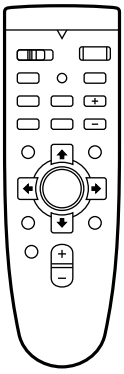
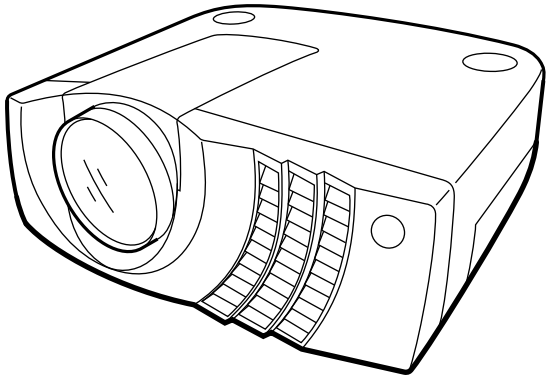
SERVICE MANUAL

MODEL	DEST.
VPL-PX20	WORLD
VPL-PX30	WORLD

MODEL	DEST.
RM-PJM610	WORLD





LCD DATA PROJECTOR

SONY

⚠WARNING

This manual is intended for qualified service personnel only.
To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

⚠WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.
Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegeben Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

⚠ AVERTISSEMENT

Ce manual est destiné uniquement aux personnes compétentes en charge de l'entretien. Afin de réduire les risques de décharge électrique, d'incendie ou de blessure n'effectuer que les réparations indiquées dans le mode d'emploi à moins d'être qualifié pour en effectuer d'autres. Pour toute réparation faire appel à une personne compétente uniquement.

WARNING!!

AN INSULATED TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY A ⚠ MARK ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION!!

AFIN D'ÉVITER TOUT RISQUE D'ÉLECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE.
LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ Á L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS Á LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MAPQUE ⚠ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

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1. Operating Instructions

2. Service Informations

3. Theory of Operation

4. Electrical Adjustments

5. Semiconductors

6. Exploded Views

7. Electrical Parts List

8. Block Diagrams

9. Diagrams

Section 1
Operating Instructions

This section is extracted from operation manual.

SONY

4-073-984-**11**(1)

LCD Data Projector

VPL-PX20
VPL-PX30

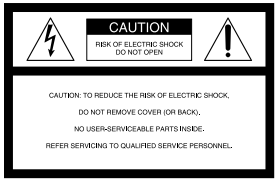
SONY

VPL-PX20/PX30

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.



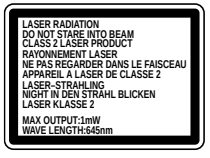
This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For the customers in the USA

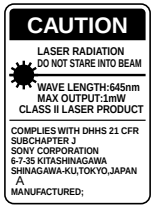
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.



This label is located on the rear of the Remote Commander.

This label is located on the side of the Remote Commander.



This label is located on the rear of the Remote Commander.

This label is located on the rear of the Remote Commander.

Laser light shines out of this window.

Caution

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

Notes

- Do not aim the laser at people or not look into the laser transmitter.
- When the Remote Commander causes malfunction, consult with qualified Sony personnel. We change the Remote Commander as new one according to the guarantee.

For the customers in Canada

This Class A digital apparatus complies with Canadian ICES-003.

For the customers in the United Kingdom

WARNING
THIS APPARATUS MUST BE EARTHED

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Green-and-Yellow:	Earth
Blue:	Neutral
Brown:	Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:
The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured green or green-and-yellow.
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Voor de klanten in Nederland

Bij dit product zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

The socket-outlet should be installed near the equipment and be easily accessible.

Warning on power connection

Use a proper power cord for your local power supply.

