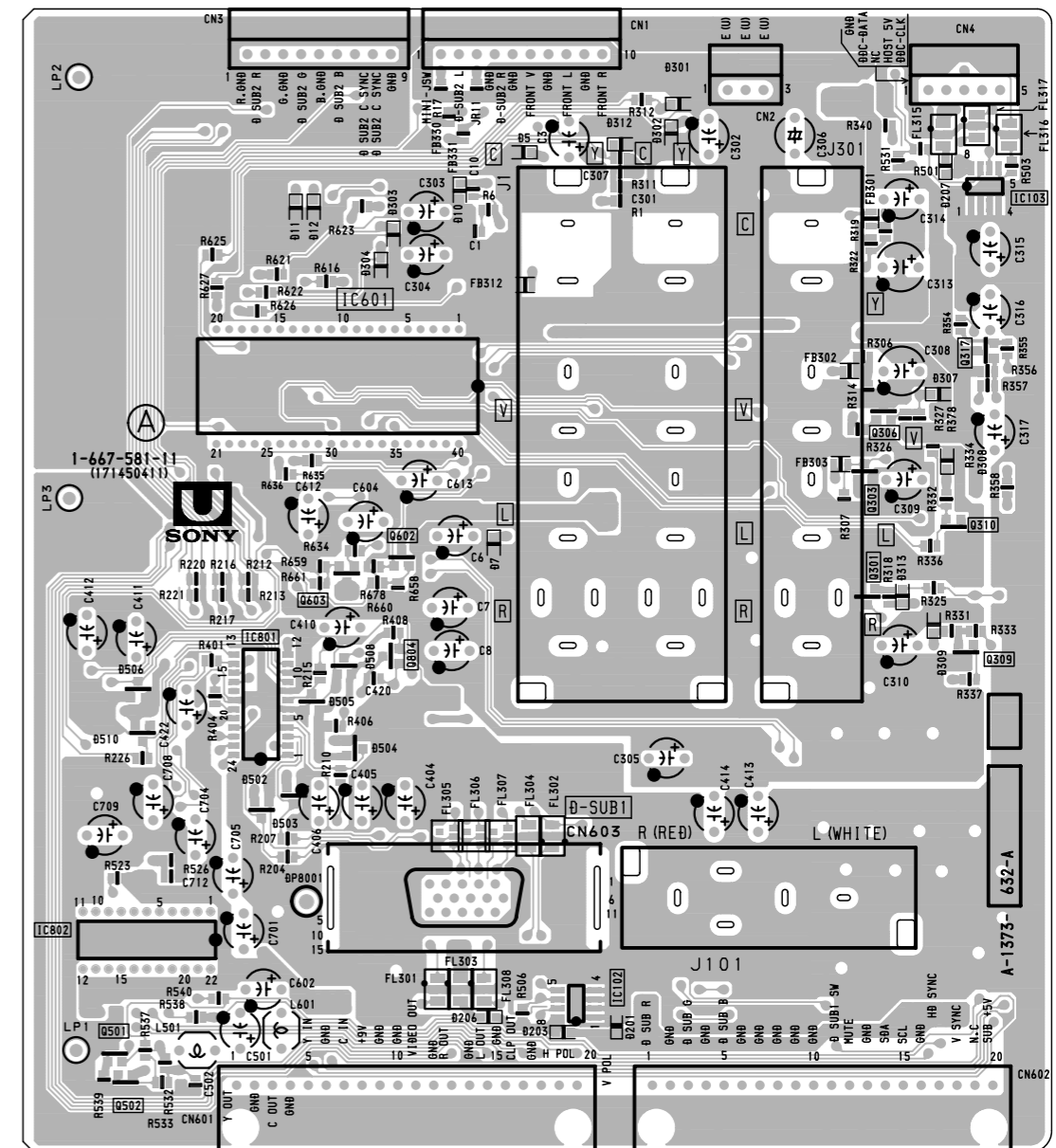
※: Refer to Terminal name of
semiconductors in silk screen
printed circuit (see page 54)



— U BOARD (Conductor Side) —



— U BOARD (Component Side) —

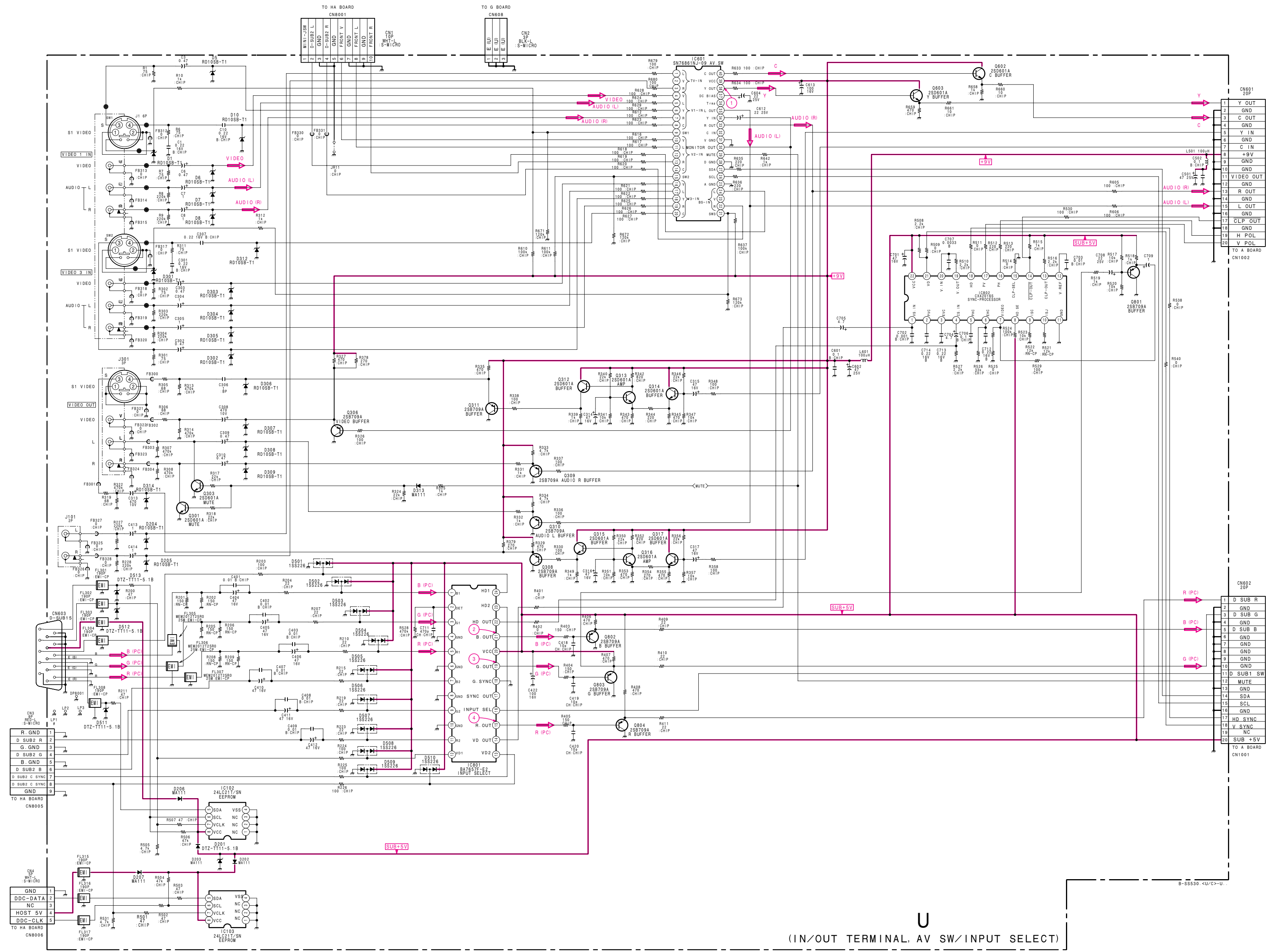


U BOARD
Terminal name of semiconductors
in silk screen printed circuit (*):

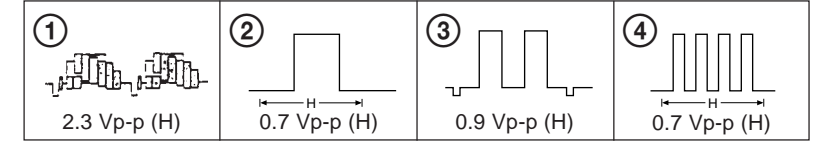
Ref.	*
Q308, Q311-Q316, Q801-Q803	①
Q301, Q303, Q306, Q309, Q310, Q317, Q602, Q603, Q804	②
D1, D5-D8, D10, D201-D207, D301-D309, D312-D314, D511-D513	③
D501, D507, D509	⑥
D502-D506, D508, D510	⑦

*: Refer to Terminal name of
semiconductors in silk screen
printed circuit (see page 54)

(6) Schematic Diagram of U Board

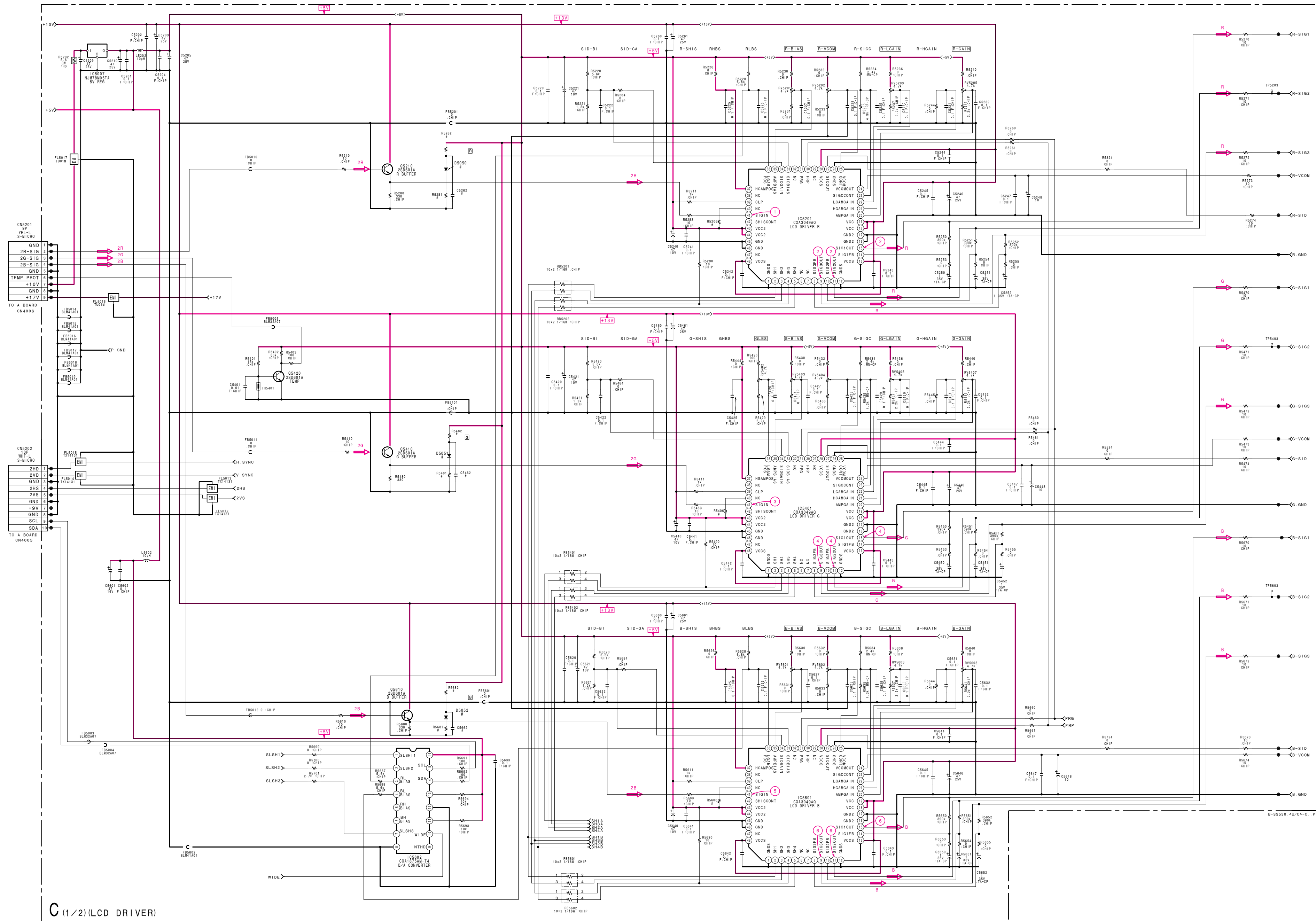


• U BOARD WAVEFORMS

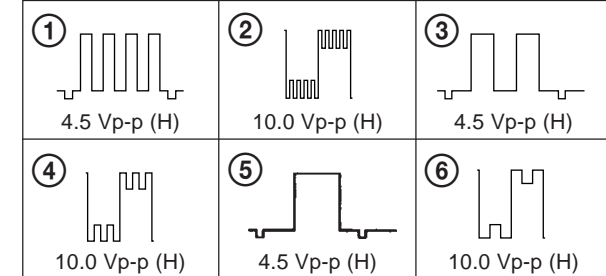


• U BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	
IC102	5	0.1	IC801	1	3.6	Q306	B	3.1	
	33	3.8		2	4.2		E	3.8	
	34	1.6		3	3.5		E	3.8	
IC103	7	4.2	Q308	14	3.6	Q602	B	3.4	
	35	3.8		15	2.1		E	2.7	
	37	4.3		16	4.9		Q603	B	3.1
	38	3.1		17	4.9			E	2.4
IC601	5	0.6	Q309	B	3.8	Q801	B	2.5	
	6	4.5		7	0		E	3.2	
	7	0		9	0		Q310	B	3.8
IC801	15	0	20	1.3	E	4.4			
	16	4.9	21	0.2	Q802	B	2.1		
	17	4.9	22	3.0		E	2.0		
	18	0.8	Q311	B	4.6	Q803	B	2.1	
	19	1.3		E	5.3		Q804	B	2.8
	20	4.9	3	3.6	Q312	B		5.3	
	21	4.9	4	5.7		E	4.6		
	22	4.4	5	0.5	Q313	B	2.1		
	23	5.0	6	2.6		E	2.8		
	24	4.4	7	1.5					
26	5.0								
27	5.0								
29	0								
30	3.1								

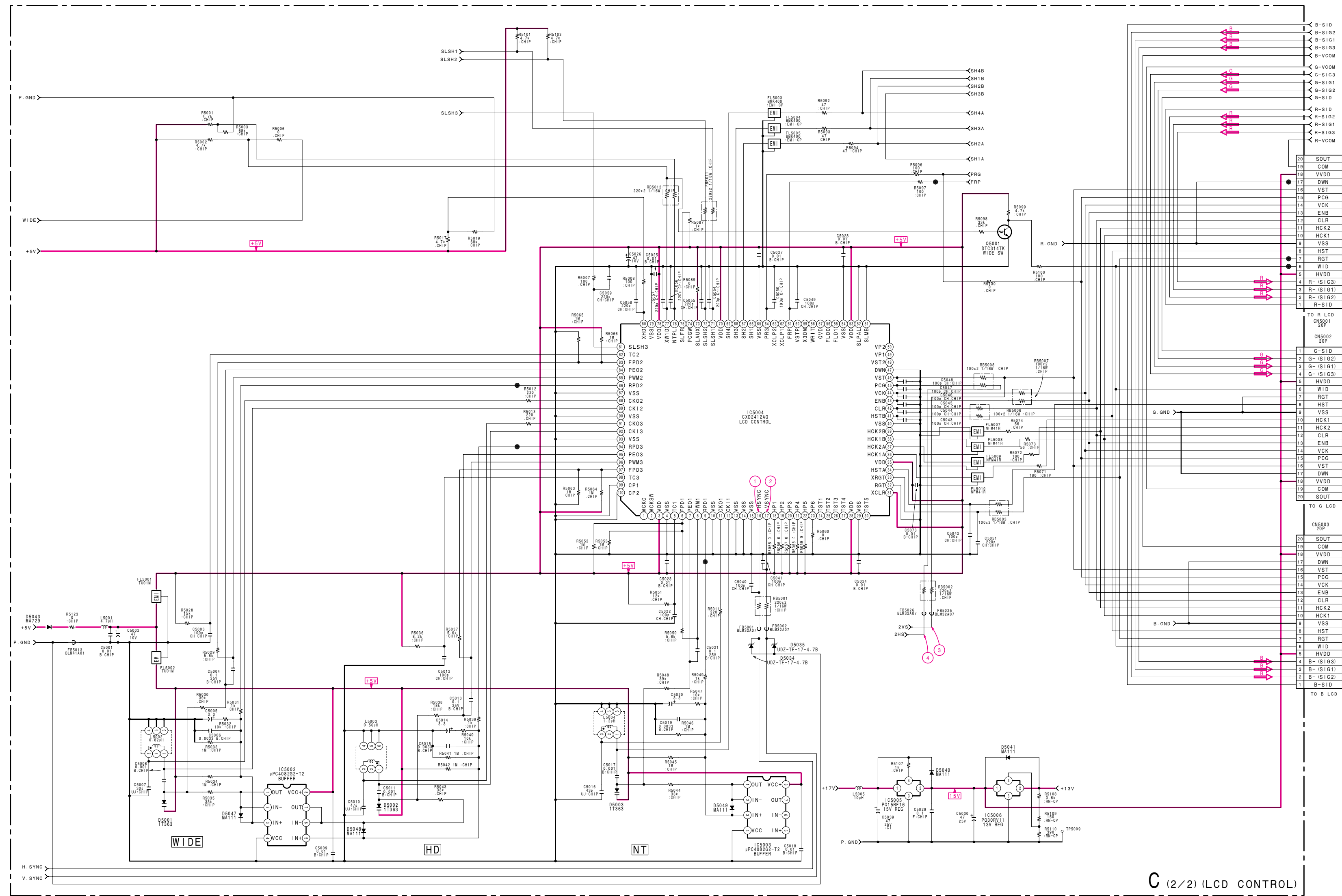


• C (1/2) BOARD WAVEFORMS



• C (1/2) BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]
IC5201	2	1.2	IC5401	2	1.2	IC5601	2	1.2	IC5602	1	0
	3	1.2		3	1.2		3	1.2		2	0
	4	5.1		4	5.1		4	5.1		3	2.6
	5	1.2		5	1.2		5	1.2		4	2.9
	8	6.8		8	6.8		8	6.8		7	0.4
	9	6.8		9	6.8		9	6.8		9	4.7
	10	6.8		10	6.8		10	6.8		10	0
	11	6.8		11	6.8		11	6.8		11	5.1
	14	6.8		14	6.8		14	6.8		13	5.1
	15	6.8		15	6.8		15	6.8		14	4.9
	20	3.3		20	3.3		20	3.3		15	5.1
	21	0		21	0		21	0		21	0
22	2.7	22	2.7	22	2.7	Q5410	B	2.8			
23	3.2	23	3.2	23	3.2	23	E	2.6			
24	6.3	24	6.3	24	6.3	24	6.3				
25	1.4	25	1.4	25	1.4	Q5420	B	0.7			
27	6.8	27	6.8	27	6.8	27	C	0			
30	3.4	30	3.4	30	3.4	Q5610	B	2.8			
31	0.3	31	0.3	31	0.3	31	0.3				
33	0.9	33	0.9	33	0.9	33	0.9				
34	0.9	34	0.9	34	0.9	34	0.9				
35	1.3	35	1.3	35	1.3	35	1.3				
36	3.7	36	3.7	36	3.7	36	3.7				
37	5.1	37	5.1	37	5.1	37	5.1				
39	5.1	39	5.1	39	5.1	39	5.1				
41	2.6	41	2.6	41	2.6	41	2.6				

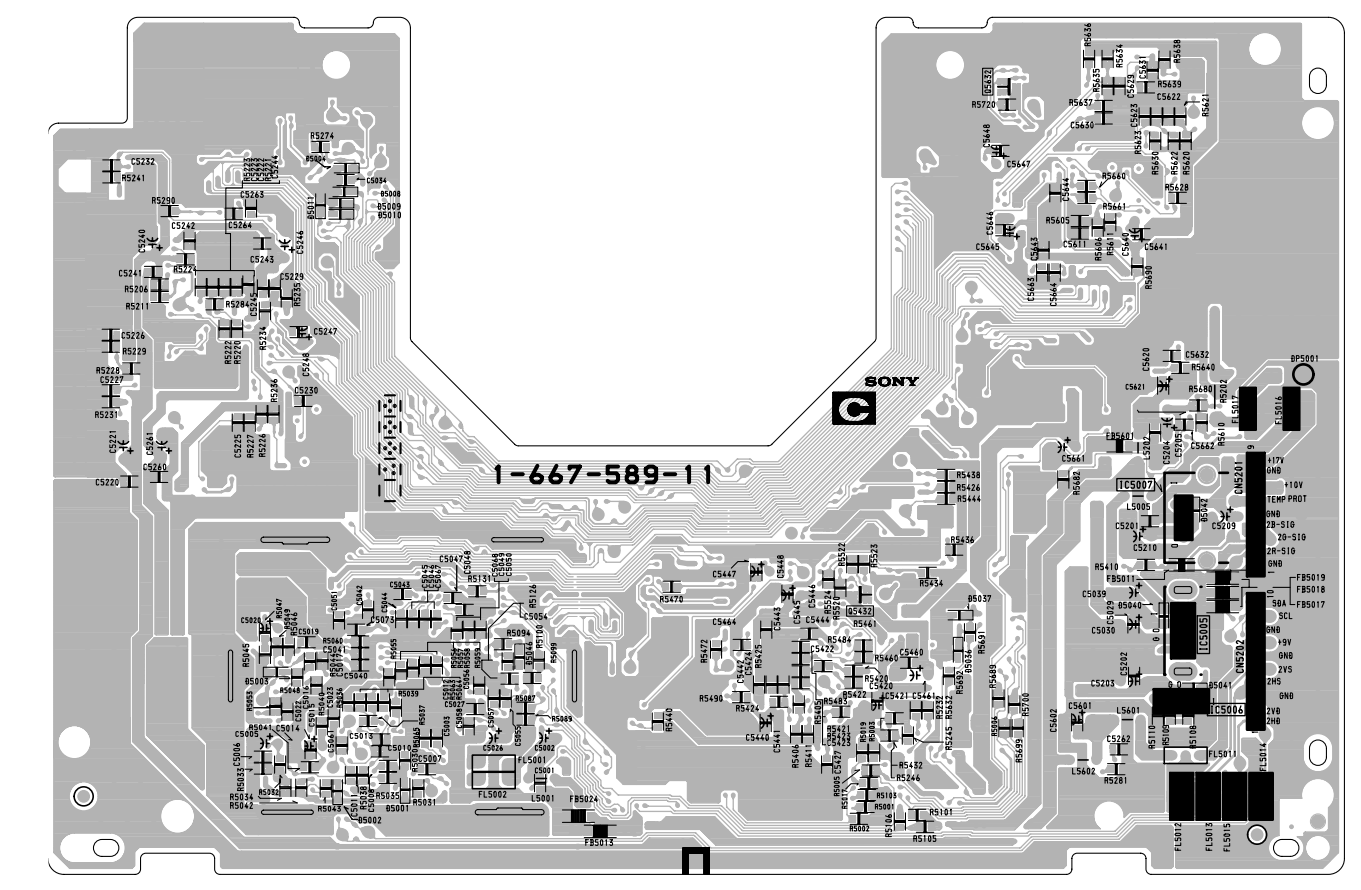


• C (2/2) BOARD VOLTAGE LIST

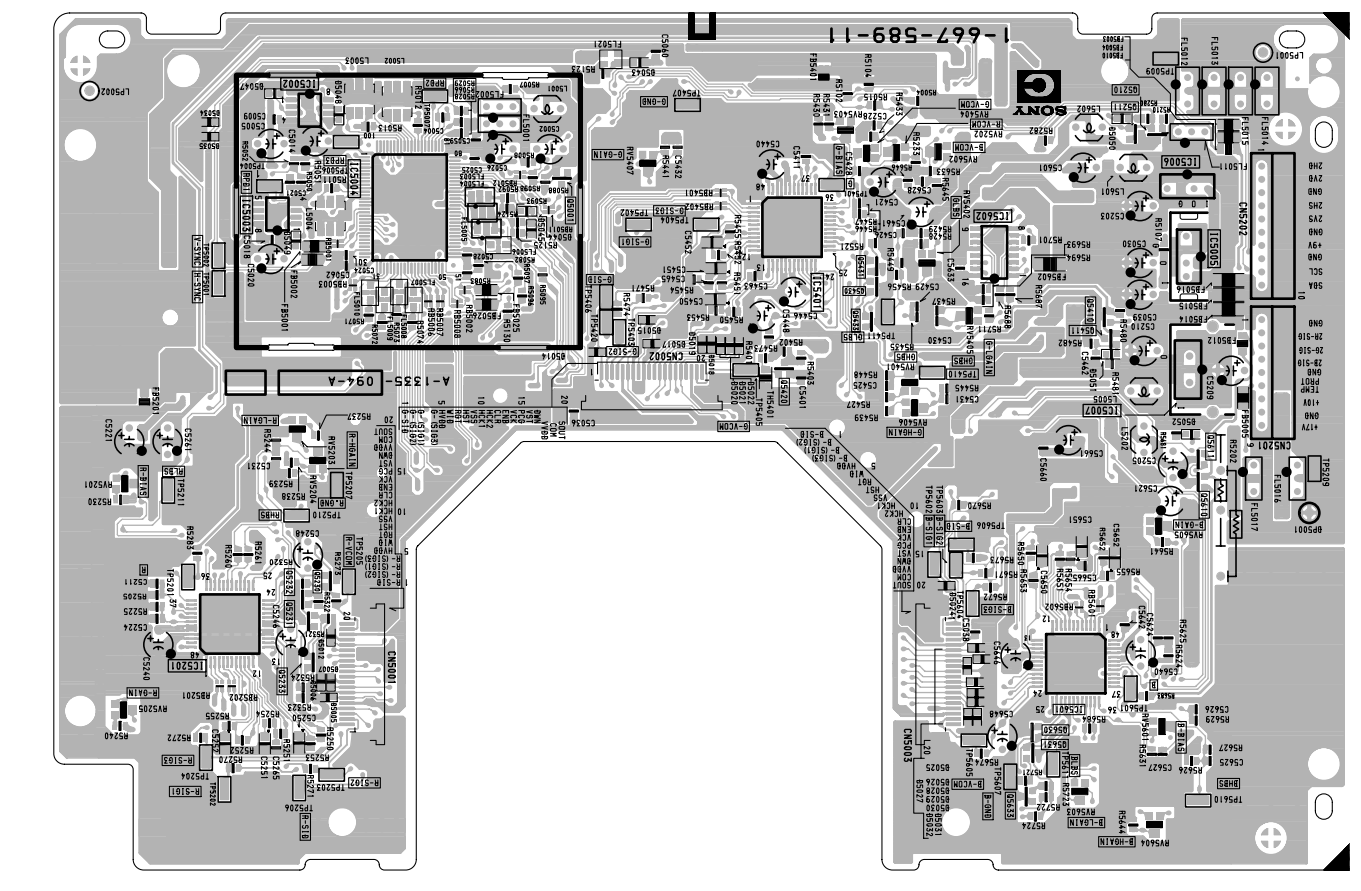
Ref.	Pin No.	Voltage [V]
IC5002	1	2.5
	2	2.5
	3	2.5
	5	0
	6	4.9
	7	4.9
	8	0
IC5003	1	1.3
	2	1.4
	3	0.8
	5	1.0
	6	0
	7	1.4
	8	0
IC5004	5	0
	6	0
	7	5.0
	8	0
	9	0
	11	5.0
	12	5.0
	16	5.4
	17	5.4
	20	5.0
	21	5.0
IC5005	22	5.0
	31	5.0
	32	0
	33	4.9
	34	0.2
	36	2.2
	37	2.2
	38	1.9
	39	1.9
	41	0.2
	42	0.6
	43	4.4
	44	2.6
	45	0.3
	46	0
	61	2.5
	64	0.4
	66	4.9
	67	1.2
68	1.2	
69	1.2	
71	5.0	
72	0.2	
73	5.0	
75	5.0	
76	5.2	
77	0.2	
80	5.2	
81	5.3	
82	4.7	
83	2.5	
84	3.3	
85	2.5	
86	2.5	
88	2.5	
89	2.5	
91	4.9	
92	5.0	
94	0	
95	5.0	
96	0	
97	0	
98	0	
IC5006	1	16.5
	4	16.2
Q5001	B	0.2
	C	5.1

C LCD DRIVER, LCD CONTROL

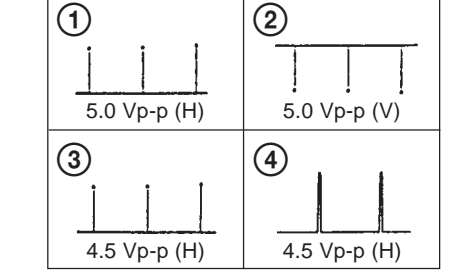
— C BOARD (Conductor Side) —



— C BOARD (Component Side) —



• C (2/2) BOARD WAVEFORMS

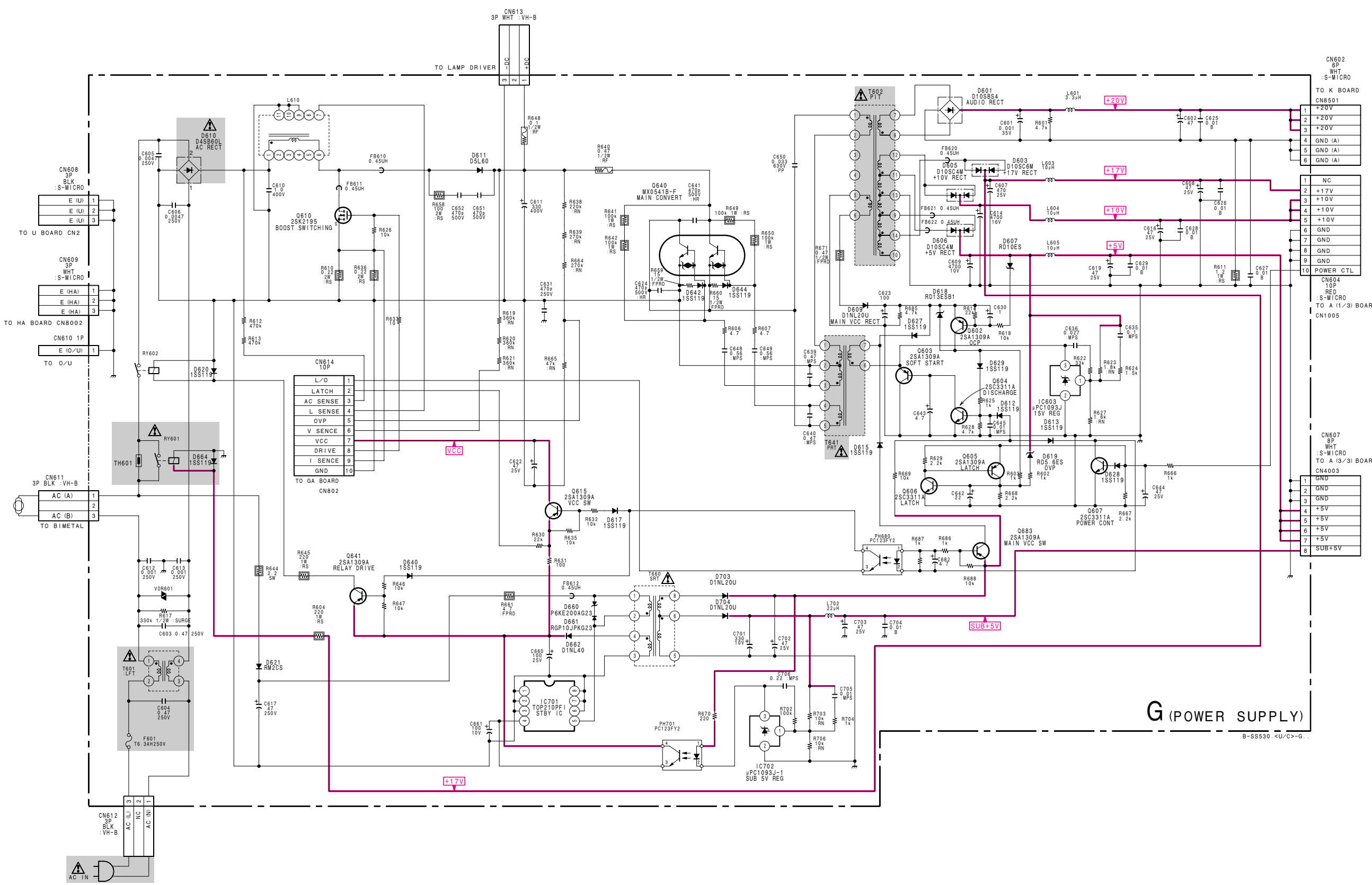


C BOARD Terminal name of semiconductors in silk screen printed circuit (*):

Ref.	*
Q5001, Q5210, Q5410, Q5420, Q5610	②
D5001-D5003, D5034, D5035, D5040, D5041, D5043, D5047-D5049	③

*: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 54)

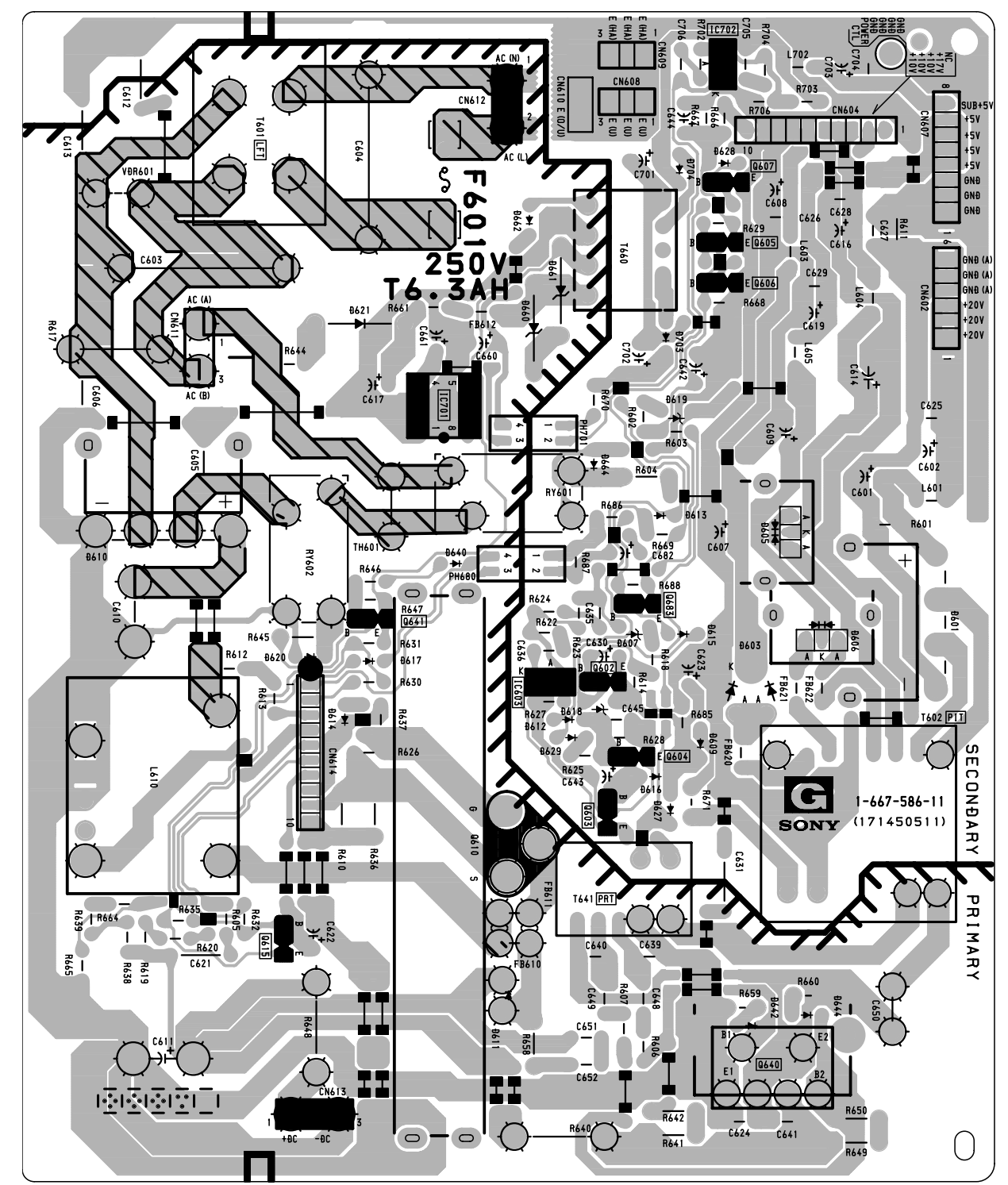
(9) Schematic Diagram of G and GA Boards



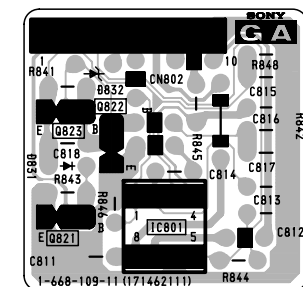
• G BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]
IC603	1	2.5	Q605	B	1.3
	3	9.3		C	0.1
				E	1.4
IC701	4	5.8	Q606	B	0.1
	5	123.6		C	1.4
IC702	1	2.5	Q607	B	0.7
	3	11.2		C	0
PH680	1	1.2	Q615	B	14.1
	2	0		E	14.9
	3	0			
	4	0.2			
PH701	1	12.3	Q640	B1	-103.1
	2	11.2		C1	0
	3	5.8		B2	-101.7
	4	16.5		C2	101.1
Q602	B	10.0	Q641	B	15.7
	C	0.1		C	16.3
	E	10.1		E	16.5
Q603	B	10.2	Q683	B	12.3
	E	9.3		C	13.1
	C	10.2		E	13.2

- G BOARD -

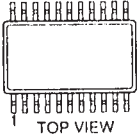


- GA BOARD -

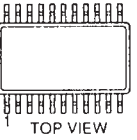


4-4. SEMICONDUCTORS

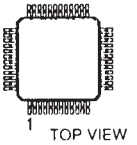
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μPC659AGS-E2



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CXA1875AM-T4
HD14053BFP
MC14053BF-T2
MC14528BF
NJM2284M



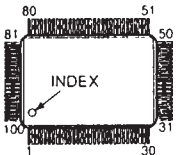
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CXA1839Q-T6
CXA2011Q
CXA3049AQ-T6



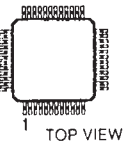
CXA2016S



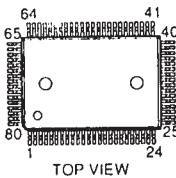
CXD2052Q
CXD2412AQ
HD6473947-IT-OTP



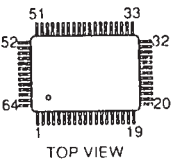
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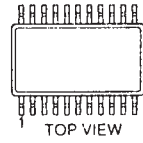
CXD2303Q



CXP853P40QA-3-035



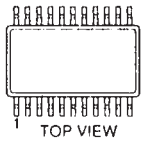
LA7217M
MC74F08M
MC74F08M-T2
TC74VHC04F
TLC2932IPW



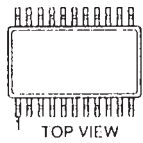
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PWR-TOP210PFI
μPC4558C



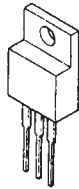
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μPD42280GU-30



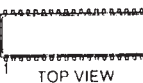
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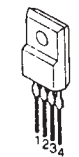
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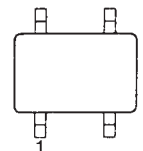
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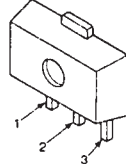
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PQ09RF11
PQ15RF16
PQ30RV11



ST9143NL
TC7S08F
TC7S08F(TE85R)
TC7S32FU(TE85R)



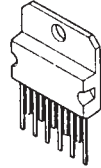
S-80743AL-A7-S
S-80743AL-A7-T1
μPC78L05T



TA8776N



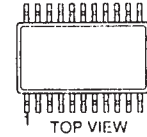
TDA2009A



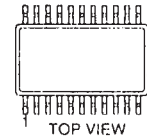
μPC1093J-1-T



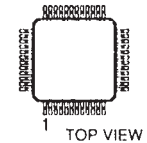
μPC1862GS-E2



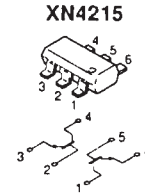
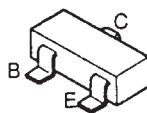
μPC4082G2
24LC16BT/SN
24LC21A/SN
24LC21T/SN



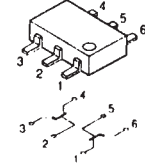
μPC6487GF-3BA



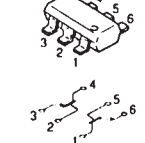
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DTC314TKH04
2SA1162G
2SB709A-QRS-TX
2SD601A-Q
2SD601A-QRS-TX



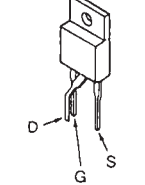
XN4401



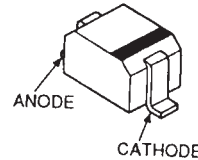
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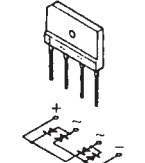
2SK2195F04



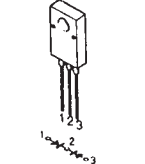
DTZ-TT11-3.9B
DTZ-TT11-5.1B
DTZ3.9B
DTZ4.7C
DTZ5.1B
HVU359TRF
MA111
MA111-TX
RD10SB-T1
RD10S-B
RD5.6SB-T1
RD5.6S-B
UDZ-TE-17-4.7B
1T363
1T363-04-T8A



D1N40-TR2
D10SBS4
D10SBS4F
D4SB60L



D10SC4M
D10SC6M



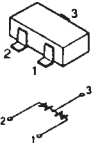
KL-W7000/W9000

D5L60

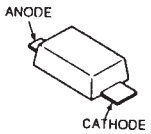
RM-Y980



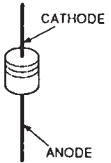
MA152WK
1SS184



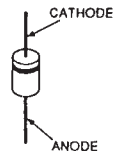
MA729
MA729-TX



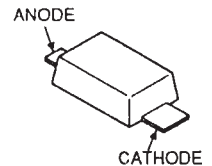
RD13ES-B1
RD22ES-B2
RD30ESB2
RD30ES-B3
RD8.2ESB1
1SS119-25
1SS119-25TD