	The United States, Canada		Continental Europe	UK, Ireland, Australia, New Zealand	Japan
Plug type	VM0233	290B	YP-12A	—[1)]	VM1296
Female end	VM0089	386A	YC-13B	VM0310B	VM10505
Cord type	SJT	SJT	H05VV-F	N13237/CO-228	HVCTF
Rated Voltage & Current	10A/125V	10A/125V	10A/250V	10A/250V	13A/125V
Safety approval	UL/CSA	UL/CSA	VDE	VDE	DENTORI

1) Use the correct plug for your country.

Table of Contents

Maintenance

Other

Precautions

On safety

- Check that the operating voltage of your unit is identical with the voltage of your local power supply.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it further.
- Unplug the unit from the wall outlet if it is not to be used for several days.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- The wall outlet should be near the unit and easily accessible.
- The unit is not disconnected to the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Do not look into the lens while the lamp is on.
- Do not aim the laser at people or not look into the laser transmitter.
- Do not place your hand or objects near the ventilation holes — the air coming out is hot.
- Be careful not to catch your fingers by the adjuster when you lift up the projector. Do not push hard on the top of the projector with the adjuster out.

On illumination

- To obtain the best picture, the front of the screen should not be exposed to direct lighting or sunlight.
- Ceiling-mounted spot lighting is recommended. Use a cover over fluorescent lamps to avoid lowering the contrast ratio.
- Cover any windows that face the screen with opaque draperies.
- It is desirable to install the projector in a room where floor and walls are not of light-reflecting material. If the floor and walls are of reflecting material, it is recommended that the carpet and wall paper be changed to a dark color.

On preventing internal heat build-up

After you turn off the power with the I / ⏻ key on the Remote Commander or on the control panel, do not disconnect the unit from the wall outlet while the cooling fan is still running.

Caution
The projector is equipped with ventilation holes (intake) on the bottom and ventilation holes (exhaust) on rear. Do not block or place anything near these holes, or internal heat build-up may occur, causing picture degradation or damage to the projector.

On cleaning

- To keep the cabinet looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents, such as thinner, benzene, or abrasive cleansers, since these will damage the cabinet.
- Avoid touching the lens. To remove dust on the lens, use a soft dry cloth. Do not use a damp cloth, detergent solution, or thinner.
- Clean the filter at regular intervals every 300 hours.

On repacking

- Save the original shipping carton and packing material; they will come in handy if you ever have to ship your unit. For maximum protection, repack your unit as it was originally packed at the factory.

Features

High brightness, high picture quality

- **High brightness**
  The LCD panel with microlens and the 200 W UHP lamp allow high brightness (light output 1400 ANSI lumen for VPL-PX20, and 2400 ANSI lumen for VPL-PX30) and excellent uniformity on the picture.
- **High resolution**
  By adopting three 1.3-inch, approximately 790,000-pixels XGA panels, this projector can project sharp picture with the resolutions of 1024 × 768 pixels for RGB input and 750 horizontal TV lines for video input.
- **High picture performance**
  This projector utilizes 3D Digital Gamma correction for good picture uniformity. And the internal RGB enhancer provides sharper RGB images.

Simple setup

- **Sony original high performance APA (Auto Pixel Alignment) function**
  You can get the clearest picture automatically by simply pressing the APA key when the signal is input from a computer.
- **Simple setup with external equipment**
  This projector has 44 kinds of preset data for input signals. You can get a suitable picture by connecting an equipment with supplied cable and pressing the APA key.
- **USB, Digital RGB and 5BNC connectors**
  USB equipment (e.g., USB mouse) allows you to expand your system. Using the application software supplied with the projector allows you to control the projector from your computer operated with Windows[1] 98 operating system . The Digital RGB connector allows you to connect the projector to a Digital RGB equipment. The 5BNC input connector allows you to connect the projector to a workstation output high-resolution signals and to connect the projector to a computer from a long distance.