RD5.6ESB3
RGP10JPKG23
RM2CS



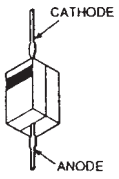
MA729
MA729-TX



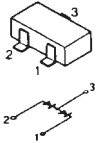
PC123F2
PC123FY2



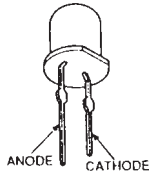
P6KE200AG23



1SS226



**TLG124A
TLO124
TLR124**



SECTION 5 EXPLODED VIEWS

KL-W7000/W9000
RM-Y980

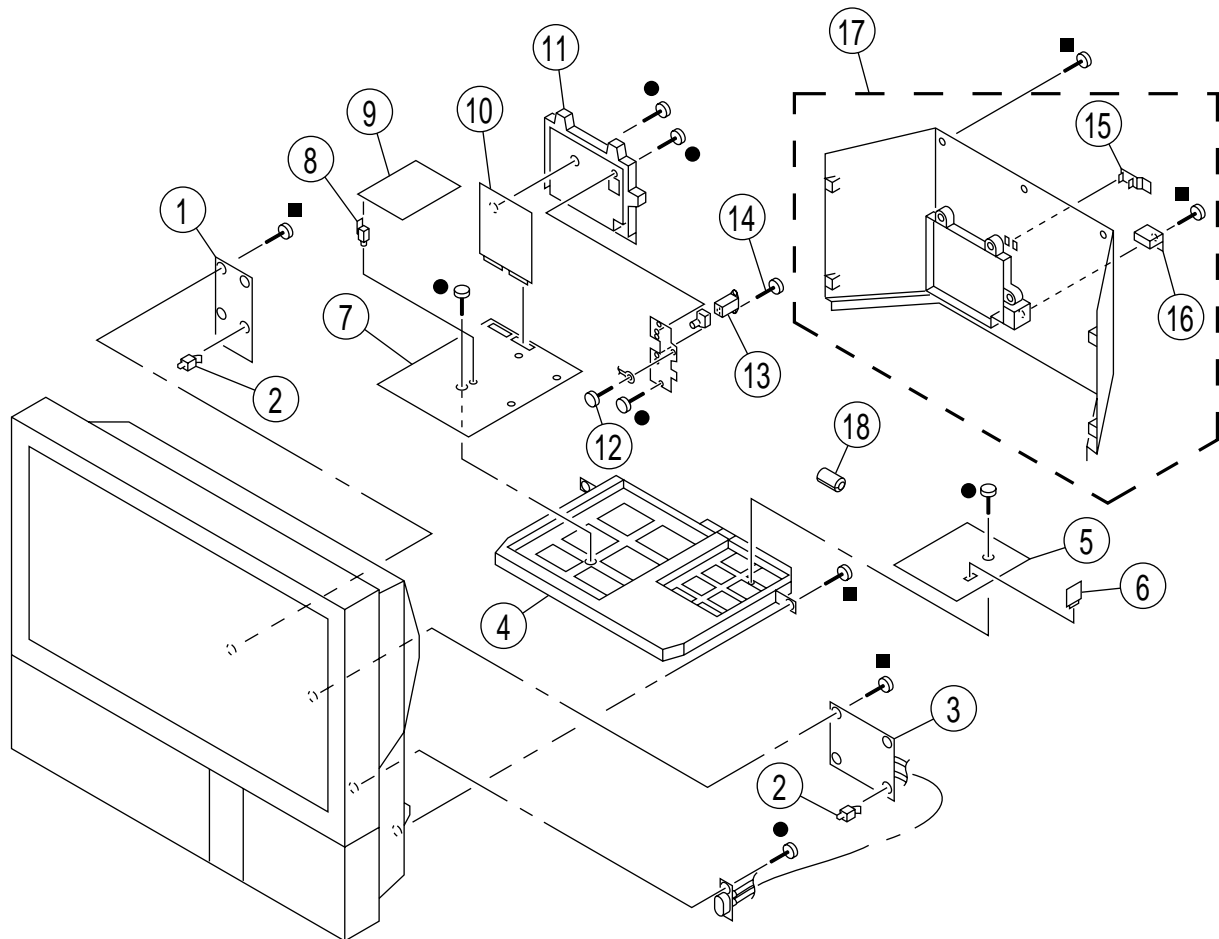
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine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

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

5-1. CHASSIS [W7000]

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



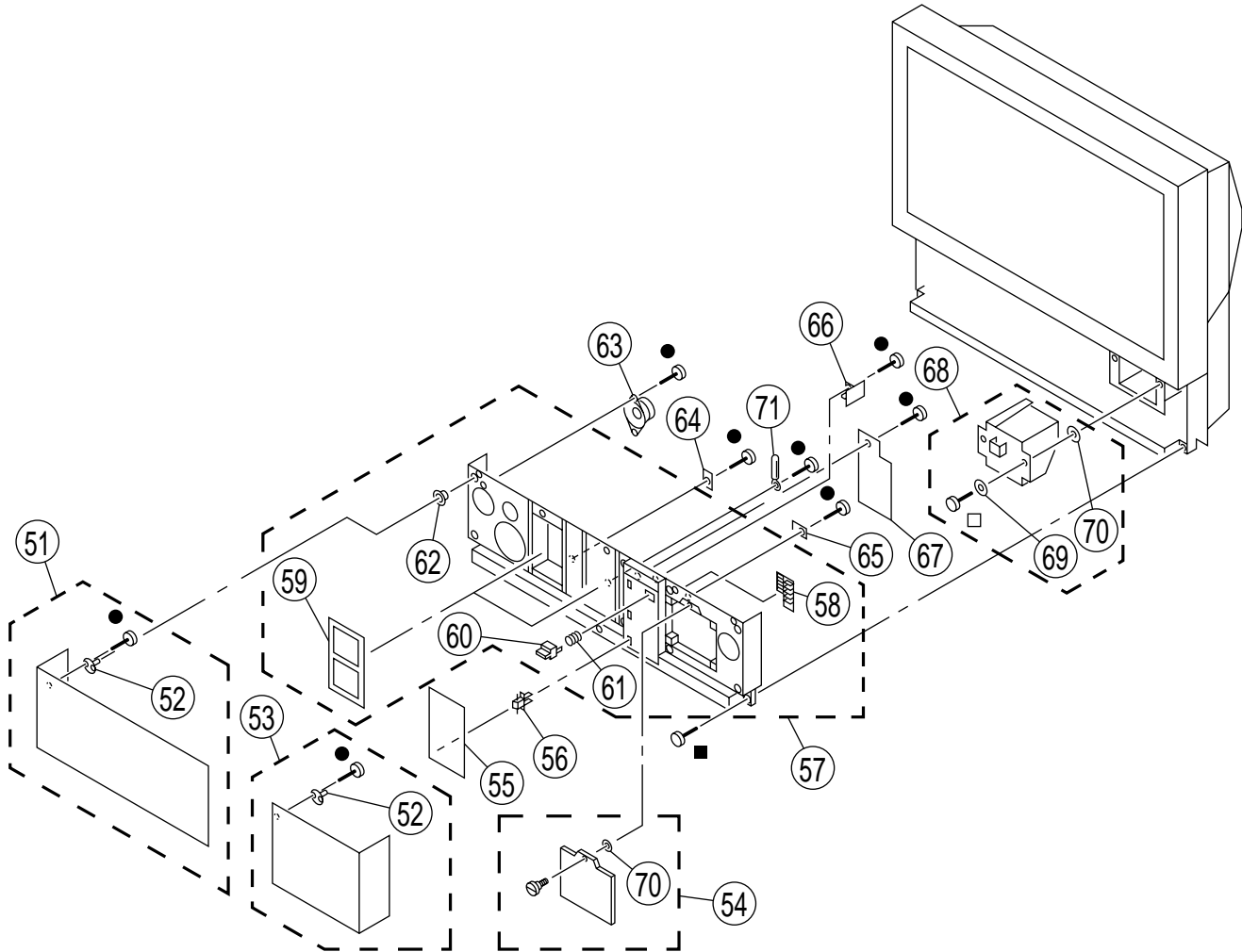
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
1	*A-1380-551-A	K BOARD, COMPLETE		11	*4-056-402-11	BRACKET, U	
2	*3-703-141-00	HOLDER, PRINTED CIRCUIT BOARD		12	4-389-025-01	SCREW (M4) (EXT TOOTH WASHER)	
3	Δ 1-473-545-13	POWER BLOCK		13	Δ 1-251-662-11	INLET, AC 3P(WITH NOISE FILTE)	
4	*4-051-332-01	BRACKET, MAIN		14	4-052-345-01	SCREW, (3X8) (+K), TAPPING	
5	*A-1311-597-A	G BOARD, COMPLETE		15	4-329-127-00	CLAMP, CORD	
6	*A-1311-631-A	GA BOARD, COMPLETE		16	4-033-719-01	BUCKLE, A	
7	*A-1298-254-A	A BOARD, COMPLETE		17	X-4035-090-1	COVER ASSY, REAR	15, 16
8	*3-657-516-00	SUPPORT, PC BOARD		18	1-543-982-11	CORE, FERRITE	
9	*A-1135-929-A	BB BOARD, COMPLETE					
10	*A-1373-632-A	U BOARD, COMPLETE					

5-2. FRONT COVER [W7000]

- 7-685-648-79 +BVTP 3X12
- 7-685-663-79 +BVTP 4X16
- 7-683-421-04 HEXAGON SOCKET BOLT 4X12

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

Les composants identifiés par un tramé et une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



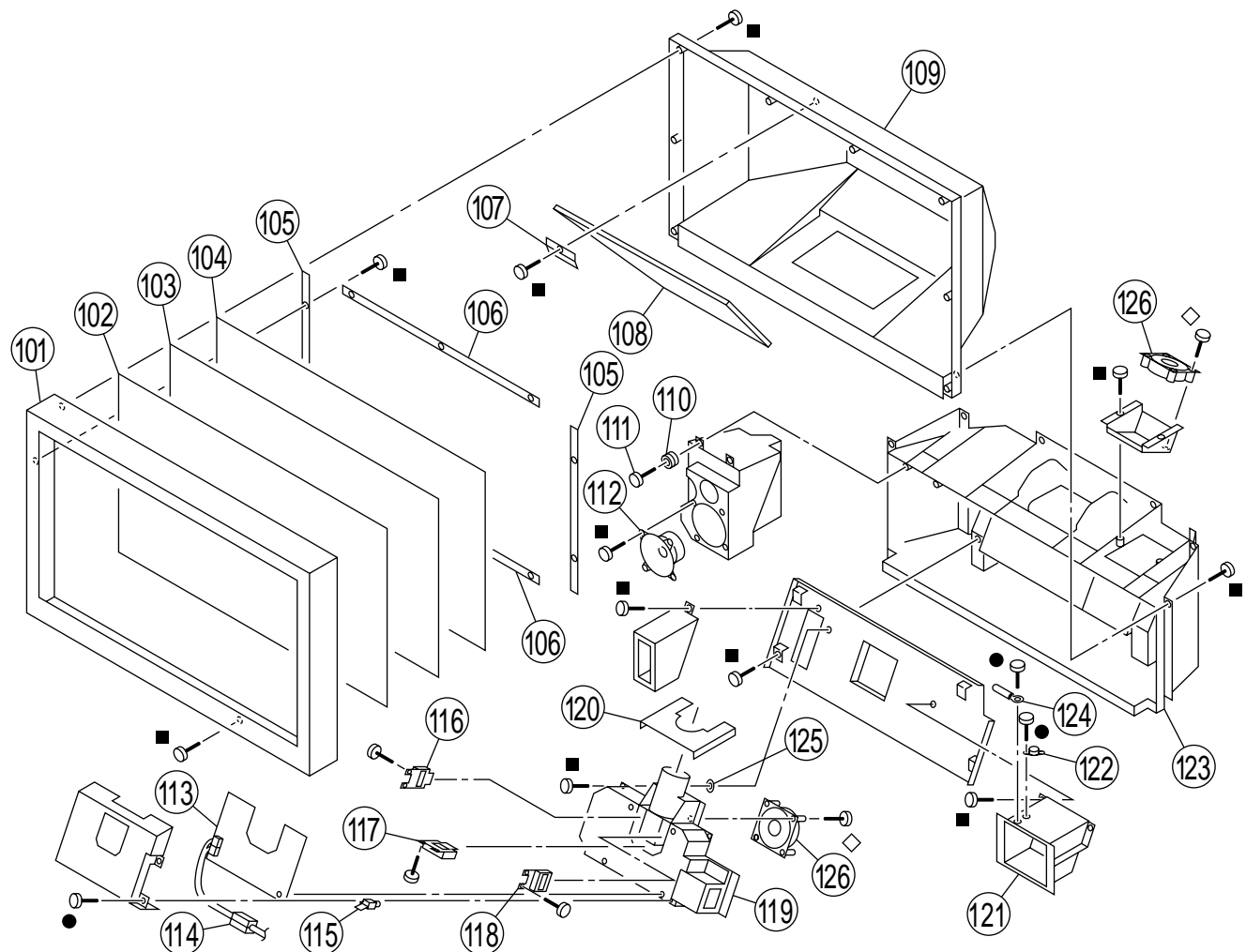
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
51	X-4033-189-1	PANEL (L) ASSY, FRONT	52	62	4-838-438-00	LATCH	
52	4-054-709-01	STRIKE		63	1-505-207-11	SPEAKER (5.7CM)	
53	X-4033-188-1	PANEL (R) ASSY, FRONT	52	64	*A-1390-763-A	TB BOARD, COMPLETE	
54	X-4035-092-1	DOOR ASSY, LAMP	70	65	*A-1390-762-A	TA BOARD, COMPLETE	
55	X-4035-091-1	DOOR ASSY		66	*A-1372-396-A	HB BOARD, COMPLETE	
56	3-703-035-11	SHAFT, LID		67	*A-1372-395-A	HA BOARD, COMPLETE	
57	X-4035-093-1	COVER ASSY, FRONT	58-62	68	\triangle A-1482-758-A	LAMP BLOCK ASSY	69, 70
58	4-051-286-31	BUTTON, MULTI		69	3-901-261-01	WASHER	
59	4-051-312-01	FILTER		70	*3-650-537-00	WASHER	
60	4-051-285-01	BUTTON, POWER		71	*4-908-882-01	CLAMP	
61	4-820-917-01	SPRING, COMPRESSION					

5-3. SCREEN MIRROR BLOCK AND OPTICS UNIT [W7000]

- 7-685-648-79 +BVTP 3X12
- 7-685-663-79 +BVTP 4X16
- ◇ 7-685-167-19 WASHER HEAD SCREW +P 4X35

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

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



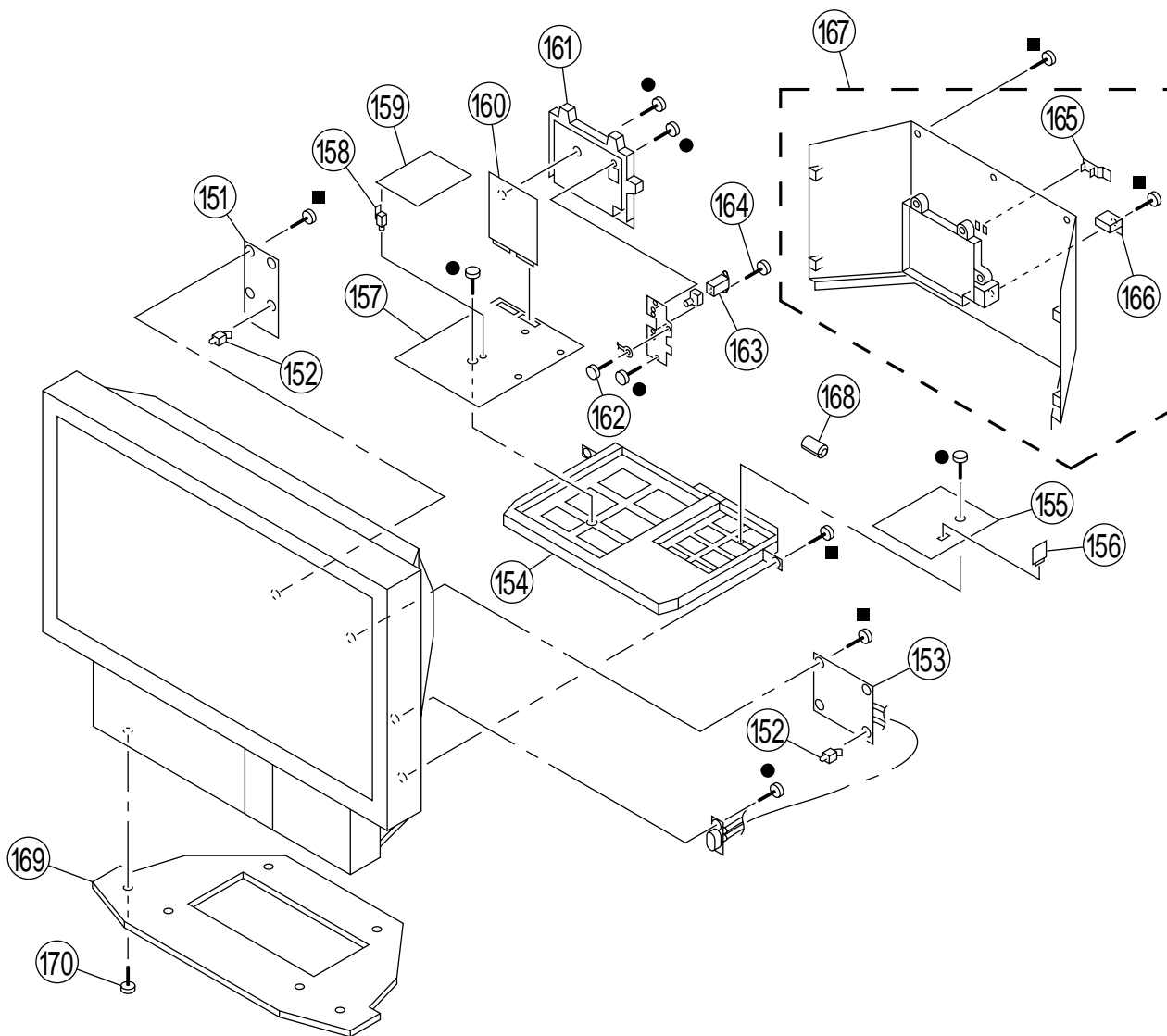
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
101	X-4035-095-1	FRAME ASSY, SCREEN		115	*3-703-141-00	HOLDER, PRINTED CIRCUIT BOARD	
102	4-056-485-11	SCREEN, CONTRAST		116	A-1501-135-A	PANEL BLOCK ASSY (B)	
103	4-051-303-31	PLATE (L), DUFFUSION		117	A-1501-209-A	PANEL BLOCK ASSY (G)	
104	4-051-297-11	PLATE (F), DUFFUSION		118	A-1501-133-A	PANEL BLOCK ASSY (R)	
105	4-049-644-01	HOLDER, SCREEN (S1)		119	Δ 1-475-523-11	OPTICAL UNIT	
106	*4-033-782-02	HOLDER (S), SCREEN		120	*4-051-825-01	SHIELD, OPTICAL	
107	*4-051-296-01	HOLDER, MIRROR		121	*4-051-343-01	BASE, LAMP	
108	4-051-283-01	MIRROR		122	Δ 1-533-746-11	THERMOSTAT	
109	X-4035-096-1	COVER ASSY, MIRROR		123	X-4035-094-1	CABINET ASSY	
110	4-374-745-11	CUSHION (A)		124	*4-908-882-01	CLAMP	
111	4-384-096-01	SCREW (4X16), TAPPING, +P		125	4-830-092-01	WASHER, FIBER	
112	1-505-208-11	SPEAKER (10CM)		126	1-698-696-11	FAN, DC	
113	*A-1335-094-A	C BOARD, COMPLETE					
114	1-543-653-11	CORE ASSY, BEAD(DIVISION TYPE)					

5-4. CHASSIS [W9000]

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

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

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



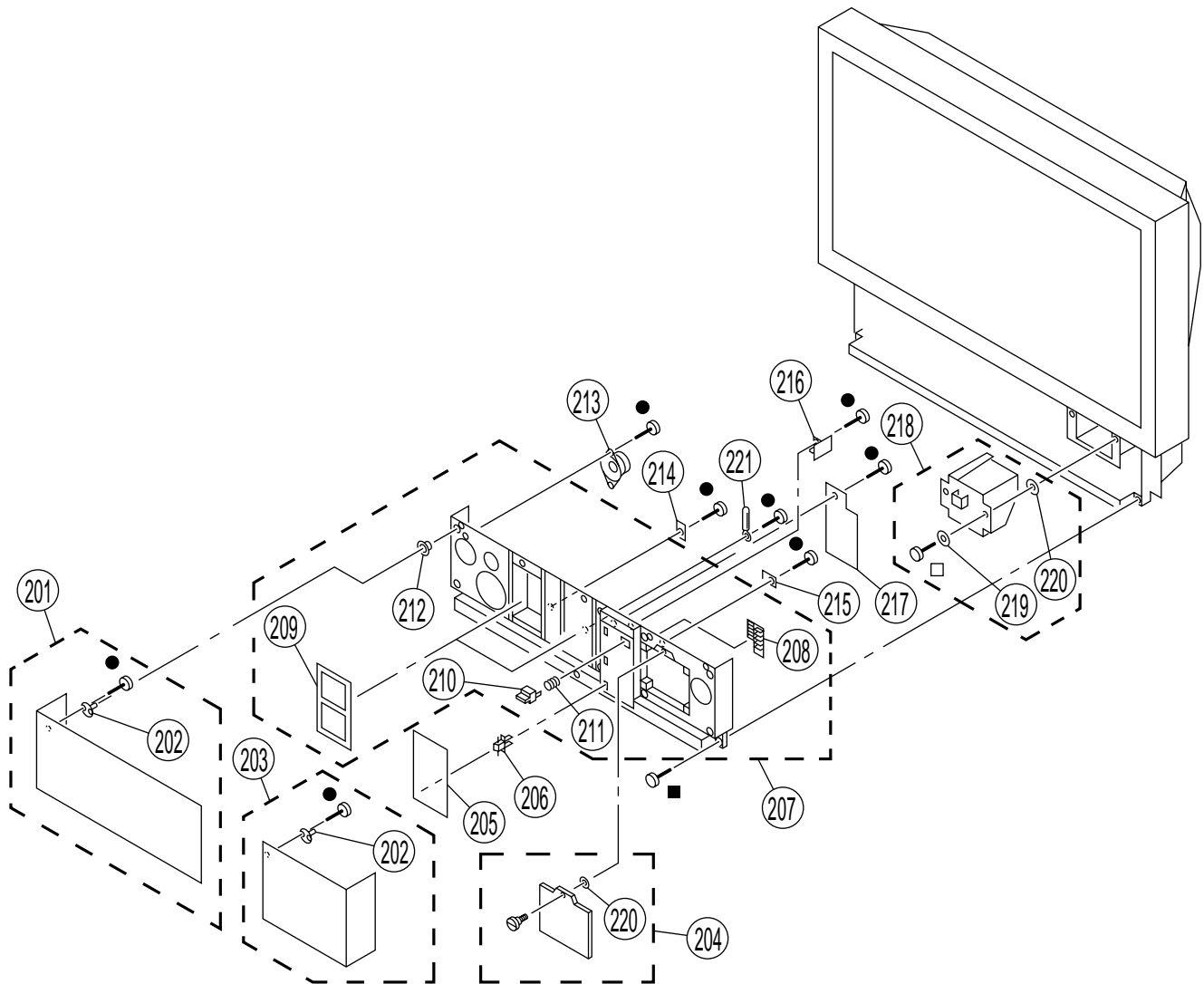
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
151	* A-1380-551-A	K BOARD, COMPLETE		161	* 4-056-402-11	BRACKET, U	
152	* 3-703-141-00	HOLDER, PRINTED CIRCUIT BOARD		162	4-389-025-01	SCREW (M4) (EXT TOOTH WASHER)	
153	Δ 1-473-545-13	POWER BLOCK		163	Δ 1-251-662-11	INLET, AC 3P(WITH NOISE FILTE)	
154	* 4-051-332-01	BRACKET, MAIN		165	4-329-127-00	CLAMP, CORD	
155	* A-1311-597-A	G BOARD, COMPLETE		164	4-052-345-01	SCREW, (3X8) (+K), TAPPING	
156	* A-1311-631-A	GA BOARD, COMPLETE		166	4-033-719-01	BUCKLE, A	
157	* A-1298-254-A	A BOARD, COMPLETE		167	X-4035-090-1	COVER ASSY, REAR	165, 166
158	* 3-657-516-00	SUPPORT, PC BOARD		168	1-543-982-11	CORE, FERRITE	
159	* A-1135-929-A	BB BOARD, COMPLETE		169	* 4-057-132-01	PEDESTAL	
160	* A-1373-632-A	U BOARD, COMPLETE		170	4-378-522-01	SCREW, TAPPING, HEXAGON HEAD	

5-5. FRONT COVER [W9000]

- 7-685-648-79 +BVTP 3X12
- 7-685-663-79 +BVTP 4X16
- 7-683-421-04 HEXAGON SOCKET BOLT 4X12

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

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



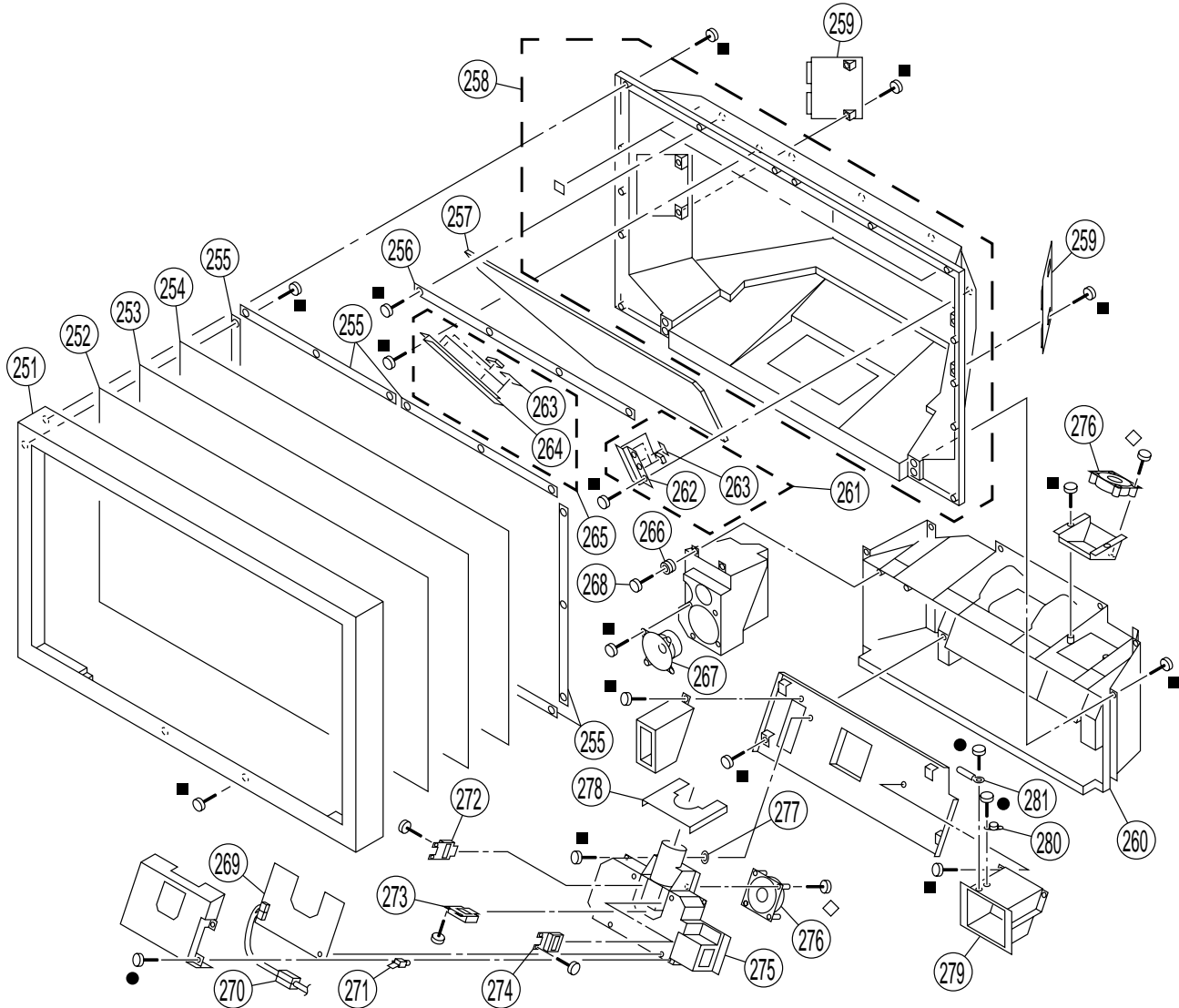
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
201	X-4033-189-1	PANEL (L) ASSY, FRONT		212	4-838-438-00	LATCH	
202	4-054-709-01	STRIKE	202	213	1-505-207-11	SPEAKER (5.7CM)	
203	X-4033-188-1	PANEL (R) ASSY, FRONT	202	214	* A-1390-763-A	TB BOARD, COMPLETE	
204	X-4035-092-1	DOOR ASSY, LAMP	220	215	* A-1390-762-A	TA BOARD, COMPLETE	
205	X-4035-091-1	DOOR ASSY		216	* A-1372-396-A	HB BOARD, COMPLETE	
206	3-703-035-11	SHAFT, LID		217	* A-1372-395-A	HA BOARD, COMPLETE	
207	X-4035-093-1	COVER ASSY, FRONT	208-212	218	Δ A-1501-247-A	LAMP BLOCK ASSY	219, 220
208	4-051-286-31	BUTTON, MULTI		219	3-901-261-01	WASHER	
209	4-051-312-01	FILTER		220	* 3-650-537-00	WASHER	
210	4-051-285-01	BUTTON, POWER		221	* 4-908-882-01	CLAMP	
211	4-820-917-01	SPRING, COMPRESSION					

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

Les composants identifiés par un trame et une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

5-6. SCREEN MIRROR BLOCK AND OPTICS UNIT [W9000]

- 7-685-648-79 +BVTP 3X12
- 7-685-663-79 +BVTP 4X16
- ◇ 7-685-167-19 WASHER HEAD SCREW +P 4X35



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
251	X-4035-095-1	FRAME ASSY, SCREEN		267	1-505-208-11	SPEAKER (10CM)	
252	4-056-485-11	SCREEN, CONTRAST		268	4-384-096-01	SCREW (4X16), TAPPING, +P	
253	4-054-229-11	PLATE (L), DUFFUSION		269	*A-1335-094-A	C BOARD, COMPLETE	
254	4-054-230-11	PLATE (F), DUFFUSION		270	1-543-653-11	CORE ASSY, BEAD(DIVISION TYPE)	
255	*4-055-161-01	HOLDER (50), SCREEN		271	*3-703-141-00	HOLDER, PRINTED CIRCUIT BOARD	
256	*4-037-351-01	HOLDER, MIRROR		272	A-1501-135-A	PANEL BLOCK ASSY (B)	
257	4-055-162-11	MIRROR (50)		273	A-1501-134-A	PANEL BLOCK ASSY (G)	
258	X-4035-096-1	COVER ASSY, MIRROR		274	A-1501-133-A	PANEL BLOCK ASSY (R)	
259	4-055-165-11	COVER (50), SERVICE		275	\triangle *1-475-523-11	OPTICAL UNIT	
260	X-4035-094-1	CABINET ASSY		276	1-698-696-11	FAN, DC	
261	*X-4033-947-1	HOLDER (R) ASSY, MIRROR	262, 263	277	4-830-092-01	WASHER, FIBER	
262	4-055-164-01	HOLDER (R), MIRROR		278	*4-051-825-01	SHIELD, OPTICAL	
263	4-864-324-11	SPACER		279	*4-051-343-01	BASE, LAMP	
264	4-055-163-01	HOLDER (L), MIRROR		280	\triangle 1-533-746-11	THERMOSTAT	
265	*X-4033-946-1	HOLDER (L) ASSY, MIRROR	263, 264	281	*4-908-882-01	CLAMP	
266	4-374-745-11	CUSHION (A)					

SECTION 6 ELECTRICAL PARTS LIST

KL-W7000/W9000

RM-Y980



NOTE:

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

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

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

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- RESISTORS
- All resistors are in ohms
- F : nonflammable
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
* A-1135-929-ABB BOARD, COMPLETE *****				C3043	1-163-038-91	CERAMIC CHIP 0.1MF	25V
				C3044	1-163-038-91	CERAMIC CHIP 0.1MF	25V
				C3045	1-163-038-91	CERAMIC CHIP 0.1MF	25V
4-042-930-01 CASE (BOTTOM LID), SHIELD				C3046	1-163-038-91	CERAMIC CHIP 0.1MF	25V
<CAPACITOR>				C3047	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C3001	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3048	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C3002	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3049	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C3003	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V	C3050	1-127-532-11	ELECT(SOLID) 47MF	20% 6.3V
C3004	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V	C3051	1-126-967-11	ELECT 47MF	20% 16V
C3005	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3052	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C3006	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3053	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C3007	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3054	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C3008	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V	C3055	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C3009	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V	C3056	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C3010	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3057	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C3011	1-163-222-11	CERAMIC CHIP 5PF	0.25PF 50V	C3058	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C3012	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3060	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C3013	1-163-222-11	CERAMIC CHIP 5PF	0.25PF 50V	C3061	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C3014	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3062	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C3016	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3071	1-126-935-11	ELECT 470MF	20% 16V
C3017	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3072	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C3019	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3202	1-163-239-11	CERAMIC CHIP 33PF	5% 50V
C3020	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3204	1-126-935-11	ELECT 470MF	20% 16V
C3021	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3205	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C3022	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3213	1-126-935-11	ELECT 470MF	20% 16V
C3023	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3214	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C3024	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3215	1-126-967-11	ELECT 47MF	20% 16V
C3025	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3216	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C3026	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3221	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C3027	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3222	1-126-935-11	ELECT 470MF	20% 16V
C3028	1-109-982-11	CERAMIC CHIP 1MF	10% 10V	C3227	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C3029	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3228	1-126-967-11	ELECT 47MF	20% 16V
C3030	1-109-982-11	CERAMIC CHIP 1MF	10% 10V	C3229	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C3031	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3230	1-126-967-11	ELECT 47MF	20% 16V
C3032	1-109-982-11	CERAMIC CHIP 1MF	10% 10V	C3232	1-126-967-11	ELECT 47MF	20% 16V
C3035	1-126-964-11	ELECT 10MF	20% 50V	C3233	1-126-967-11	ELECT 47MF	20% 16V
C3036	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3234	1-126-967-11	ELECT 47MF	20% 16V
C3037	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3235	1-126-967-11	ELECT 47MF	20% 16V
C3038	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3236	1-126-967-11	ELECT 47MF	20% 16V
C3039	1-126-967-11	ELECT 47MF	20% 16V	C3237	1-126-967-11	ELECT 47MF	20% 16V
C3041	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3238	1-126-967-11	ELECT 47MF	20% 16V
C3042	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C3240	1-126-964-11	ELECT 10MF	20% 50V
				C3241	1-126-964-11	ELECT 10MF	20% 50V



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R3003	1-216-053-00	METAL GLAZE 1.5K	5% 1/10W	R3236	1-216-643-11	METAL CHIP 470	0.50% 1/10W
R3004	1-216-041-00	METAL GLAZE 470	5% 1/10W	R3237	1-216-041-00	METAL GLAZE 470	5% 1/10W
R3005	1-216-295-91	SHORT 0		R3238	1-216-041-00	METAL GLAZE 470	5% 1/10W
R3007	1-216-117-00	METAL GLAZE 680K	5% 1/10W	R3239	1-216-041-00	METAL GLAZE 470	5% 1/10W
R3008	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W	R3240	1-216-295-91	SHORT 0	
R3009	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R3241	1-216-295-91	SHORT 0	
R3010	1-216-041-00	METAL GLAZE 470	5% 1/10W	R3242	1-216-295-91	SHORT 0	
R3011	1-216-295-91	SHORT 0		R3252	1-216-647-11	METAL CHIP 680	0.50% 1/10W
R3013	1-216-013-00	METAL GLAZE 33	5% 1/10W	R3253	1-216-029-00	METAL GLAZE 150	5% 1/10W
R3014	1-216-121-91	METAL GLAZE 1M	5% 1/10W	R3254	1-216-647-11	METAL CHIP 680	0.50% 1/10W
R3015	1-216-025-91	METAL GLAZE 100	5% 1/10W	R3263	1-216-295-91	SHORT 0	
R3016	1-216-025-91	METAL GLAZE 100	5% 1/10W	R3264	1-216-295-91	SHORT 0	
R3017	1-216-025-91	METAL GLAZE 100	5% 1/10W	R3265	1-216-025-91	METAL GLAZE 100	5% 1/10W
R3018	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R3266	1-216-025-91	METAL GLAZE 100	5% 1/10W
R3019	1-216-041-00	METAL GLAZE 470	5% 1/10W	R3267	1-216-025-91	METAL GLAZE 100	5% 1/10W
R3020	1-216-295-91	SHORT 0		R3269	1-216-029-00	METAL GLAZE 150	5% 1/10W
R3021	1-216-041-00	METAL GLAZE 470	5% 1/10W	R3271	1-216-295-91	SHORT 0	
R3022	1-216-295-91	SHORT 0		R3272	1-216-029-00	METAL GLAZE 150	5% 1/10W
R3023	1-216-295-91	SHORT 0		R3273	1-216-029-00	METAL GLAZE 150	5% 1/10W
R3029	1-216-025-91	METAL GLAZE 100	5% 1/10W	R3274	1-216-295-91	SHORT 0	
R3030	1-216-025-91	METAL GLAZE 100	5% 1/10W	R3275	1-216-295-91	SHORT 0	
R3032	1-216-633-11	METAL CHIP 180	0.50% 1/10W	R3276	1-216-029-00	METAL GLAZE 150	5% 1/10W
R3037	1-216-025-91	METAL GLAZE 100	5% 1/10W	R3280	1-216-033-00	METAL GLAZE 220	5% 1/10W
R3038	1-216-633-11	METAL CHIP 180	0.50% 1/10W	R3281	1-216-033-00	METAL GLAZE 220	5% 1/10W
R3044	1-216-651-11	METAL CHIP 1K	0.50% 1/10W	R3282	1-216-009-00	METAL GLAZE 22	5% 1/10W
R3045	1-216-651-11	METAL CHIP 1K	0.50% 1/10W	R3283	1-216-009-00	METAL GLAZE 22	5% 1/10W
R3047	1-216-121-91	METAL GLAZE 1M	5% 1/10W	R3284	1-216-041-00	METAL GLAZE 470	5% 1/10W
R3048	1-216-651-11	METAL CHIP 1K	0.50% 1/10W	R3285	1-216-041-00	METAL GLAZE 470	5% 1/10W
R3049	1-216-295-91	SHORT 0		R3286	1-216-295-91	SHORT 0	
R3051	1-216-633-11	METAL CHIP 180	0.50% 1/10W	R3287	1-216-295-91	SHORT 0	
R3201	1-216-295-91	SHORT 0		R3288	1-216-649-11	METAL CHIP 820	0.50% 1/10W
R3202	1-216-295-91	SHORT 0		R3289	1-216-649-11	METAL CHIP 820	0.50% 1/10W
R3203	1-216-295-91	SHORT 0		R3301	1-216-295-91	SHORT 0	
R3204	1-216-033-00	METAL GLAZE 220	5% 1/10W	R3302	1-216-295-91	SHORT 0	
R3205	1-216-033-00	METAL GLAZE 220	5% 1/10W	R3305	1-216-025-91	METAL GLAZE 100	5% 1/10W
R3206	1-216-033-00	METAL GLAZE 220	5% 1/10W	R3306	1-216-013-00	METAL GLAZE 33	5% 1/10W
R3213	1-216-053-00	METAL GLAZE 1.5K	5% 1/10W	R3307	1-216-295-91	SHORT 0	
R3214	1-216-053-00	METAL GLAZE 1.5K	5% 1/10W	R3308	1-216-013-00	METAL GLAZE 33	5% 1/10W
R3215	1-216-053-00	METAL GLAZE 1.5K	5% 1/10W	R3309	1-216-607-11	METAL CHIP 15	0.50% 1/10W
R3216	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R3311	1-216-607-11	METAL CHIP 15	0.50% 1/10W
R3217	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R3316	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R3218	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R3317	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R3219	1-216-009-00	METAL GLAZE 22	5% 1/10W	R3318	1-216-625-11	METAL CHIP 82	0.50% 1/10W
R3220	1-216-009-00	METAL GLAZE 22	5% 1/10W	R3319	1-216-627-11	METAL CHIP 100	0.50% 1/10W
R3221	1-216-009-00	METAL GLAZE 22	5% 1/10W	R3321	1-216-627-11	METAL CHIP 100	0.50% 1/10W
R3225	1-216-033-00	METAL GLAZE 220	5% 1/10W	R3322	1-216-639-11	METAL CHIP 330	0.50% 1/10W
R3226	1-216-033-00	METAL GLAZE 220	5% 1/10W	R3325	1-216-295-91	SHORT 0	
R3227	1-216-033-00	METAL GLAZE 220	5% 1/10W	R3332	1-216-013-00	METAL GLAZE 33	5% 1/10W
R3228	1-216-029-00	METAL GLAZE 150	5% 1/10W	R3334	1-216-295-91	SHORT 0	
R3229	1-216-029-00	METAL GLAZE 150	5% 1/10W	R3351	1-216-607-11	METAL CHIP 15	0.50% 1/10W
R3230	1-216-029-00	METAL GLAZE 150	5% 1/10W	R3352	1-216-607-11	METAL CHIP 15	0.50% 1/10W
R3231	1-216-647-11	METAL CHIP 680	0.50% 1/10W	R3360	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R3232	1-216-647-11	METAL CHIP 680	0.50% 1/10W	R3361	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R3233	1-216-651-11	METAL CHIP 1K	0.50% 1/10W	R3362	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R3234	1-216-649-11	METAL CHIP 820	0.50% 1/10W	R3363	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R3235	1-216-649-11	METAL CHIP 820	0.50% 1/10W	R3364	1-216-049-91	METAL GLAZE 1K	5% 1/10W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R3365	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1120	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R3366	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1121	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
R3367	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1126	1-107-909-11	ELECT 47MF	20% 10V
R3368	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1127	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R3369	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1128	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
R3370	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1129	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
R3371	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1130	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R3372	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1131	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
R3373	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1132	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R3374	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1133	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
R3375	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1134	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
R3376	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1135	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
R3377	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1136	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
R3378	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1137	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
R3379	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1140	1-163-259-91	CERAMIC CHIP 220PF	5% 50V
R3380	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1141	1-104-760-11	CERAMIC CHIP 0.047MF	10% 50V
R3381	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1142	1-126-960-11	ELECT 1MF	20% 50V
R3382	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1144	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R3383	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C1145	1-163-259-91	CERAMIC CHIP 220PF	5% 50V
<CRYSTAL>				C1146	1-126-960-11	ELECT 1MF	20% 50V
X3001	1-767-262-11	VIBRATOR, CRYSTAL		C1401	1-126-967-11	ELECT 47MF	20% 16V
*****				C1402	1-163-038-91	CERAMIC CHIP 0.1MF	25V
* A-1298-254-AA BOARD, COMPLETE				C1403	1-163-038-91	CERAMIC CHIP 0.1MF	25V
*****				C1404	1-126-767-11	ELECT 1000MF	20% 16V
4-382-854-01	SCREW (M3X8), P, SW (+) (IC1007)			C1409	1-126-961-11	ELECT 2.2MF	20% 50V
*****				C1410	1-126-961-11	ELECT 2.2MF	20% 50V
<CAPACITOR>				C1411	1-126-960-11	ELECT 1MF	20% 50V
C1001	1-104-664-11	ELECT 47MF	20% 25V	C1412	1-126-960-11	ELECT 1MF	20% 50V
C1004	1-126-967-11	ELECT 47MF	20% 16V	C1413	1-126-964-11	ELECT 10MF	20% 50V
C1007	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C1414	1-126-964-11	ELECT 10MF	20% 50V
C1013	1-104-664-11	ELECT 47MF	20% 25V	C1415	1-126-964-11	ELECT 10MF	20% 50V
C1014	1-104-664-11	ELECT 47MF	20% 25V	C1416	1-126-963-11	ELECT 4.7MF	20% 50V
C1015	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C1417	1-126-964-11	ELECT 10MF	20% 50V
C1016	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C1418	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C1017	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C1419	1-126-964-11	ELECT 10MF	20% 50V
C1018	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C1434	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C1019	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C1435	1-130-489-00	FILM 0.033MF	5% 50V
C1020	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C1436	1-137-399-11	FILM 0.1MF	5% 50V
C1021	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C1437	1-130-489-00	FILM 0.033MF	5% 50V
C1022	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C1438	1-130-489-00	FILM 0.033MF	5% 50V
C1102	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C1439	1-104-664-11	ELECT 47MF	20% 25V
C1103	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C1440	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C1104	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C1442	1-126-934-11	ELECT 220MF	20% 16V
C1107	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C1443	1-163-259-91	CERAMIC CHIP 220PF	5% 50V
C1108	1-126-925-11	ELECT 470MF	20% 10V	C1601	1-126-967-11	ELECT 47MF	20% 10V
C1110	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1602	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C1113	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1603	1-126-967-11	ELECT 47MF	20% 10V
C1114	1-163-237-11	CERAMIC CHIP 27PF	5% 50V	C1604	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C1117	1-163-237-11	CERAMIC CHIP 27PF	5% 50V	C1605	1-163-243-11	CERAMIC CHIP 47PF	5% 50V
				C1608	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
				C1609	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
				C1610	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
				C1611	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
				C1612	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
				C1613	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
				C1614	1-163-251-11	CERAMIC CHIP 100PF	5% 50V