Easy presentation

- **Remote Commander with mouse control and laser pointer functions**
  With the built-in mouse receiver, you can operate a computer with the Remote Commander. For presentations, you can use the laser pointer built into the Remote Commander.
- **Digital ZOOM, FUNCTION and HELP keys on the Remote Commander**
  The Digital ZOOM allows you to enhance your presentation by zoooming in on the image.
  You can allocate a presentation file to the FUNCTION keys by using the application software (CD-ROM) supplied with the projector. Just pressing the FUNCTION key opens the file immediately.
  The HELP key will be helpful if you encounter a problem during operation.
- **High portability**
  This projector is compact-7.2kg (15lb 14oz), portable size. With such a feature, a carrying handle contributes to a convenient carrying, and you can carry it everywhere you want.

Multi scan compatibility

- **Scan converter built-in**
  This projector has a built-in scan converter which converts the input signal within 1024 × 768 pixels.
- **Accept various input signals**
  This projector accepts video signals of the composite, S video, and component as well as the 15k RGB, VGA[2], SVGA[2], XGA[2] and SXGA[2] signals, which all can be displayed.
- **Compatible with six color systems**
  NTSC 3.58, PAL, SECAM, NTSC 4.43[3], PAL-M or PAL-N color system can be selected automatically or manually.

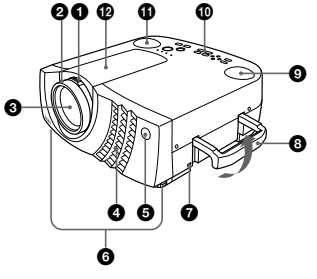
Other functions

Plug & Play
This projector complies with DDC1 and DDC2B. (DDC1 and DDC2B are the Display Data Channel (DDC™)[4] standard in the VESA standard.)
When connecting a DDC1 host system, the projector synchronizes with V.CLK that follows the VESA standard and outputs EDID (Extended Display Identification Data) to the data line.
When connecting a DDC2B host system, the projector automatically switches to the appropriate communication mode.

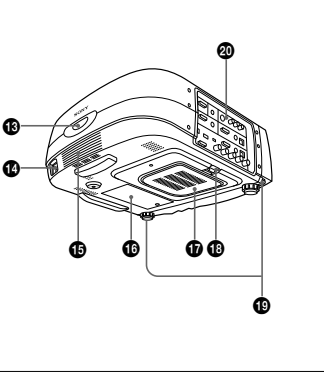
1) Windows is a registered trademark of Microsoft Corporation (U.S.A and other countries).
2) VGA, SVGA, XGA and SXGA are registered trademarks of the International Business Machines Corporation, U.S.A.
3) NTSC4.43 is the color system used when playing back a video recorded on NTSC on an NTSC4.43 system VCR.
4) DDC™ is a registered trademark of the Video Electronics Standard Association.

Location and Function of Controls

Front/Left Side



Rear/Right Side/Bottom



❶ Zoom ring
Adjusts the size of the picture.

❷ Focus ring
Adjusts the picture focus.

❸ Lens
Open the lens cap before projection.

❹ Ventilation holes (exhaust)

❺ Front remote control detector (SIRCS receiver)

❻ Adjuster
When a picture is projected on the out of the screen, adjust the picture using this adjuster.
For details on how to use the adjusters, see "How to use the adjuster" on page 10 (GB).

❼ Security lock
Connects to an optional security cable (Kensington's).

> The security lock corresponds to Kensington's MicroSaver Security System.
> If you have any comment, contact
> Kensington
> 2853 Campus Drive, San Mates, CA 94403
> U.S.A.
> Tel: 800-535-4242: extension 3348
> Home page address:
> http://www.kensington.com/

❽ Carrying handle
Pull up the handle from the projector for carrying.

❾ Left speaker

❿ Control panel
For details, see "Control panel" on page 11 (GB).

⓫ Right speaker

⓬ Lens hood

⓭ Rear remote control detector (SIRCS receiver)

⓮ AC IN socket
Connects the supplied AC power cord.