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C1616	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C2052	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C1617	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C2053	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1618	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C2054	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1619	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C2055	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1620	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C2057	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C1621	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C2058	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C2001	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C2059	1-107-909-11	ELECT 47MF	20% 10V
C2002	1-107-909-11	ELECT 47MF	20% 16V	C2060	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C2003	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C2062	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C2004	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C2063	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C2005	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C2064	1-107-909-11	ELECT 47MF	20% 10V
C2006	1-107-715-11	ELECT 22MF	20% 25V	C2065	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C2007	1-126-964-11	ELECT 10MF	20% 50V	C2066	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C2008	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C2067	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C2009	1-163-231-11	CERAMIC CHIP 15PF	5% 50V	C2068	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C2010	1-107-906-11	ELECT 10MF	20% 50V	C2069	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C2011	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C2070	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C2012	1-107-906-11	ELECT 10MF	20% 50V	C2071	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C2013	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C2072	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C2014	1-128-526-11	ELECT 100MF	20% 10V	C2073	1-107-909-11	ELECT 47MF	20% 10V
C2015	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C2075	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C2017	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C2076	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C2018	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C2077	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C2019	1-107-909-11	ELECT 47MF	20% 10V	C2078	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C2020	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C2079	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C2021	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C2080	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C2022	1-107-902-11	ELECT 1MF	20% 50V	C2081	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C2023	1-107-902-11	ELECT 1MF	20% 50V	C2082	1-107-906-11	ELECT 10MF	20% 50V
C2024	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C2083	1-107-909-11	ELECT 47MF	20% 10V
C2025	1-107-909-11	ELECT 47MF	20% 10V	C2084	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C2026	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C2085	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C2027	1-163-227-11	CERAMIC CHIP 10PF	0.5PF 50V	C2086	1-107-902-11	ELECT 1MF	20% 50V
C2028	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C2087	1-163-139-00	CERAMIC CHIP 820PF	10% 50V
C2029	1-107-909-11	ELECT 47MF	20% 10V	C2088	1-107-906-11	ELECT 10MF	20% 50V
C2030	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C2090	1-107-909-11	ELECT 47MF	20% 10V
C2031	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C2091	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C2032	1-163-137-00	CERAMIC CHIP 680PF	5% 50V	C2093	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C2033	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C2096	1-107-909-11	ELECT 47MF	20% 10V
C2034	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C2097	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C2035	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C2098	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C2036	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C2099	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C2037	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C2101	1-107-909-11	ELECT 47MF	20% 16V
C2038	1-163-259-91	CERAMIC CHIP 220PF	5% 50V	C2102	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C2039	1-163-145-00	CERAMIC CHIP 0.0015MF	5% 50V	C2103	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C2040	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C2104	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
C2041	1-163-263-11	CERAMIC CHIP 330PF	5% 50V	C2106	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V
C2042	1-107-909-11	ELECT 47MF	20% 10V	C2107	1-107-902-11	ELECT 1MF	20% 50V
C2043	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C2108	1-164-343-11	CERAMIC CHIP 0.056MF	10% 25V
C2044	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C2109	1-107-909-11	ELECT 47MF	20% 10V
C2045	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C2110	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C2046	1-107-905-11	ELECT 4.7MF	20% 50V	C2112	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C2047	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C2115	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C2048	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C2116	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C2049	1-107-909-11	ELECT 47MF	20% 10V	C2117	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C2050	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C2118	1-107-906-11	ELECT 10MF	20% 50V
C2051	1-107-909-11	ELECT 47MF	20% 10V	C2119	1-107-906-11	ELECT 10MF	20% 50V



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
		<DIODE>					
D1011	8-719-404-49	DIODE MA111		FL2020	1-233-520-21	FILTER, EMI	
D1025	8-719-404-49	DIODE MA111		FL2021	1-233-520-21	FILTER, EMI	
D1031	8-719-158-15	ZENER DIODE RD5.6SB		FL2022	1-233-520-21	FILTER, EMI	
D1032	8-719-158-15	ZENER DIODE RD5.6SB					
D1102	8-719-404-49	DIODE MA111				<IC>	
D1103	8-719-404-49	DIODE MA111		IC1007	8-759-390-51	IC UPC2409AHF	
D1104	8-719-158-15	ZENER DIODE RD5.6SB		IC1008	8-759-054-12	IC PQ09RA1	
D1105	8-719-158-15	ZENER DIODE RD5.6SB		IC1101	8-759-487-96	IC HD6473947-IT-OTP	
D1401	8-719-158-39	ZENER DIODE RD10SB		IC1102	8-759-352-91	IC PST9143NL	
D1402	8-719-158-39	ZENER DIODE RD10SB		IC1103	8-759-454-79	IC 24LC16BT/SN	
D1405	8-719-404-49	DIODE MA111		IC1106	8-759-013-86	IC MC74HC4066F	
D1406	8-719-404-49	DIODE MA111		IC1401	8-759-172-60	IC TA8776N	
D1407	8-719-404-49	DIODE MA111		IC1601	8-752-890-27	IC CXP853P40AQ-3-035	
D1408	8-719-404-49	DIODE MA111		IC1602	8-759-042-02	IC S-80743AL-A7-S	
D1601	8-719-801-78	DIODE 1SS184		IC2001	8-759-161-24	IC UPC659AGS-E2	
D1605	8-719-404-49	DIODE MA111		IC2003	8-759-296-53	IC UPC1862GS-E2	
D1606	8-719-404-49	DIODE MA111		IC2004	8-752-376-20	IC CXD2052Q	
D2001	8-719-404-49	DIODE MA111		IC2006	8-759-360-80	IC UPD6487GF-3BA	
D2002	8-719-031-68	DIODE HVU359TRF		IC2007	8-759-033-03	IC MC74F08M	
D2004	8-719-976-88	ZENER DIODE DTZ3.9B		IC2008	8-759-167-20	IC UPD42280GU-30	
D2005	8-719-976-88	ZENER DIODE DTZ3.9B		IC2009	8-759-297-80	IC MSM514222B-30GS-KR1	
D2006	8-719-404-49	DIODE MA111		IC2011	8-759-083-11	IC LA7217M	
D2008	8-719-404-49	DIODE MA111		IC2012	8-759-081-44	IC TC74VHC04F	
D2009	8-719-404-49	DIODE MA111		IC2101	8-759-150-61	IC UPC78L05T	
D2010	8-719-404-49	DIODE MA111		IC2102	8-759-150-61	IC UPC78L05T	
D2011	8-719-404-49	DIODE MA111		IC4001	8-759-009-46	IC MC14528BF	
D4001	8-719-404-49	DIODE MA111		IC4002	8-752-072-88	IC CXA2011Q	
D4002	8-719-404-49	DIODE MA111		IC4003	8-752-070-54	IC CXA1839Q-T6	
D4005	8-719-031-68	DIODE HVU359TRF		IC4004	8-752-058-68	IC CXA1315M	
D4006	8-719-031-68	DIODE HVU359TRF		IC4008	8-759-234-20	IC TC7S08F	
D4007	8-719-031-68	DIODE HVU359TRF		IC4009	8-759-300-71	IC HD14053BFP	
D4008	8-719-031-68	DIODE HVU359TRF		IC4011	8-752-072-88	IC CXA2011Q	
D4009	8-719-031-68	DIODE HVU359TRF				<CHIP CONDUCTOR>	
D4010	8-719-031-68	DIODE HVU359TRF		JR4001	1-216-295-91	SHORT	0
D4011	8-719-031-68	DIODE HVU359TRF				<COIL>	
D4012	8-719-031-68	DIODE HVU359TRF		L1101	1-408-417-00	INDUCTOR 47UH	
		<FERRITE BEAD>		L1102	1-408-417-00	INDUCTOR 47UH	
FB1601	1-412-364-11	INDUCTOR 0UH		L1401	1-408-607-31	INDUCTOR 22UH	
FB1602	1-412-364-11	INDUCTOR 0UH		L1402	1-408-607-31	INDUCTOR 22UH	
FB2002	1-414-234-11	INDUCTOR 0UH		L1601	1-408-607-31	INDUCTOR 22UH	
FB2037	1-414-234-11	INDUCTOR 0UH		L1602	1-408-403-00	INDUCTOR 3.3UH	
		<FILTER>		L2001	1-408-408-00	INDUCTOR 8.2UH	
FL2001	1-239-847-11	FILTER, LOW PASS		L2002	1-408-398-00	INDUCTOR 1.2UH	
FL2002	1-233-535-11	FILTER, LOW PASS		L2003	1-412-938-61	INDUCTOR 0.82UH	
FL2003	1-233-534-11	FILTER, LOW PASS		L2004	1-408-398-00	INDUCTOR 1.2UH	
FL2004	1-233-535-11	FILTER, LOW PASS		L2006	1-408-398-00	INDUCTOR 1.2UH	
FL2005	1-233-536-11	FILTER, LOW PASS		L2007	1-408-398-00	INDUCTOR 1.2UH	
FL2006	1-233-536-11	FILTER, LOW PASS		L2008	1-408-398-00	INDUCTOR 1.2UH	
FL2007	1-239-847-11	FILTER, LOW PASS		L2009	1-408-412-00	INDUCTOR 18UH	
FL2015	1-233-539-21	FILTER, EMI		L2010	1-408-408-00	INDUCTOR 8.2UH	
FL2019	1-233-520-21	FILTER, EMI					



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R1108	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1610	1-216-035-00	METAL GLAZE 270	5% 1/10W
R1111	1-216-121-91	METAL GLAZE 1M	5% 1/10W	R1611	1-216-035-00	METAL GLAZE 270	5% 1/10W
R1112	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1612	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1113	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1613	1-216-035-00	METAL GLAZE 270	5% 1/10W
R1115	1-216-049-91	METAL GLAZE 1K	5% 1/10W				
R1119	1-216-033-00	METAL GLAZE 220	5% 1/10W	R1614	1-216-035-00	METAL GLAZE 270	5% 1/10W
R1120	1-216-033-00	METAL GLAZE 220	5% 1/10W	R1615	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1122	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1616	1-216-035-00	METAL GLAZE 270	5% 1/10W
R1125	1-216-295-91	SHORT 0		R1617	1-216-035-00	METAL GLAZE 270	5% 1/10W
R1128	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R1618	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1129	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R1619	1-216-039-00	METAL GLAZE 390	5% 1/10W
R1130	1-216-033-00	METAL GLAZE 220	5% 1/10W	R1620	1-216-039-00	METAL GLAZE 390	5% 1/10W
R1132	1-216-097-91	METAL GLAZE 100K	5% 1/10W	R1621	1-216-039-00	METAL GLAZE 390	5% 1/10W
R1133	1-216-121-91	METAL GLAZE 1M	5% 1/10W	R1622	1-216-045-00	METAL GLAZE 680	5% 1/10W
R1134	1-216-017-91	METAL GLAZE 47	5% 1/10W	R1623	1-216-045-00	METAL GLAZE 680	5% 1/10W
R1135	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1624	1-216-045-00	METAL GLAZE 680	5% 1/10W
R1138	1-216-017-91	METAL GLAZE 47	5% 1/10W	R1625	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1139	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1626	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R1140	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R1627	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R1141	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R1628	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R1151	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1629	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R1154	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1630	1-216-295-91	SHORT 0	
R1155	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1646	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1156	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R2001	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R1157	1-216-295-91	SHORT 0		R2002	1-216-001-00	METAL GLAZE 10	5% 1/10W
R1167	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R2003	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1168	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R2004	1-216-077-00	METAL GLAZE 15K	5% 1/10W
R1200	1-216-025-91	METAL GLAZE 100	5% 1/10W	R2005	1-216-055-00	METAL GLAZE 1.8K	5% 1/10W
R1201	1-216-025-91	METAL GLAZE 100	5% 1/10W	R2006	1-216-017-91	METAL GLAZE 47	5% 1/10W
R1202	1-216-025-91	METAL GLAZE 100	5% 1/10W	R2007	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W
R1203	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R2008	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
R1204	1-216-047-91	METAL GLAZE 820	5% 1/10W	R2010	1-216-645-11	METAL CHIP 560	0.50% 1/10W
R1205	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R2011	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1402	1-216-295-91	SHORT 0		R2012	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W
R1403	1-216-295-91	SHORT 0		R2013	1-216-075-00	METAL GLAZE 12K	5% 1/10W
R1405	1-216-111-91	METAL GLAZE 390K	5% 1/10W	R2014	1-216-638-11	METAL CHIP 300	0.50% 1/10W
R1410	1-216-295-91	SHORT 0		R2015	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W
R1411	1-216-037-00	METAL GLAZE 330	5% 1/10W	R2016	1-216-669-11	METAL CHIP 5.6K	0.50% 1/10W
R1412	1-216-037-00	METAL GLAZE 330	5% 1/10W	R2017	1-216-643-11	METAL CHIP 470	0.50% 1/10W
R1413	1-216-295-91	SHORT 0		R2018	1-216-001-00	METAL GLAZE 10	5% 1/10W
R1414	1-216-295-91	SHORT 0		R2019	1-216-097-91	METAL GLAZE 100K	5% 1/10W
R1439	1-215-866-11	METAL OXIDE 330	5% 1W F	R2021	1-216-039-00	METAL GLAZE 390	5% 1/10W
R1442	1-216-025-91	METAL GLAZE 100	5% 1/10W	R2022	1-216-039-00	METAL GLAZE 390	5% 1/10W
R1443	1-216-025-91	METAL GLAZE 100	5% 1/10W	R2024	1-216-683-11	METAL CHIP 22K	0.50% 1/10W
R1444	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R2025	1-216-675-11	METAL CHIP 10K	0.50% 1/10W
R1445	1-216-089-91	METAL GLAZE 47K	5% 1/10W	R2026	1-216-023-00	METAL GLAZE 82	5% 1/10W
R1446	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R2027	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1447	1-216-081-00	METAL GLAZE 22K	5% 1/10W	R2029	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R1448	1-216-033-00	METAL GLAZE 220	5% 1/10W	R2030	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R1603	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R2031	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1604	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R2032	1-216-033-00	METAL GLAZE 220	5% 1/10W
R1605	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R2033	1-216-033-00	METAL GLAZE 220	5% 1/10W
R1606	1-216-033-00	METAL GLAZE 220	5% 1/10W	R2034	1-216-699-11	METAL CHIP 100K	0.50% 1/10W
R1607	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R2035	1-216-665-11	METAL CHIP 3.9K	0.50% 1/10W
R1608	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	R2036	1-216-651-11	METAL CHIP 1K	0.50% 1/10W
R1609	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	R2037	1-216-097-91	METAL GLAZE 100K	5% 1/10W
				R2038	1-216-693-11	METAL CHIP 56K	0.50% 1/10W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R2039	1-216-059-00	METAL GLAZE 2.7K	5%	1/10W	R2112	1-216-295-91 SHORT	0
R2040	1-216-057-00	METAL GLAZE 2.2K	5%	1/10W	R2113	1-216-067-00 METAL GLAZE 5.6K	5% 1/10W
R2042	1-216-035-00	METAL GLAZE 270	5%	1/10W	R2125	1-216-047-91 METAL GLAZE 820	5% 1/10W
R2043	1-216-062-00	METAL GLAZE 3.6K	5%	1/10W	R2129	1-216-043-91 METAL GLAZE 560	5% 1/10W
R2044	1-216-071-00	METAL GLAZE 8.2K	5%	1/10W	R2130	1-216-295-91 SHORT	0
R2045	1-216-053-00	METAL GLAZE 1.5K	5%	1/10W	R2131	1-216-067-00 METAL GLAZE 5.6K	5% 1/10W
R2046	1-216-073-00	METAL GLAZE 10K	5%	1/10W	R2132	1-216-295-91 SHORT	0
R2047	1-216-073-00	METAL GLAZE 10K	5%	1/10W	R2133	1-216-295-91 SHORT	0
R2048	1-216-049-91	METAL GLAZE 1K	5%	1/10W	R2135	1-216-101-00 METAL GLAZE 150K	5% 1/10W
R2049	1-216-059-00	METAL GLAZE 2.7K	5%	1/10W	R2141	1-216-025-91 METAL GLAZE 100	5% 1/10W
R2050	1-216-057-00	METAL GLAZE 2.2K	5%	1/10W	R2144	1-216-295-91 SHORT	0
R2051	1-216-025-91	METAL GLAZE 100	5%	1/10W	R2145	1-216-623-11 METAL CHIP 68	0.50% 1/10W
R2052	1-216-057-00	METAL GLAZE 2.2K	5%	1/10W	R2150	1-216-025-91 METAL GLAZE 100	5% 1/10W
R2053	1-216-043-91	METAL GLAZE 560	5%	1/10W	R2151	1-216-049-91 METAL GLAZE 1K	5% 1/10W
R2054	1-216-059-00	METAL GLAZE 2.7K	5%	1/10W	R2152	1-216-043-91 METAL GLAZE 560	5% 1/10W
R2055	1-216-051-00	METAL GLAZE 1.2K	5%	1/10W	R2153	1-216-053-00 METAL GLAZE 1.5K	5% 1/10W
R2056	1-216-033-00	METAL GLAZE 220	5%	1/10W	R2154	1-216-063-91 METAL GLAZE 3.9K	5% 1/10W
R2057	1-216-049-91	METAL GLAZE 1K	5%	1/10W	R2155	1-216-049-91 METAL GLAZE 1K	5% 1/10W
R2059	1-216-295-91	SHORT 0			R2157	1-216-037-00 METAL GLAZE 330	5% 1/10W
R2060	1-216-295-91	SHORT 0			R2158	1-216-037-00 METAL GLAZE 330	5% 1/10W
R2061	1-216-295-91	SHORT 0			R2159	1-216-097-91 METAL GLAZE 100K	5% 1/10W
R2062	1-216-067-00	METAL GLAZE 5.6K	5%	1/10W	R2160	1-216-037-00 METAL GLAZE 330	5% 1/10W
R2064	1-216-089-91	METAL GLAZE 47K	5%	1/10W	R2161	1-216-037-00 METAL GLAZE 330	5% 1/10W
R2065	1-216-049-91	METAL GLAZE 1K	5%	1/10W	R2162	1-216-097-91 METAL GLAZE 100K	5% 1/10W
R2066	1-216-059-00	METAL GLAZE 2.7K	5%	1/10W	R2171	1-216-031-00 METAL GLAZE 180	5% 1/10W
R2068	1-216-025-91	METAL GLAZE 100	5%	1/10W	R2172	1-216-045-00 METAL GLAZE 680	5% 1/10W
R2069	1-216-023-00	METAL GLAZE 82	5%	1/10W	R2173	1-216-677-11 METAL CHIP 12K	0.50% 1/10W
R2071	1-216-043-91	METAL GLAZE 560	5%	1/10W	R2174	1-216-695-11 METAL CHIP 68K	0.50% 1/10W
R2072	1-216-023-00	METAL GLAZE 82	5%	1/10W	R2175	1-216-097-91 METAL GLAZE 100K	5% 1/10W
R2073	1-216-033-00	METAL GLAZE 220	5%	1/10W	R2176	1-216-687-11 METAL CHIP 33K	0.50% 1/10W
R2074	1-216-067-00	METAL GLAZE 5.6K	5%	1/10W	R2177	1-216-675-11 METAL CHIP 10K	0.50% 1/10W
R2076	1-216-049-91	METAL GLAZE 1K	5%	1/10W	R2178	1-216-065-00 METAL GLAZE 4.7K	5% 1/10W
R2077	1-216-295-91	SHORT 0			R2179	1-216-073-00 METAL GLAZE 10K	5% 1/10W
R2078	1-216-295-91	SHORT 0			R2180	1-218-756-11 METAL CHIP 150K	0.50% 1/10W
R2079	1-216-634-11	METAL CHIP 200	0.50%	1/10W	R2181	1-216-697-91 METAL CHIP 82K	0.50% 1/10W
R2080	1-216-049-91	METAL GLAZE 1K	5%	1/10W	R2182	1-216-073-00 METAL GLAZE 10K	5% 1/10W
R2081	1-216-295-91	SHORT 0			R2183	1-218-762-11 METAL CHIP 270K	0.50% 1/10W
R2082	1-216-295-91	SHORT 0			R2184	1-216-675-11 METAL CHIP 10K	0.50% 1/10W
R2083	1-216-295-91	SHORT 0			R2185	1-216-684-91 METAL CHIP 24K	0.50% 1/10W
R2084	1-216-634-11	METAL CHIP 200	0.50%	1/10W	R2191	1-216-041-00 METAL GLAZE 470	5% 1/10W
R2087	1-216-049-91	METAL GLAZE 1K	5%	1/10W	R2192	1-216-041-00 METAL GLAZE 470	5% 1/10W
R2088	1-216-047-91	METAL GLAZE 820	5%	1/10W	R2193	1-216-049-91 METAL GLAZE 1K	5% 1/10W
R2089	1-216-295-91	SHORT 0			R2194	1-216-049-91 METAL GLAZE 1K	5% 1/10W
R2090	1-216-043-91	METAL GLAZE 560	5%	1/10W	R2195	1-216-077-00 METAL GLAZE 15K	5% 1/10W
R2091	1-216-634-11	METAL CHIP 200	0.50%	1/10W	R2196	1-216-077-00 METAL GLAZE 15K	5% 1/10W
R2094	1-216-067-00	METAL GLAZE 5.6K	5%	1/10W	R2197	1-216-073-00 METAL GLAZE 10K	5% 1/10W
R2096	1-216-651-11	METAL CHIP 1K	0.50%	1/10W	R2198	1-216-073-00 METAL GLAZE 10K	5% 1/10W
R2097	1-216-085-00	METAL GLAZE 33K	5%	1/10W	R2200	1-216-035-00 METAL GLAZE 270	5% 1/10W
R2099	1-216-057-00	METAL GLAZE 2.2K	5%	1/10W	R2201	1-216-035-00 METAL GLAZE 270	5% 1/10W
R2100	1-216-047-91	METAL GLAZE 820	5%	1/10W	R2202	1-216-051-00 METAL GLAZE 1.2K	5% 1/10W
R2101	1-216-073-00	METAL GLAZE 10K	5%	1/10W	R2203	1-216-049-91 METAL GLAZE 1K	5% 1/10W
R2102	1-216-049-91	METAL GLAZE 1K	5%	1/10W	R2204	1-216-049-91 METAL GLAZE 1K	5% 1/10W
R2103	1-216-043-91	METAL GLAZE 560	5%	1/10W	R2205	1-216-049-91 METAL GLAZE 1K	5% 1/10W
R2108	1-216-643-11	METAL CHIP 470	0.50%	1/10W	R2211	1-216-065-00 METAL GLAZE 4.7K	5% 1/10W
R2109	1-216-033-00	METAL GLAZE 220	5%	1/10W	R2212	1-216-031-00 METAL GLAZE 180	5% 1/10W
R2111	1-216-043-91	METAL GLAZE 560	5%	1/10W	R2213	1-216-065-00 METAL GLAZE 4.7K	5% 1/10W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R2214	1-216-689-11	METAL GLAZE 39K	5% 1/10W	R4108	1-216-051-00	METAL GLAZE 1.2K	5% 1/10W
R2215	1-216-053-00	METAL GLAZE 1.5K	5% 1/10W	R4134	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R2216	1-216-031-00	METAL GLAZE 180	5% 1/10W	R4135	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R4002	1-216-675-11	METAL CHIP 10K	0.50% 1/10W	R4136	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R4003	1-216-680-11	METAL CHIP 16K	0.50% 1/10W	R4137	1-216-041-00	METAL GLAZE 470	5% 1/10W
R4004	1-216-680-11	METAL CHIP 16K	0.50% 1/10W	R4138	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R4005	1-216-680-11	METAL CHIP 16K	0.50% 1/10W	R4139	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R4006	1-216-675-11	METAL CHIP 10K	0.50% 1/10W	R4140	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R4007	1-216-675-11	METAL CHIP 10K	0.50% 1/10W	R4142	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R4008	1-216-675-11	METAL CHIP 10K	0.50% 1/10W	R4143	1-216-295-91	SHORT 0	
R4009	1-216-677-11	METAL CHIP 12K	0.50% 1/10W	R4150	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R4011	1-216-677-11	METAL CHIP 12K	0.50% 1/10W	R4160	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R4012	1-216-677-11	METAL CHIP 12K	0.50% 1/10W	R4161	1-216-295-91	SHORT 0	
R4013	1-216-675-11	METAL CHIP 10K	0.50% 1/10W	R4162	1-216-025-91	METAL GLAZE 100	5% 1/10W
R4018	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	R4164	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R4019	1-216-035-00	METAL GLAZE 270	5% 1/10W	R4165	1-216-295-91	SHORT 0	
R4020	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R4166	1-216-025-91	METAL GLAZE 100	5% 1/10W
R4023	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4170	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R4024	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4171	1-216-295-91	SHORT 0	
R4026	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R4172	1-216-025-91	METAL GLAZE 100	5% 1/10W
R4027	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R4301	1-216-041-00	METAL GLAZE 470	5% 1/10W
R4028	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R4302	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R4029	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R4303	1-216-295-91	SHORT 0	
R4032	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4304	1-216-023-00	METAL GLAZE 82	5% 1/10W
R4033	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4305	1-216-295-91	SHORT 0	
R4034	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4306	1-216-295-91	SHORT 0	
R4035	1-216-295-91	SHORT 0		R4307	1-216-041-00	METAL GLAZE 470	5% 1/10W
R4036	1-216-077-00	METAL GLAZE 15K	5% 1/10W	R4308	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R4040	1-216-133-00	METAL GLAZE 3.3M	5% 1/10W	R4309	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R4042	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R4311	1-216-041-00	METAL GLAZE 470	5% 1/10W
R4044	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4312	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R4046	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4313	1-216-295-91	SHORT 0	
R4047	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4314	1-216-027-00	METAL GLAZE 120	5% 1/10W
R4048	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4315	1-216-295-91	SHORT 0	
R4050	1-216-083-00	METAL GLAZE 27K	5% 1/10W	R4316	1-216-295-91	SHORT 0	
R4051	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4317	1-216-041-00	METAL GLAZE 470	5% 1/10W
R4052	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4318	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R4063	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4319	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R4064	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4321	1-216-041-00	METAL GLAZE 470	5% 1/10W
R4065	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4322	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R4066	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4323	1-216-295-91	SHORT 0	
R4067	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R4324	1-216-027-00	METAL GLAZE 120	5% 1/10W
R4081	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R4325	1-216-295-91	SHORT 0	
R4089	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4326	1-216-295-91	SHORT 0	
R4090	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4327	1-216-041-00	METAL GLAZE 470	5% 1/10W
R4091	1-216-041-00	METAL GLAZE 470	5% 1/10W	R4328	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R4092	1-216-077-00	METAL GLAZE 15K	5% 1/10W	R4329	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R4093	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R4330	1-216-079-00	METAL GLAZE 18K	5% 1/10W
R4094	1-216-041-00	METAL GLAZE 470	5% 1/10W	R4331	1-216-079-00	METAL GLAZE 18K	5% 1/10W
R4095	1-216-077-00	METAL GLAZE 15K	5% 1/10W	R4332	1-216-079-00	METAL GLAZE 18K	5% 1/10W
R4096	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R4333	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R4103	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4334	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R4104	1-216-051-00	METAL GLAZE 1.2K	5% 1/10W	R4335	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R4105	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4340	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R4106	1-216-051-00	METAL GLAZE 1.2K	5% 1/10W	R4341	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R4107	1-216-025-91	METAL GLAZE 100	5% 1/10W	R4342	1-216-041-00	METAL GLAZE 470	5% 1/10W