⓯ Rear speaker

⓰ Lamp cover

⓱ Ventilation holes (intake)/air filter cover

Notes

- Do not place anything near the ventilation holes as it may cause internal heat build-up.
- Do not place your hand or objects near the ventilation holes — the air coming out is hot.

⓲ Air filter cover button

Used to remove the air filter cover.

For details, see "Cleaning the Air Filter" on page 33 (GB).

Note

Clean the air filter every 300 hours to ensure optimal performance.

⓳ Adjuster buttons

⓴ Connector panel

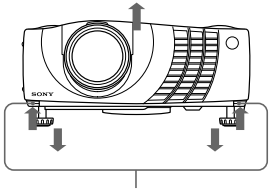
For details, see page 12 (GB).

How to use the adjuster

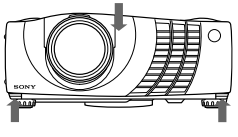
To adjust the height

Adjust the height of the projector as follows:

1 Lift the projector and press the adjuster buttons. The adjusters will extend from the projector.



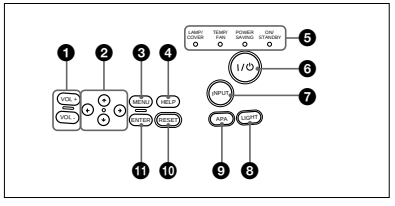
2 While pressing the buttons, lower the projector. Then, release the buttons.
For fine adjustment, turn the adjusters to the right and the left.



Notes

- Be careful not to let the projector down on your fingers.
- Do not push hard on the top of the projector with the adjusters out.

Control panel



❶ VOL +/– keys

Adjust the volume of the built-in speakers and output level of the AUDIO jack.

+ : Increases the volume.

– : Decreases the volume.

❷ Arrow keys (↑/↓/←/→)

Used to select the menu or to make various adjustments.

❸ MENU key

Displays the on-screen menu. Press again to clear the menu.

❹ HELP key

If you need help information during an operation, press this key to display help messages. The Help menu lists error recoveries depending on problem type.

❺ Indicators

LAMP/COVER: Lights up or flashes under the following conditions:

- Lights up when the lamp has reached the end of its life or becomes a high temperature.
- Flashes when the lamp cover or air filter cover is not secured firmly.

TEMP (Temperature)/FAN: Lights up or flashes under the following conditions:

- Lights up when temperature inside the projector becomes unusually high.
- Flashes when the fan is broken.

POWER SAVING: Lights up when the projector is in the power saving mode. When POWER SAVING in the SET SETTING menu is set to ON, the projector goes into the power saving mode if no signal is input for 10 minutes. Although the lamp goes out, the cooling fan keeps running. In the power saving mode, any key does not function for the first 40 seconds. The power saving mode is canceled when a signal is input or any key is pressed.

ON/STANDBY: Lights up or flashes under the following conditions:

- Lights in red when the AC power cord is plugged into the wall outlet. Once in the standby mode, you can turn on the projector with the I / ⏻ key.
- Lights in green when the power is turned on.
- Flashes in green while the cooling fan runs after turning off the power with the I / ⏻ key. The fan runs for about 120 seconds after turning off the power.
  The ON/STANDBY indicator flashes quickly for the first 40 seconds.
  During this time, you cannot turn the power back on with the I / ⏻ key.

For details on the LAMP/COVER and the TEMP/FAN indicators, see page 35 (GB).

❻ I / ⏻ (on / standby) key

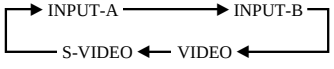
Turns on and off the projector when the projector is in the standby mode. The ON/STANDBY indicator lights in green when the power is turned on.

When turning off the power, press the I / ⏻ key twice following the message on the screen, or press and hold the key for about one second.

For details on steps for turning off the power, see "To turn off the power" on page 20 (GB).

❼ INPUT key

Selects the input signal. Each time you press the key, the input signal switches as follows:



The audio signals are common to the VIDEO and S-VIDEO.