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

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
R4350	1-216-073-00	METAL GLAZE 10K	5% 1/10W	C610	1-137-479-11	FILM 1MF 10% 400V	
R4351	1-216-073-00	METAL GLAZE 10K	5% 1/10W	C611	1-113-607-11	ELECT(SOLID) 330MF 20% 400V	
R4352	1-216-041-00	METAL GLAZE 470	5% 1/10W	C612 Δ	1-117-699-51	CERAMIC 0.001MF 99% 250V	
R4353	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C613 Δ	1-117-699-51	CERAMIC 0.001MF 99% 250V	
R4354	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C614	1-126-937-11	ELECT 4700MF 20% 16V	
R4360	1-216-073-00	METAL GLAZE 10K	5% 1/10W	C616	1-104-664-11	ELECT 47MF 20% 25V	
R4361	1-216-073-00	METAL GLAZE 10K	5% 1/10W	C617	1-107-655-11	ELECT 47MF 20% 250V	
R4362	1-216-041-00	METAL GLAZE 470	5% 1/10W	C619	1-104-664-11	ELECT 47MF 20% 25V	
R4369	1-216-025-91	METAL GLAZE 100	5% 1/10W	C622	1-104-664-11	ELECT 47MF 20% 25V	
R4370	1-216-117-00	METAL GLAZE 680K	5% 1/10W	C623	1-126-968-11	ELECT 100MF 20% 50V	
R4373	1-216-295-91	SHORT 0		C624	1-165-127-11	CERAMIC 470PF 10% 500V	
<RESISTOR BLOCK>				C625	1-102-129-00	CERAMIC 0.01MF 10% 50V	
RB1101	1-236-404-11	NETWORK, RES 220		C626	1-102-129-00	CERAMIC 0.01MF 10% 50V	
RB1103	1-236-404-11	NETWORK, RES 220		C627	1-102-129-00	CERAMIC 0.01MF 10% 50V	
RB1105	1-236-400-11	NETWORK, RES 100		C628	1-102-129-00	CERAMIC 0.01MF 10% 50V	
RB1106	1-236-400-11	NETWORK, RES 100		C629	1-102-129-00	CERAMIC 0.01MF 10% 50V	
RB1107	1-236-404-11	NETWORK, RES 220		C630	1-126-960-11	ELECT 1MF 20% 50V	
RB1110	1-236-404-11	NETWORK, RES 220		C631 Δ	1-113-900-51	CERAMIC 470PF 10% 250V	
RB1111	1-236-404-11	NETWORK, RES 220		C635	1-136-165-00	FILM 0.1MF 5% 50V	
RB1112	1-236-404-11	NETWORK, RES 220		C636	1-136-158-00	FILM 0.027MF 5% 50V	
RB1113	1-236-404-11	NETWORK, RES 220		C639	1-136-173-00	FILM 0.47MF 5% 50V	
RB1114	1-236-404-11	NETWORK, RES 220		C640	1-136-173-00	FILM 0.47MF 5% 50V	
RB1601	1-236-400-11	NETWORK, RES 100		C641	1-165-127-11	CERAMIC 470PF 10% 500V	
RB1602	1-236-400-11	NETWORK, RES 100		C642	1-126-965-11	ELECT 22MF 20% 50V	
RB1603	1-236-400-11	NETWORK, RES 100		C643	1-126-963-11	ELECT 4.7MF 20% 50V	
RB1604	1-236-400-11	NETWORK, RES 100		C644	1-104-664-11	ELECT 47MF 20% 25V	
<CRYSTAL>				C645	1-136-153-00	FILM 0.01MF 5% 50V	
X1101	1-760-506-11	VIBRATOR, CRYSTAL		C648	1-137-195-11	FILM 0.56MF 5% 50V	
X1601	1-579-125-11	VIBRATOR, CERAMIC		C649	1-137-195-11	FILM 0.56MF 5% 50V	
X2001	1-760-892-21	VIBRATOR, CRYSTAL		C650	1-129-720-00	FILM 0.033MF 5% 630V	
X2002	1-579-583-11	VIBRATOR, CERAMIC		C651	1-165-127-11	CERAMIC 470PF 10% 500V	
X2003	1-577-165-11	VIBLATOR, CERAMIC		C652	1-165-127-11	CERAMIC 470PF 10% 500V	
*****				C660	1-104-665-11	ELECT 100MF 20% 25V	
* A-1311-597-AG BOARD, COMPLETE				C661	1-126-933-11	ELECT 100MF 20% 10V	
*****				C682	1-126-963-11	ELECT 4.7MF 20% 50V	
4-382-854-11	SCREW (M3X10), P, SW (+) (Q610, D601, D605, D606, D610, D611)			C701	1-115-732-11	ELECT 330MF 20% 10V	
7-682-948-01	SCREW +PSW 3X8 (Q640)			C702	1-104-664-11	ELECT 47MF 20% 25V	
<CAPACITOR>				C703	1-104-664-11	ELECT 47MF 20% 25V	
C601	1-111-092-11	ELECT 0.001F 20% 35V		C704	1-102-129-00	CERAMIC 0.01MF 10% 50V	
C602	1-126-967-11	ELECT 47MF 20% 50V		C705	1-136-153-00	FILM 0.01MF 5% 50V	
C603 Δ	1-104-708-51	FILM 0.47MF 20% 250V		C706	1-136-169-00	FILM 0.22MF 5% 50V	
C604 Δ	1-104-708-51	FILM 0.47MF 20% 250V		<CONNECTOR>			
C605 Δ	1-113-926-91	CERAMIC 0.0047MF 250V		CN602*	1-564-509-11	PLUG, CONNECTOR 6P	
C606 Δ	1-113-926-91	CERAMIC 0.0047MF 250V		CN604*	1-564-513-11	PLUG, CONNECTOR 10P	
C607	1-126-941-11	ELECT 470MF 20% 25V		CN607*	1-564-511-11	PLUG, CONNECTOR 8P	
C608	1-104-664-11	ELECT 47MF 20% 25V		CN608*	1-564-506-11	PLUG, CONNECTOR 3P	
C609	1-126-929-11	ELECT 4700MF 20% 10V		CN609*	1-564-506-11	PLUG, CONNECTOR 3P	
				CN610	1-695-915-11	TAB (CONTACT)	
				CN611*	1-691-960-21	PIN, CONNECTOR (PC BOARD) 3P	
				CN612	1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P	
				CN613	1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P	
				CN614*	1-774-511-11	CONNECTOR, BOARD TO BOARD 10P	



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

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

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
		<DIODE>		L610	1-416-512-11	COIL, CHOKE	
D601	8-719-052-92	DIODE D10SBS4F		L702	1-412-529-11	INDUCTOR 22UH	
D603	8-719-510-09	DIODE D10SC6M				<PHOTO COUPLER>	
D605	8-719-510-12	DIODE D10SC4M				PH680 Δ 8-749-010-65	PHOTO COUPLER PC123F2
D606	8-719-510-12	DIODE D10SC4M				PH701 Δ 8-749-010-65	PHOTO COUPLER PC123F2
D607	8-719-110-06	ZENER DIODE RD8.2ESB1				<TRANSISTOR>	
D609	8-719-510-64	DIODE S2LA20F		Q602	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D610 Δ	8-719-510-53	DIODE D4SB60L		Q603	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D611	8-719-029-04	DIODE D5L60		Q604	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D612	8-719-911-19	DIODE 1SS119-25		Q605	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D613	8-719-911-19	DIODE 1SS119-25		Q606	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D615	8-719-911-19	DIODE 1SS119-25		Q607	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D617	8-719-911-19	DIODE 1SS119-25		Q610	8-729-041-65	TRANSISTOR 2SK2195F04	
D618	8-719-110-35	ZENER DIODE RD13ESB1		Q615	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D619	8-719-109-90	ZENER DIODE RD5.6ESB3		Q640	8-729-039-65	TRANSISTOR MX0541B-F	
D620	8-719-911-19	DIODE 1SS119-25		Q641	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D621	8-719-301-18	DIODE RM2CS		Q683	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D627	8-719-911-19	DIODE 1SS119-25				<RESISTOR>	
D628	8-719-911-19	DIODE 1SS119-25		R601	1-249-425-11	CARBON 4.7K 5%	1/4W
D629	8-719-911-19	DIODE 1SS119-25		R602	1-249-417-11	CARBON 1K 5%	1/4W
D640	8-719-911-19	DIODE 1SS119-25		R603	1-249-417-11	CARBON 1K 5%	1/4W
D642	8-719-911-19	DIODE 1SS119-25		R604	1-215-865-11	METAL OXIDE 220 5%	1W F
D644	8-719-911-19	DIODE 1SS119-25		R606	1-249-389-11	CARBON 4.7 5%	1/4W
D660	8-719-059-23	DIODE P6KE200AG23		R607	1-249-389-11	CARBON 4.7 5%	1/4W
D661	8-719-947-06	DIODE RGP10JPKG23		R610	1-216-361-00	METAL OXIDE 0.22 5%	2W F
D662	8-719-052-90	DIODE D1NL40-TA2		R611	1-216-350-11	METAL OXIDE 1.2 5%	1W F
D664	8-719-911-19	DIODE 1SS119-25		R612	1-247-895-91	CARBON 470K 5%	1/4W
D703	8-719-510-64	DIODE S2LA20F		R613	1-247-895-91	CARBON 470K 5%	1/4W
D704	8-719-510-64	DIODE S2LA20F		R614	1-247-863-91	CARBON 22K 5%	1/4W
		<FUSE>		R617 Δ	1-202-880-91	SOLID 330K 20%	1/2W
F601 Δ	1-576-233-11	FUSE (H.B.C.) (6.3A/250V)		R618	1-249-429-11	CARBON 10K 5%	1/4W
	1-533-223-11	HOLDER, FUSE ; F601		R619	1-215-482-00	METAL 360K 1%	1/4W
		<FERRITE BEAD>		R620	1-215-482-00	METAL 360K 1%	1/4W
FB610	1-410-396-41	INDUCTOR 0.45UH		R621	1-215-482-00	METAL 360K 1%	1/4W
FB611	1-410-396-41	INDUCTOR 0.45UH		R622	1-249-435-11	CARBON 33K 5%	1/4W
FB612	1-410-396-41	INDUCTOR 0.45UH		R623	1-215-427-00	METAL 1.8K 1%	1/4W
FB620	1-410-396-41	INDUCTOR 0.45UH		R624	1-249-419-11	CARBON 1.5K 5%	1/4W
FB621	1-410-396-41	INDUCTOR 0.45UH		R625	1-249-417-11	CARBON 1K 5%	1/4W
FB622	1-410-396-41	INDUCTOR 0.45UH		R626	1-249-429-11	CARBON 10K 5%	1/4W
		<IC>		R627	1-215-426-00	METAL 1.6K 1%	1/4W
IC603	8-759-198-31	IC UPC1093J-1-T		R628	1-249-425-11	CARBON 4.7K 5%	1/4W
IC701	8-759-426-45	IC PWR-TOP210PFI		R629	1-249-421-11	CARBON 2.2K 5%	1/4W
IC702	8-759-198-31	IC UPC1093J-1-T		R630	1-247-863-91	CARBON 22K 5%	1/4W
		<COIL>		R631	1-247-807-31	CARBON 100 5%	1/4W
L601	1-412-519-11	INDUCTOR 3.3UH		R632	1-249-429-11	CARBON 10K 5%	1/4W
L603	1-412-525-31	INDUCTOR 10UH		R635	1-249-429-11	CARBON 10K 5%	1/4W
L604	1-412-525-31	INDUCTOR 10UH		R636	1-216-361-00	METAL OXIDE 0.22 5%	2W F
L605	1-412-525-31	INDUCTOR 10UH		R637	1-249-393-11	CARBON 10 5%	1/4W
				R638	1-215-477-00	METAL 220K 1%	1/4W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C5006	1-164-182-11	CERAMIC CHIP 0.0033MF 10%	50V	C5226	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5007	1-163-104-00	CERAMIC CHIP 30PF 5%	50V	C5227	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5008	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V	C5228	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5009	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V	C5229	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5010	1-163-109-00	CERAMIC CHIP 47PF 5%	50V				
C5011	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V	C5230	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5012	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	C5231	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5013	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V	C5232	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5014	1-126-962-11	ELECT 3.3MF 20%	50V	C5240	1-126-967-11	ELECT 47MF	20% 10V
C5015	1-164-182-11	CERAMIC CHIP 0.0033MF 10%	50V	C5241	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5016	1-163-108-00	CERAMIC CHIP 43PF 5%	50V	C5242	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5017	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V	C5243	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5018	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V	C5244	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5019	1-164-182-11	CERAMIC CHIP 0.0033MF 10%	50V	C5245	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5020	1-126-962-11	ELECT 3.3MF 20%	50V	C5246	1-104-664-11	ELECT 47MF	20% 25V
C5021	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V	C5247	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5022	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	C5248	1-126-964-11	ELECT 10MF	20% 50V
C5023	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V	C5250	1-107-689-21	TANTAL. CHIP 1MF	20% 35V
C5024	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V	C5251	1-107-689-21	TANTAL. CHIP 1MF	20% 35V
C5025	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V	C5252	1-107-689-21	TANTAL. CHIP 1MF	20% 35V
C5026	1-126-967-11	ELECT 47MF 20%	10V	C5260	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5027	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V	C5261	1-104-664-11	ELECT 47MF	20% 25V
C5028	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V	C5401	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C5029	1-165-319-11	CERAMIC CHIP 0.1MF	50V	C5420	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5030	1-104-664-11	ELECT 47MF 20%	25V	C5421	1-126-967-11	ELECT 47MF	20% 10V
C5039	1-104-664-11	ELECT 47MF 20%	25V	C5422	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5040	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	C5425	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5041	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	C5426	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5042	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	C5427	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5043	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	C5428	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5044	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	C5429	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5045	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	C5430	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5046	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	C5431	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5047	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	C5432	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5048	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	C5440	1-126-967-11	ELECT 47MF	20% 10V
C5049	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	C5441	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5050	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	C5442	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5051	1-163-259-91	CERAMIC CHIP 220PF 5%	50V	C5443	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5054	1-163-259-91	CERAMIC CHIP 220PF 5%	50V	C5444	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5055	1-163-259-91	CERAMIC CHIP 220PF 5%	50V	C5445	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5056	1-163-259-91	CERAMIC CHIP 220PF 5%	50V	C5446	1-104-664-11	ELECT 47MF	20% 25V
C5057	1-163-259-91	CERAMIC CHIP 220PF 5%	50V	C5447	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5058	1-163-259-91	CERAMIC CHIP 220PF 5%	50V	C5448	1-126-964-11	ELECT 10MF	20% 50V
C5059	1-163-259-91	CERAMIC CHIP 220PF 5%	50V	C5450	1-107-689-21	TANTAL. CHIP 1MF	20% 35V
C5073	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V	C5451	1-107-689-21	TANTAL. CHIP 1MF	20% 35V
C5201	1-165-319-11	CERAMIC CHIP 0.1MF	50V	C5452	1-107-689-21	TANTAL. CHIP 1MF	20% 35V
C5202	1-165-319-11	CERAMIC CHIP 0.1MF	50V	C5460	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5203	1-104-664-11	ELECT 47MF 20%	25V	C5461	1-104-664-11	ELECT 47MF	20% 25V
C5204	1-165-319-11	CERAMIC CHIP 0.1MF	50V	C5601	1-126-967-11	ELECT 47MF	20% 16V
C5205	1-104-664-11	ELECT 47MF 20%	25V	C5602	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5209	1-104-664-11	ELECT 47MF 20%	25V	C5620	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5210	1-104-664-11	ELECT 47MF 20%	25V	C5621	1-126-967-11	ELECT 47MF	20% 10V
C5220	1-165-319-11	CERAMIC CHIP 0.1MF	50V	C5622	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5221	1-126-967-11	ELECT 47MF 20%	10V	C5625	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5222	1-165-319-11	CERAMIC CHIP 0.1MF	50V	C5626	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C5225	1-165-319-11	CERAMIC CHIP 0.1MF	50V	C5627	1-165-319-11	CERAMIC CHIP 0.1MF	50V
				C5628	1-165-319-11	CERAMIC CHIP 0.1MF	50V