❽ LIGHT key

If you press this key while the power is on, the keys on the control panel will be displayed in orange. Press this key to turn off the light.

❾ APA (Auto Pixel Alignment) key

Adjusts a picture to be projected clearest automatically while a signal from the computer is input. Adjust the shift (up/down and left/right) at the same time automatically.

Note

Press the APA key when the full image is displayed on the screen. If there are black edges around the image, the APA function will not function properly and the image may extend beyond the screen.

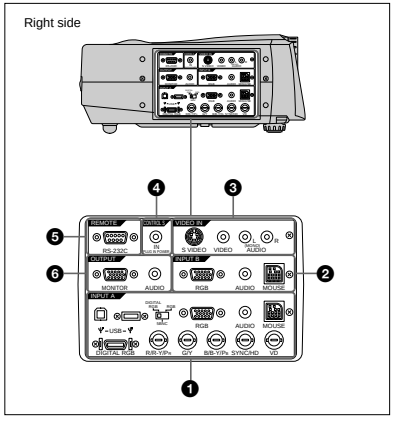
❿ RESET key

Resets the value of an item back to its factory preset value. This key functions when the menu or a setting item is displayed on the screen.

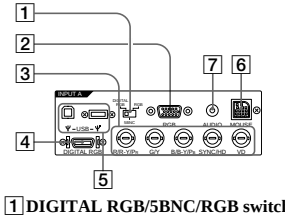
⓫ ENTER key

Enters the settings of items in the menu system.

Connector panel



❶ INPUT A connectors



1 **DIGITAL RGB/5BNC/RGB switch:** Selects DIGITAL RGB, 5BNC or RGB on INPUT A connectors. Select the appropriate position depending on the input signal.
DIGITAL RGB: Signal input from DIGITAL RGB connector.
5BNC: Signal input from the 5BNC connector.
RGB: Signal input from the RGB connector.

2 **RGB input connector (HD D-sub 15-pin, female):** Connects to the monitor output on a computer using the supplied cable. This connector only accepts signals from a computer.

3 **5BNC input connectors (R/R-Y/P_R, G/Y, B/B-Y/P_B, SYNC/HD, VD connectors) (BNC type):** Connect to a high-resolution computer or VCR where signals are transmitted long distances; for example, when the projector has been hung from the ceiling.
According to the connected equipment, computer, component (R-Y/Y/B-Y), HDTV or DTV (DTV GBR, DTV YP_BP_R) signal is selected.

4 **DIGITAL RGB input connector (DFP 20-pin, TMDS):** Connects to a digital RGB output connector on external equipment.

5 **USB connector:** Connects your computer or USB equipment.
A plug: (Right, for downstream, 4-pin): Connects to USB equipment.
B plug: (Left, for upstream, 4-pin): Connects to a computer. If you connect the projector and a computer, the projector automatically assumes that a USB mouse is connected; this allows you to control the mouse from the Remote Commander. The application software supplied with the projector allows you to control the projector from your computer.

6 **MOUSE (13-pin) connector:** Connects to the mouse port on a computer to control the mouse function using the supplied mouse cable.

7 **AUDIO (stereo mini-jack) jack:** Connects to the audio output on a computer.

❷ INPUT B connectors
Connect to external equipment such as a computer. You can control the mouse signal with the Remote Commander.
RGB input (HD D-sub 15-pin, female): Connects to the monitor output on a computer using the supplied cable. This connector only accepts signals from a computer.
AUDIO (stereo mini-jack): Connects to the audio output on a computer.
MOUSE (13-pin): Connects to the mouse port on a computer to control the mouse function using the supplied mouse cable.