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
Q5610	8-729-422-27	TRANSISTOR 2SD601A-Q		R5089	1-216-295-91	SHORT 0	
		<RESISTOR>		R5092	1-216-017-91	METAL GLAZE 47	5% 1/10W
R5001	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R5093	1-216-017-91	METAL GLAZE 47	5% 1/10W
R5002	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R5094	1-216-017-91	METAL GLAZE 47	5% 1/10W
R5003	1-216-093-00	METAL GLAZE 68K	5% 1/10W	R5096	1-216-025-91	METAL GLAZE 100	5% 1/10W
R5006	1-216-295-91	SHORT 0		R5097	1-216-025-91	METAL GLAZE 100	5% 1/10W
R5007	1-216-025-91	METAL GLAZE 100	5% 1/10W	R5098	1-216-085-00	METAL GLAZE 33K	5% 1/10W
R5008	1-216-025-91	METAL GLAZE 100	5% 1/10W	R5099	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R5011	1-216-033-00	METAL GLAZE 220	5% 1/10W	R5100	1-216-025-91	METAL GLAZE 100	5% 1/10W
R5012	1-216-033-00	METAL GLAZE 220	5% 1/10W	R5101	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R5013	1-216-033-00	METAL GLAZE 220	5% 1/10W	R5103	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R5017	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R5107	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R5019	1-216-093-00	METAL GLAZE 68K	5% 1/10W	R5108	1-216-664-11	METAL CHIP 3.6K	0.50% 1/10W
R5028	1-216-077-00	METAL GLAZE 15K	5% 1/10W	R5109	1-216-631-11	METAL CHIP 150	0.50% 1/10W
R5029	1-216-067-00	METAL GLAZE 5.6K	5% 1/10W	R5110	1-216-641-11	METAL CHIP 390	0.50% 1/10W
R5030	1-216-689-11	METAL GLAZE 39K	5% 1/10W	R5123	1-216-295-91	SHORT 0	
R5031	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R5130	1-216-295-91	SHORT 0	
R5032	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R5202	1-216-398-11	METAL OXIDE 5.6	5% 3W F
R5033	1-216-121-91	METAL GLAZE 1M	5% 1/10W	R5210	1-216-001-00	METAL GLAZE 10	5% 1/10W
R5034	1-216-121-91	METAL GLAZE 1M	5% 1/10W	R5211	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R5035	1-216-085-00	METAL GLAZE 33K	5% 1/10W	R5220	1-216-067-00	METAL GLAZE 5.6K	5% 1/10W
R5036	1-216-071-00	METAL GLAZE 8.2K	5% 1/10W	R5221	1-216-051-00	METAL GLAZE 1.2K	5% 1/10W
R5037	1-216-067-00	METAL GLAZE 5.6K	5% 1/10W	R5226	1-216-295-91	SHORT 0	
R5038	1-216-079-00	METAL GLAZE 18K	5% 1/10W	R5228	1-216-069-00	METAL GLAZE 6.8K	5% 1/10W
R5039	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R5230	1-216-295-91	SHORT 0	
R5040	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R5231	1-216-295-91	SHORT 0	
R5041	1-216-121-91	METAL GLAZE 1M	5% 1/10W	R5232	1-216-295-91	SHORT 0	
R5042	1-216-121-91	METAL GLAZE 1M	5% 1/10W	R5233	1-216-295-91	SHORT 0	
R5043	1-216-085-00	METAL GLAZE 33K	5% 1/10W	R5234	1-216-660-11	METAL CHIP 2.4K	0.50% 1/10W
R5044	1-216-085-00	METAL GLAZE 33K	5% 1/10W	R5235	1-216-666-11	METAL CHIP 4.3K	0.50% 1/10W
R5045	1-216-121-91	METAL GLAZE 1M	5% 1/10W	R5236	1-216-295-91	SHORT 0	
R5046	1-216-121-91	METAL GLAZE 1M	5% 1/10W	R5237	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
R5047	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R5240	1-216-295-91	SHORT 0	
R5048	1-216-689-11	METAL GLAZE 39K	5% 1/10W	R5241	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
R5049	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R5244	1-216-295-91	SHORT 0	
R5050	1-216-067-00	METAL GLAZE 5.6K	5% 1/10W	R5250	1-216-111-91	METAL GLAZE 390K	5% 1/10W
R5051	1-216-075-00	METAL GLAZE 12K	5% 1/10W	R5251	1-216-111-91	METAL GLAZE 390K	5% 1/10W
R5052	1-216-121-91	METAL GLAZE 1M	5% 1/10W	R5252	1-216-111-91	METAL GLAZE 390K	5% 1/10W
R5053	1-216-121-91	METAL GLAZE 1M	5% 1/10W	R5253	1-216-295-91	SHORT 0	
R5055	1-216-295-91	SHORT 0		R5254	1-216-295-91	SHORT 0	
R5056	1-216-295-91	SHORT 0		R5255	1-216-295-91	SHORT 0	
R5057	1-216-295-91	SHORT 0		R5260	1-216-295-91	SHORT 0	
R5058	1-216-295-91	SHORT 0		R5261	1-216-295-91	SHORT 0	
R5059	1-216-295-91	SHORT 0		R5270	1-216-001-00	METAL GLAZE 10	5% 1/10W
R5060	1-216-295-91	SHORT 0		R5271	1-216-001-00	METAL GLAZE 10	5% 1/10W
R5063	1-216-121-91	METAL GLAZE 1M	5% 1/10W	R5272	1-216-001-00	METAL GLAZE 10	5% 1/10W
R5064	1-216-121-91	METAL GLAZE 1M	5% 1/10W	R5273	1-216-001-00	METAL GLAZE 10	5% 1/10W
R5065	1-216-121-91	METAL GLAZE 1M	5% 1/10W	R5274	1-216-001-00	METAL GLAZE 10	5% 1/10W
R5066	1-216-121-91	METAL GLAZE 1M	5% 1/10W	R5280	1-216-037-00	METAL GLAZE 330	5% 1/10W
R5071	1-216-031-00	METAL GLAZE 180	5% 1/10W	R5283	1-216-001-00	METAL GLAZE 10	5% 1/10W
R5072	1-216-031-00	METAL GLAZE 180	5% 1/10W	R5284	1-216-295-91	SHORT 0	
R5073	1-216-019-00	METAL GLAZE 56	5% 1/10W	R5290	1-216-001-00	METAL GLAZE 10	5% 1/10W
R5074	1-216-019-00	METAL GLAZE 56	5% 1/10W	R5324	1-216-295-91	SHORT 0	
R5087	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R5401	1-216-077-00	METAL GLAZE 15K	5% 1/10W
				R5402	1-216-085-00	METAL GLAZE 33K	5% 1/10W
				R5403	1-216-025-91	METAL GLAZE 100	5% 1/10W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R5410	1-216-001-00	METAL GLAZE 10	5%	1/10W	R5653	1-216-295-91 SHORT 0	
R5411	1-216-049-91	METAL GLAZE 1K	5%	1/10W	R5654	1-216-295-91 SHORT 0	
R5420	1-216-067-00	METAL GLAZE 5.6K	5%	1/10W	R5655	1-216-295-91 SHORT 0	
R5421	1-216-051-00	METAL GLAZE 1.2K	5%	1/10W	R5660	1-216-295-91 SHORT 0	
R5428	1-216-025-91	METAL GLAZE 100	5%	1/10W	R5661	1-216-295-91 SHORT 0	
R5429	1-216-057-00	METAL GLAZE 2.2K	5%	1/10W	R5670	1-216-001-00 METAL GLAZE 10	5% 1/10W
R5430	1-216-295-91	SHORT 0			R5671	1-216-001-00 METAL GLAZE 10	5% 1/10W
R5431	1-216-295-91	SHORT 0			R5672	1-216-001-00 METAL GLAZE 10	5% 1/10W
R5432	1-216-295-91	SHORT 0			R5673	1-216-001-00 METAL GLAZE 10	5% 1/10W
R5433	1-216-295-91	SHORT 0			R5674	1-216-001-00 METAL GLAZE 10	5% 1/10W
R5434	1-216-660-11	METAL CHIP 2.4K	0.50%	1/10W	R5680	1-216-037-00 METAL GLAZE 330	5% 1/10W
R5435	1-216-666-11	METAL CHIP 4.3K	0.50%	1/10W	R5683	1-216-001-00 METAL GLAZE 10	5% 1/10W
R5436	1-216-295-91	SHORT 0			R5684	1-216-295-91 SHORT 0	
R5437	1-216-057-00	METAL GLAZE 2.2K	5%	1/10W	R5687	1-216-067-00 METAL GLAZE 5.6K	5% 1/10W
R5440	1-216-295-91	SHORT 0			R5688	1-216-067-00 METAL GLAZE 5.6K	5% 1/10W
R5441	1-216-057-00	METAL GLAZE 2.2K	5%	1/10W	R5690	1-216-001-00 METAL GLAZE 10	5% 1/10W
R5444	1-216-295-91	SHORT 0			R5691	1-216-025-91 METAL GLAZE 100	5% 1/10W
R5445	1-216-295-91	SHORT 0			R5692	1-216-025-91 METAL GLAZE 100	5% 1/10W
R5450	1-216-111-91	METAL GLAZE 390K	5%	1/10W	R5693	1-216-073-00 METAL GLAZE 10K	5% 1/10W
R5451	1-216-111-91	METAL GLAZE 390K	5%	1/10W	R5694	1-216-073-00 METAL GLAZE 10K	5% 1/10W
R5452	1-216-111-91	METAL GLAZE 390K	5%	1/10W	R5699	1-216-295-91 SHORT 0	
R5453	1-216-295-91	SHORT 0			R5700	1-216-295-91 SHORT 0	
R5454	1-216-295-91	SHORT 0			R5701	1-216-059-00 METAL GLAZE 2.7K	5% 1/10W
R5455	1-216-295-91	SHORT 0			R5724	1-216-295-91 SHORT 0	
R5460	1-216-295-91	SHORT 0				<RESISTOR BLOCK>	
R5461	1-216-295-91	SHORT 0			RB5001	1-236-404-11 NETWORK, RES 220	
R5470	1-216-001-00	METAL GLAZE 10	5%	1/10W	RB5002	1-236-404-11 NETWORK, RES 220	
R5471	1-216-001-00	METAL GLAZE 10	5%	1/10W	RB5003	1-236-400-11 NETWORK, RES 100	
R5472	1-216-001-00	METAL GLAZE 10	5%	1/10W	RB5006	1-236-400-11 NETWORK, RES 100	
R5473	1-216-001-00	METAL GLAZE 10	5%	1/10W	RB5007	1-236-400-11 NETWORK, RES 100	
R5474	1-216-001-00	METAL GLAZE 10	5%	1/10W	RB5008	1-236-400-11 NETWORK, RES 100	
R5480	1-216-037-00	METAL GLAZE 330	5%	1/10W	RB5011	1-236-404-11 NETWORK, RES 220	
R5483	1-216-001-00	METAL GLAZE 10	5%	1/10W	RB5012	1-236-404-11 NETWORK, RES 220	
R5484	1-216-295-91	SHORT 0			RB5201	1-236-972-11 NETWORK, RES 10	
R5490	1-216-001-00	METAL GLAZE 10	5%	1/10W	RB5202	1-236-972-11 NETWORK, RES 10	
R5524	1-216-295-91	SHORT 0			RB5401	1-236-972-11 NETWORK, RES 10	
R5610	1-216-001-00	METAL GLAZE 10	5%	1/10W	RB5402	1-236-972-11 NETWORK, RES 10	
R5611	1-216-049-91	METAL GLAZE 1K	5%	1/10W	RB5601	1-236-972-11 NETWORK, RES 10	
R5620	1-216-067-00	METAL GLAZE 5.6K	5%	1/10W	RB5602	1-236-972-11 NETWORK, RES 10	
R5621	1-216-051-00	METAL GLAZE 1.2K	5%	1/10W		<VARIABLE RESISTOR>	
R5626	1-216-295-91	SHORT 0			RV5201	1-241-394-11 RES, ADJ, METAL GLAZE 4.7K (R-BIAS)	
R5628	1-216-069-00	METAL GLAZE 6.8K	5%	1/10W	RV5202	1-241-394-11 RES, ADJ, METAL GLAZE 4.7K (R-VCOM)	
R5630	1-216-295-91	SHORT 0			RV5203	1-241-394-11 RES, ADJ, METAL GLAZE 4.7K (R-L GAIN)	
R5631	1-216-295-91	SHORT 0			RV5205	1-241-394-11 RES, ADJ, METAL GLAZE 4.7K (R GAIN)	
R5632	1-216-295-91	SHORT 0			RV5402	1-241-394-11 RES, ADJ, METAL GLAZE 4.7K (GLBS)	
R5633	1-216-295-91	SHORT 0			RV5403	1-241-394-11 RES, ADJ, METAL GLAZE 4.7K (G-BIAS)	
R5634	1-216-660-11	METAL CHIP 2.4K	0.50%	1/10W	RV5404	1-241-394-11 RES, ADJ, METAL GLAZE 4.7K (G-VCOM)	
R5635	1-216-666-11	METAL CHIP 4.3K	0.50%	1/10W	RV5405	1-241-394-11 RES, ADJ, METAL GLAZE 4.7K (G-L GAIN)	
R5636	1-216-295-91	SHORT 0			RV5407	1-241-394-11 RES, ADJ, METAL GLAZE 4.7K (G-GAIN)	
R5637	1-216-057-00	METAL GLAZE 2.2K	5%	1/10W	RV5601	1-241-394-11 RES, ADJ, METAL GLAZE 4.7K (G-BIAS)	
R5640	1-216-295-91	SHORT 0					
R5641	1-216-057-00	METAL GLAZE 2.2K	5%	1/10W			
R5644	1-216-295-91	SHORT 0					
R5650	1-216-111-91	METAL GLAZE 390K	5%	1/10W			
R5651	1-216-111-91	METAL GLAZE 390K	5%	1/10W			
R5652	1-216-111-91	METAL GLAZE 390K	5%	1/10W			



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
RV5602	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K (B-VCOM)		FB133	1-414-233-21	INDUCTOR 0UH	
RV5603	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K (B-L GAIN)		FB134	1-216-295-91	SHORT 0	
RV5605	1-241-394-11	RES, ADJ, METAL GLAZE 4.7K (B-GAIN)		FB135	1-414-233-21	INDUCTOR 0UH	
<THERMISTOR>				FB136	1-414-233-21	INDUCTOR 0UH	
TH5401	1-806-715-11	THERMISTOR		FB137	1-414-233-21	INDUCTOR 0UH	
*****				FB138	1-414-233-21	INDUCTOR 0UH	
* A-1372-395-AHA BOARD, COMPLETE				FB139	1-216-295-91	SHORT 0	
*****				FB140	1-414-233-21	INDUCTOR 0UH	
4-359-103-00		HOLDER, LED (D8002, D8005, D8007)		<FILTER>			
<CAPACITOR>				FL8001	1-233-512-21	FILTER, EMI	
C8001	1-124-779-00	ELECT 10MF 20% 16V		FL8002	1-233-512-21	FILTER, EMI	
C8005	1-126-193-11	ELECT 1MF 20% 50V		FL8003	1-233-512-21	FILTER, EMI	
C8006	1-126-193-11	ELECT 1MF 20% 50V		FL8004	1-233-512-21	FILTER, EMI	
C8101	1-126-193-11	ELECT 1MF 20% 50V		FL8005	1-233-512-21	FILTER, EMI	
C8102	1-126-193-11	ELECT 1MF 20% 50V		FL8006	1-239-896-11	FILTER, EMI (SMD)	
C8103	1-126-193-11	ELECT 1MF 20% 50V		FL8007	1-239-896-11	FILTER, EMI (SMD)	
<CONNECTOR>				FL8008	1-239-896-11	FILTER, EMI (SMD)	
CN8001*	1-564-525-11	PLUG, CONNECTOR 10P		<IC>			
CN8002*	1-564-518-11	PLUG, CONNECTOR 3P		IC8001	8-742-010-11	HYB IC SBX1971-51	
CN8003	1-564-524-11	PLUG, CONNECTOR 9P		<JACK>			
CN8004	1-537-947-12	TERMINAL BOARD ASST, I/O		J8001	1-565-839-11	PIN JACK BLOCK 3P	
CN8005*	1-564-524-11	PLUG, CONNECTOR 9P		J8002	1-774-753-11	JACK	
CN8006*	1-564-520-11	PLUG, CONNECTOR 5P		<RESISTOR>			
CN8101	1-695-915-11	TAB (CONTACT)		R8002	1-216-037-00	METAL GLAZE 330 5% 1/10W	
CN8102	1-695-915-11	TAB (CONTACT)		R8003	1-216-037-00	METAL GLAZE 330 5% 1/10W	
<DIODE>				R8004	1-216-025-91	METAL GLAZE 100 5% 1/10W	
D8002	8-719-812-43	DIODE TLG124A		R8006	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
D8005	8-719-812-41	DIODE TLR124		R8008	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
D8007	8-719-812-44	DIODE TLO124		R8009	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
D8008	8-719-016-73	DIODE STZ6.8T		R8010	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
D8009	8-719-016-73	DIODE STZ6.8T		R8011	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
D8011	8-719-016-73	DIODE STZ6.8T		R8012	1-216-045-00	METAL GLAZE 680 5% 1/10W	
D8017	8-719-016-73	DIODE STZ6.8T		R8013	1-216-295-91	SHORT 0	
D8018	8-719-016-73	DIODE STZ6.8T		R8014	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
D8301	8-719-016-73	DIODE STZ6.8T		R8015	1-216-045-00	METAL GLAZE 680 5% 1/10W	
D8302	8-719-016-73	DIODE STZ6.8T		R8016	1-216-295-91	SHORT 0	
D8303	8-719-016-73	DIODE STZ6.8T		R8019	1-216-295-91	SHORT 0	
D8304	8-719-016-73	DIODE STZ6.8T		R8020	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
D8305	8-719-016-73	DIODE STZ6.8T		R8021	1-216-105-91	METAL GLAZE 220K 5% 1/10W	
<FERRITE BEAD>				R8022	1-216-105-91	METAL GLAZE 220K 5% 1/10W	
FB131	1-414-233-21	INDUCTOR 0UH		R8101	1-216-017-91	METAL GLAZE 47 5% 1/10W	
FB132	1-414-233-21	INDUCTOR 0UH		R8102	1-216-017-91	METAL GLAZE 47 5% 1/10W	
				R8103	1-216-029-00	METAL GLAZE 150 5% 1/10W	
				R8104	1-216-029-00	METAL GLAZE 150 5% 1/10W	
				R8105	1-216-029-00	METAL GLAZE 150 5% 1/10W	
				R8106	1-216-029-00	METAL GLAZE 150 5% 1/10W	
				R8107	1-216-029-00	METAL GLAZE 150 5% 1/10W	
				R8108	1-216-029-00	METAL GLAZE 150 5% 1/10W	



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R8121	1-216-022-00	METAL GLAZE 75	5% 1/10W	C310	1-126-959-11	ELECT 0.47MF	20% 50V
R8122	1-216-105-91	METAL GLAZE 220K	5% 1/10W	C313	1-126-925-11	ELECT 470MF	20% 10V
R8123	1-216-105-91	METAL GLAZE 220K	5% 1/10W	C314	1-126-967-11	ELECT 47MF	20% 16V
<SWITCH>				C315	1-126-967-11	ELECT 47MF	20% 16V
S8001	1-571-731-11	SWITCH, TACTIL (INPUT SELECT)		C316	1-126-967-11	ELECT 47MF	20% 16V
S8003	1-571-731-11	SWITCH, TACTIL (ENTER)		C317	1-126-967-11	ELECT 47MF	20% 16V
S8004	1-571-731-11	SWITCH, TACTIL (→)		C401	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
S8005	1-571-731-11	SWITCH, TACTIL (MENU)		C402	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
S8007	1-571-731-11	SWITCH, TACTIL (←)		C403	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
S8008	1-571-731-11	SWITCH, TACTIL (VOL -)		C404	1-126-967-11	ELECT 47MF	20% 16V
S8009	1-571-731-11	SWITCH, TACTIL (↓)		C405	1-126-967-11	ELECT 47MF	20% 16V
S8010	1-571-731-11	SWITCH, TACTIL (VOL +)		C406	1-126-967-11	ELECT 47MF	20% 16V
S8011	1-571-731-11	SWITCH, TACTIL (↑)		C407	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
S8012	1-571-731-11	SWITCH, TACTIL (SIZE/CENTER)		C408	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
S8013	1-571-731-11	SWITCH, TACTIL (RESET)		C409	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
*****				C410	1-126-967-11	ELECT 47MF	20% 16V
* A-1372-396-AHB BOARD, COMPLETE				C411	1-126-967-11	ELECT 47MF	20% 16V
*****				C412	1-126-967-11	ELECT 47MF	20% 16V
<CONNECTOR>				C413	1-126-960-11	ELECT 1MF	20% 50V
CN8031*	1-564-518-11	PLUG, CONNECTOR 3P		C414	1-126-960-11	ELECT 1MF	20% 50V
<SWITCH>				C418	1-163-227-11	CERAMIC CHIP 10PF	0.5PF 50V
S8031	1-570-826-11	SWITCH, PUSH (1 KEY) (POWER)		C419	1-163-227-11	CERAMIC CHIP 10PF	0.5PF 50V
*****				C420	1-163-227-11	CERAMIC CHIP 10PF	0.5PF 50V
* A-1373-632-AU BOARD, COMPLETE				C422	1-126-933-11	ELECT 100MF	20% 16V
*****				C501	1-104-664-11	ELECT 47MF	20% 25V
<CAPACITOR>				C502	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V	C601	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C3	1-126-959-11	ELECT 0.47MF	20% 50V	C602	1-104-664-11	ELECT 47MF	20% 25V
C6	1-126-959-11	ELECT 0.47MF	20% 50V	C604	1-128-551-11	ELECT 22MF	20% 25V
C7	1-126-960-11	ELECT 1MF	20% 50V	C612	1-128-551-11	ELECT 22MF	20% 25V
C8	1-126-960-11	ELECT 1MF	20% 50V	C613	1-126-933-11	ELECT 100MF	20% 16V
C10	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V	C701	1-126-967-11	ELECT 47MF	20% 16V
C301	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V	C702	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C302	1-126-959-11	ELECT 0.47MF	20% 50V	C703	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C303	1-126-959-11	ELECT 0.47MF	20% 50V	C704	1-126-963-11	ELECT 4.7MF	20% 50V
C304	1-126-960-11	ELECT 1MF	20% 50V	C705	1-126-963-11	ELECT 4.7MF	20% 50V
C305	1-126-960-11	ELECT 1MF	20% 50V	C706	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C306	1-109-889-11	ELECT 1MF	20% 50V	C707	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V
C307	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V	C708	1-128-551-11	ELECT 22MF	20% 25V
C308	1-126-925-11	ELECT 470MF	20% 10V	C709	1-126-960-11	ELECT 1MF	20% 50V
C309	1-126-959-11	ELECT 0.47MF	20% 50V	C711	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
*****				C712	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V
<CONNECTOR>				C713	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V
CN1	* 1-564-525-11	PLUG, CONNECTOR 10P		C714	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V
CN2	* 1-564-518-11	PLUG, CONNECTOR 3P		<CONNECTOR>			
CN3	* 1-564-524-11	PLUG, CONNECTOR 9P		CN1	* 1-564-525-11	PLUG, CONNECTOR 10P	
CN4	* 1-564-520-11	PLUG, CONNECTOR 5P		CN2	* 1-564-518-11	PLUG, CONNECTOR 3P	
CN601*	1-770-734-11	CONNECTOR, BOARD TO BOARD 20P		CN3	* 1-564-524-11	PLUG, CONNECTOR 9P	
CN602*	1-770-734-11	CONNECTOR, BOARD TO BOARD 20P		CN4	* 1-564-520-11	PLUG, CONNECTOR 5P	
CN603	1-537-947-12	TERMINAL BOARD ASST, I/O		CN601*	1-770-734-11	CONNECTOR, BOARD TO BOARD 20P	



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
Q312	8-729-422-27	TRANSISTOR 2SD601A-Q		R322	1-216-113-00	METAL GLAZE 470K	5% 1/10W
Q313	8-729-422-27	TRANSISTOR 2SD601A-Q		R324	1-216-081-00	METAL GLAZE 22K	5% 1/10W
Q314	8-729-422-27	TRANSISTOR 2SD601A-Q		R325	1-216-049-91	METAL GLAZE 1K	5% 1/10W
				R326	1-216-025-91	METAL GLAZE 100	5% 1/10W
Q315	8-729-422-27	TRANSISTOR 2SD601A-Q					
Q316	8-729-422-27	TRANSISTOR 2SD601A-Q		R327	1-216-041-00	METAL GLAZE 470	5% 1/10W
Q317	8-729-422-27	TRANSISTOR 2SD601A-Q		R329	1-216-041-00	METAL GLAZE 470	5% 1/10W
Q602	8-729-422-27	TRANSISTOR 2SD601A-Q		R330	1-216-025-91	METAL GLAZE 100	5% 1/10W
Q603	8-729-422-27	TRANSISTOR 2SD601A-Q		R331	1-216-049-91	METAL GLAZE 1K	5% 1/10W
				R332	1-216-049-91	METAL GLAZE 1K	5% 1/10W
Q801	8-729-216-22	TRANSISTOR 2SA1162-G					
Q802	8-729-216-22	TRANSISTOR 2SA1162-G		R333	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
Q803	8-729-216-22	TRANSISTOR 2SA1162-G		R334	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
Q804	8-729-216-22	TRANSISTOR 2SA1162-G		R335	1-216-041-00	METAL GLAZE 470	5% 1/10W
				R336	1-216-025-91	METAL GLAZE 100	5% 1/10W
				R337	1-216-025-91	METAL GLAZE 100	5% 1/10W
		<RESISTOR>					
R1	1-216-022-00	METAL GLAZE 75	5% 1/10W	R338	1-216-025-91	METAL GLAZE 100	5% 1/10W
R6	1-216-022-00	METAL GLAZE 75	5% 1/10W	R339	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R7	1-216-022-00	METAL GLAZE 75	5% 1/10W	R340	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R8	1-216-105-91	METAL GLAZE 220K	5% 1/10W	R341	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R9	1-216-105-91	METAL GLAZE 220K	5% 1/10W	R342	1-216-047-91	METAL GLAZE 820	5% 1/10W
R10	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R343	1-216-041-00	METAL GLAZE 470	5% 1/10W
R200	1-216-017-91	METAL GLAZE 47	5% 1/10W	R344	1-216-033-00	METAL GLAZE 220	5% 1/10W
R201	1-216-631-11	METAL CHIP 150	0.50% 1/10W	R345	1-216-041-00	METAL GLAZE 470	5% 1/10W
R202	1-216-631-11	METAL CHIP 150	0.50% 1/10W	R346	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R203	1-216-025-91	METAL GLAZE 100	5% 1/10W	R347	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R204	1-216-009-00	METAL GLAZE 22	5% 1/10W	R348	1-216-025-91	METAL GLAZE 100	5% 1/10W
R205	1-216-631-11	METAL CHIP 150	0.50% 1/10W	R349	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R206	1-216-631-11	METAL CHIP 150	0.50% 1/10W	R350	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R207	1-216-009-00	METAL GLAZE 22	5% 1/10W	R351	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R208	1-216-631-11	METAL CHIP 150	0.50% 1/10W	R352	1-216-047-91	METAL GLAZE 820	5% 1/10W
R209	1-216-631-11	METAL CHIP 150	0.50% 1/10W	R353	1-216-041-00	METAL GLAZE 470	5% 1/10W
R210	1-216-009-00	METAL GLAZE 22	5% 1/10W	R354	1-216-035-00	METAL GLAZE 270	5% 1/10W
R211	1-216-017-91	METAL GLAZE 47	5% 1/10W	R355	1-216-041-00	METAL GLAZE 470	5% 1/10W
R215	1-216-009-00	METAL GLAZE 22	5% 1/10W	R356	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R219	1-216-009-00	METAL GLAZE 22	5% 1/10W	R357	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R223	1-216-009-00	METAL GLAZE 22	5% 1/10W	R358	1-216-025-91	METAL GLAZE 100	5% 1/10W
R224	1-216-025-91	METAL GLAZE 100	5% 1/10W	R378	1-216-035-00	METAL GLAZE 270	5% 1/10W
R225	1-216-025-91	METAL GLAZE 100	5% 1/10W	R379	1-216-035-00	METAL GLAZE 270	5% 1/10W
R226	1-216-025-91	METAL GLAZE 100	5% 1/10W	R401	1-216-295-91	SHORT 0	
R227	1-216-105-91	METAL GLAZE 220K	5% 1/10W	R402	1-216-295-91	SHORT 0	
R228	1-216-105-91	METAL GLAZE 220K	5% 1/10W	R403	1-216-029-00	METAL GLAZE 150	5% 1/10W
R301	1-216-022-00	METAL GLAZE 75	5% 1/10W	R404	1-216-029-00	METAL GLAZE 150	5% 1/10W
R302	1-216-022-00	METAL GLAZE 75	5% 1/10W	R405	1-216-029-00	METAL GLAZE 150	5% 1/10W
R303	1-216-105-91	METAL GLAZE 220K	5% 1/10W	R406	1-216-041-00	METAL GLAZE 470	5% 1/10W
R304	1-216-105-91	METAL GLAZE 220K	5% 1/10W	R407	1-216-041-00	METAL GLAZE 470	5% 1/10W
R305	1-216-021-00	METAL GLAZE 68	5% 1/10W	R408	1-216-041-00	METAL GLAZE 470	5% 1/10W
R306	1-216-021-00	METAL GLAZE 68	5% 1/10W	R409	1-216-009-00	METAL GLAZE 22	5% 1/10W
R307	1-216-113-00	METAL GLAZE 470K	5% 1/10W	R410	1-216-009-00	METAL GLAZE 22	5% 1/10W
R308	1-216-113-00	METAL GLAZE 470K	5% 1/10W	R411	1-216-009-00	METAL GLAZE 22	5% 1/10W
R311	1-216-022-00	METAL GLAZE 75	5% 1/10W	R501	1-216-017-91	METAL GLAZE 47	5% 1/10W
R312	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R502	1-216-017-91	METAL GLAZE 47	5% 1/10W
R313	1-216-113-00	METAL GLAZE 470K	5% 1/10W	R503	1-216-017-91	METAL GLAZE 47	5% 1/10W
R314	1-216-113-00	METAL GLAZE 470K	5% 1/10W	R504	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R317	1-216-081-00	METAL GLAZE 22K	5% 1/10W	R505	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R318	1-216-081-00	METAL GLAZE 22K	5% 1/10W	R506	1-216-089-91	METAL GLAZE 47K	5% 1/10W
R319	1-216-021-00	METAL GLAZE 68	5% 1/10W	R507	1-216-017-91	METAL GLAZE 47	5% 1/10W
				R508	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R509	1-216-295-91	SHORT 0		R673	1-216-099-00	METAL GLAZE 120K	5% 1/10W
R510	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	R679	1-216-025-91	METAL GLAZE 100	5% 1/10W
R511	1-216-295-91	SHORT 0		R680	1-216-025-91	METAL GLAZE 100	5% 1/10W
R512	1-216-033-00	METAL GLAZE 220	5% 1/10W	*****			
R513	1-216-033-00	METAL GLAZE 220	5% 1/10W	* A-1380-551-AK BOARD, COMPLETE			
R514	1-216-295-91	SHORT 0		*****			
R515	1-216-049-91	METAL GLAZE 1K	5% 1/10W	7-682-948-01 SCREW +PSW 3X8 (IC8501, IC8503)			
R516	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	<CAPACITOR>			
R517	1-216-073-00	METAL GLAZE 10K	5% 1/10W	C8501	1-126-967-11	ELECT 47MF	20% 16V
R518	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C8502	1-126-967-11	ELECT 47MF	20% 16V
R519	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C8503	1-126-967-11	ELECT 47MF	20% 16V
R520	1-216-073-00	METAL GLAZE 10K	5% 1/10W	C8504	1-136-165-00	FILM 0.1MF	5% 50V
R521	1-216-677-11	METAL CHIP 12K	0.50% 1/10W	C8505	1-126-041-11	ELECT 2200MF	20% 35V
R522	1-216-677-11	METAL CHIP 12K	0.50% 1/10W	C8506	1-136-165-00	FILM 0.1MF	5% 50V
R523	1-216-073-00	METAL GLAZE 10K	5% 1/10W	C8507	1-126-041-11	ELECT 2200MF	20% 35V
R524	1-216-097-91	METAL GLAZE 100K	5% 1/10W	C8508	1-126-964-11	ELECT 10MF	20% 50V
R525	1-216-295-91	SHORT 0		C8509	1-137-372-11	FILM 0.022MF	5% 50V
R526	1-216-085-00	METAL GLAZE 33K	5% 1/10W	C8510	1-137-372-11	FILM 0.022MF	5% 50V
R527	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	C8511	1-126-965-11	ELECT 22MF	20% 50V
R528	1-216-113-00	METAL GLAZE 470K	5% 1/10W	C8512	1-126-967-11	ELECT 47MF	20% 16V
R529	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8513	1-126-960-11	ELECT 1MF	20% 50V
R530	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8515	1-102-121-00	CERAMIC 0.0022MF	10% 50V
R531	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	C8516	1-126-967-11	ELECT 47MF	20% 16V
R538	1-216-295-91	SHORT 0		C8517	1-137-372-11	FILM 0.022MF	5% 50V
R540	1-216-295-91	SHORT 0		C8518	1-137-372-11	FILM 0.022MF	5% 50V
R605	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8519	1-126-961-11	ELECT 2.2MF	20% 50V
R606	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8520	1-126-964-11	ELECT 10MF	20% 50V
R610	1-216-097-91	METAL GLAZE 100K	5% 1/10W	C8521	1-126-961-11	ELECT 2.2MF	20% 50V
R611	1-216-097-91	METAL GLAZE 100K	5% 1/10W	C8522	1-126-967-11	ELECT 47MF	20% 16V
R612	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8523	1-136-165-00	FILM 0.1MF	5% 50V
R616	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8524	1-124-701-11	ELECT 470MF	20% 25V
R617	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8525	1-136-165-00	FILM 0.1MF	5% 50V
R618	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8526	1-124-701-11	ELECT 470MF	20% 25V
R619	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8527	1-126-967-11	ELECT 47MF	20% 16V
R620	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8528	1-137-371-11	FILM 0.015MF	5% 50V
R621	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8529	1-126-964-11	ELECT 10MF	20% 50V
R622	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8531	1-137-371-11	FILM 0.015MF	5% 50V
R623	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8532	1-137-371-11	FILM 0.015MF	5% 50V
R624	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8535	1-126-965-11	ELECT 22MF	20% 50V
R625	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8536	1-126-960-11	ELECT 1MF	20% 50V
R626	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8537	1-107-630-11	ELECT 2200MF	20% 50V
R627	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8538	1-102-121-00	CERAMIC 0.0022MF	10% 50V
R628	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8539	1-102-121-00	CERAMIC 0.0022MF	10% 50V
R629	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8540	1-126-967-11	ELECT 47MF	20% 16V
R633	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8541	1-104-664-11	ELECT 47MF	20% 25V
R634	1-216-025-91	METAL GLAZE 100	5% 1/10W	C8550	1-130-489-00	FILM 0.033MF	5% 50V
R635	1-216-033-00	METAL GLAZE 220	5% 1/10W	C8551	1-161-772-11	CERAMIC 0.1MF	10% 25V
R636	1-216-033-00	METAL GLAZE 220	5% 1/10W	C8552	1-161-772-11	CERAMIC 0.1MF	10% 25V
R637	1-216-097-91	METAL GLAZE 100K	5% 1/10W	C8553	1-102-121-00	CERAMIC 0.0022MF	10% 50V
R642	1-216-049-91	METAL GLAZE 1K	5% 1/10W	C8554	1-102-121-00	CERAMIC 0.0022MF	10% 50V
R658	1-216-049-91	METAL GLAZE 1K	5% 1/10W				
R659	1-216-041-00	METAL GLAZE 470	5% 1/10W				
R660	1-216-001-00	METAL GLAZE 10	5% 1/10W				
R661	1-216-001-00	METAL GLAZE 10	5% 1/10W				
R671	1-216-099-00	METAL GLAZE 120K	5% 1/10W				
R672	1-216-099-00	METAL GLAZE 120K	5% 1/10W				



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

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>		R8528	1-249-389-11	CARBON	4.7 5% 1/4W F
CN8501*	1-564-521-11	PLUG, CONNECTOR 6P		R8529	1-249-421-11	CARBON	2.2K 5% 1/4W
CN8502*	1-564-518-11	PLUG, CONNECTOR 3P		R8531	1-249-429-11	CARBON	10K 5% 1/4W
CN8503*	1-564-519-11	PLUG, CONNECTOR 4P		R8532	1-215-461-00	METAL	47K 1% 1/4W
CN8505*	1-564-523-11	PLUG, CONNECTOR 8P		R8533	1-215-461-00	METAL	47K 1% 1/4W
		<DIODE>		R8534	1-215-385-00	METAL	33 1% 1/4W
D8501	8-719-110-72	ZENER DIODE RD30ESB2		R8535	1-247-843-11	CARBON	3.3K 5% 1/4W
D8502	8-719-110-72	ZENER DIODE RD30ESB2		R8536	1-215-421-00	METAL	1K 1% 1/4W
		<IC>		R8537	1-215-421-00	METAL	1K 1% 1/4W
IC8501	8-759-980-43	IC TDA2009A		R8538	1-249-429-11	CARBON	10K 5% 1/4W
IC8502	8-759-145-58	IC UPC4558C		R8539	1-249-429-11	CARBON	10K 5% 1/4W
IC8503	8-759-980-43	IC TDA2009A		R8540	1-247-889-00	CARBON	270K 5% 1/4W
IC8504	8-759-145-58	IC UPC4558C		R8544	1-215-443-00	METAL	8.2K 1% 1/4W
		<IC LINK>		R8545	1-215-445-00	METAL	10K 1% 1/4W
PS8501	Δ 1-532-984-91	LINK, IC (2A/90V AC, 60V DC)		*****			
PS8502	Δ 1-532-984-91	LINK, IC (2A/90V AC, 60V DC)		* A-1390-762-ATA BOARD, COMPLETE			
		<TRANSISTOR>		*****			
Q8501	8-729-119-78	TRANSISTOR 2SC2785-HFE		<CONNECTOR>			
Q8502	8-729-119-78	TRANSISTOR 2SC2785-HFE		CN9501*1-564-518-11 PLUG, CONNECTOR 3P			
Q8503	8-729-119-78	TRANSISTOR 2SC2785-HFE		<SWITCH>			
		<RESISTOR>		S9501 1-771-275-11 SWITCH, MICRO (LAMP COVER)			
R8501	1-215-421-00	METAL	1K 1% 1/4W	*****			
R8502	1-215-429-00	METAL	2.2K 1% 1/4W	* A-1390-763-ATB BOARD, COMPLETE			
R8503	1-215-421-00	METAL	1K 1% 1/4W	*****			
R8504	1-215-383-00	METAL	27 1% 1/4W	<CONNECTOR>			
R8505	1-249-385-11	CARBON	2.2 5% 1/4W F	CN9551*1-564-518-11 PLUG, CONNECTOR 3P			
R8506	1-249-421-11	CARBON	2.2K 5% 1/4W	<SWITCH>			
R8507	1-249-385-11	CARBON	2.2 5% 1/4W F	S9551 1-570-245-11 SWITCH, MICRO (FILTER COVER)			
R8508	1-249-421-11	CARBON	2.2K 5% 1/4W	*****			
R8509	1-215-455-00	METAL	27K 1% 1/4W				
R8510	1-249-429-11	CARBON	10K 5% 1/4W				
R8511	1-215-383-00	METAL	27 1% 1/4W				
R8512	1-215-463-00	METAL	56K 1% 1/4W				
R8513	1-215-421-00	METAL	1K 1% 1/4W				
R8514	1-247-843-11	CARBON	3.3K 5% 1/4W				
R8515	1-249-429-11	CARBON	10K 5% 1/4W				
R8516	1-215-463-00	METAL	56K 1% 1/4W				
R8517	1-215-455-00	METAL	27K 1% 1/4W				
R8518	1-215-421-00	METAL	1K 1% 1/4W				
R8519	1-215-421-00	METAL	1K 1% 1/4W				
R8520	1-247-843-11	CARBON	3.3K 5% 1/4W				
R8521	1-215-423-00	METAL	1.2K 1% 1/4W				
R8522	1-215-423-00	METAL	1.2K 1% 1/4W				
R8525	1-215-385-00	METAL	33 1% 1/4W				
R8526	1-249-389-11	CARBON	4.7 5% 1/4W F				
R8527	1-249-421-11	CARBON	2.2K 5% 1/4W				

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

Les composants identifiés par un trame et une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK
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MISCELLANEOUS

- \triangle 1-251-662-11 INLET, AC 3P(WITH NOISE FILTE)
- \triangle 1-473-545-13 POWER BLOCK
- \triangle^* 1-475-523-11 OPTICAL UNIT (W9000)
- 1-505-207-11 SPEAKER (5.7CM)
- 1-505-208-11 SPEAKER (10CM)

- \triangle 1-533-746-11 THERMOSTAT
- 1-543-653-11 CORE ASSY, BEAD(DIVISION TYPE)
- 1-543-982-11 CORE, FERRITE
- 1-698-696-11 FAN, DC
- \triangle 1-475-523-21 OPTICAL UNIT (W7000)

REMOTE COMMANDER

- 1-475-384-11 REMOTE COMMANDER (RM-Y980)

KL-W7000/W9000

RM-Y980

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