❸ VIDEO IN jacks
Connect to external video equipment such as a VCR.
S VIDEO (mini DIN 4-pin): Connects to the S video output (Y/C video output) on video equipment.
VIDEO (phono type): Connects to the composite video output.
AUDIO input L (MONO)/R (phono type): Connect to the audio output of equipment. For stereo equipment, use both the L and R jacks; for monaural equipment, use the L (MONO) jack only.
The audio signals are common to the VIDEO and S VIDEO.

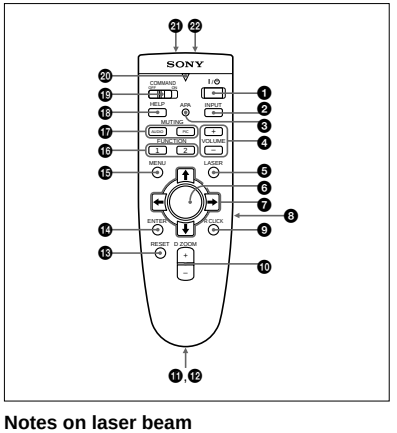
❹ CONTROL S IN/PLUG IN POWER (DC 5V output) jack
Connects to the control S out jacks of the Sony equipment. Connects to the CONTROL S OUT jack on the supplied Remote Commander when using it as a wired Remote Commander. In this case, you do not need to install the batteries in the Remote Commander, since the power is supplied from this jack.

❺ RS-232C connector (D-sub 9-pin, female)
Connects to a computer to operate the projector from the computer.

❻ OUTPUT connectors
MONITOR (HD D-sub 15-pin, female): Connects to the video input connector on the monitor. Outputs signals from the selected channel in the INPUT A (RGB or 5BNC) or INPUT B (RGB) connector. This connector does not output any signals from the DIGITAL RGB connector.
AUDIO (phono type): Connects to external active speakers.
The volume of the speakers can be controlled by the VOLUME +/– keys on the Remote Commander or the VOL +/– keys on the control panel.

Remote Commander

The keys which have the same names as on the control panel function identically.
You can control a connected computer using the Remote Commander.
For details, see "Connecting with a Computer" on page 15 (GB).



Notes on laser beam

• Do not look into the laser transmitter.
• Do not aim the laser at people.

❶ I / ⏻ key

❷ INPUT key

❸ APA (Auto Pixel Alignment) key

❹ VOLUME +/– keys

❺ LASER key
Emits laser beam from the laser transmitter when you press this key.

❻ Joy stick
Functions as a mouse of a computer connected to the unit.

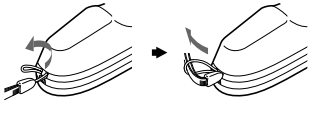
❼ Arrow keys (↑/↓/←/→)

❽ L CLICK key
Functions as a left button on a mouse. When connected to a Macintosh[1)] computer, the L CLICK key functions as a mouse button.

❾ R CLICK key
Functions as a right button on a mouse. When connected to a Macintosh computer, the R CLICK key functions as a mouse button.

❿ D ZOOM +/– key
Enlarges the image at a desired location on the screen.
+: Pressing the + key once displays the icon. This icon indicates the point you want to enlarge. Use an arrow key (↑/↓/←/→) to move the icon to the point to be enlarged. Press the + key repeatedly until the image is enlarged to your requirements.
–: Pressing the – key reduces an image that has been enlarged with the D ZOOM + key.

⓫ Strap holder
Attaches the supplied strap.



⓬ CONTROL S OUT jack (stereo minijack)
Connects to the CONTROL S IN jack on the projector with the connecting cable (not supplied) when using the Remote Commander as a wired one. In this case, you do not need to install the batteries since the power is supplied via the CONTROL S IN jack on the projector.

⓭ RESET key

⓮ ENTER key

⓯ MENU key

⓰ FUNCTION 1/2 keys
When you connect the projector with a computer, you can open a file on the screen by just pressing the FUNCTION key. This will enhance your presentation. To use this function, allocate a file to the FUNCTION key by using the application software. For details on how to allocate a file to the FUNCTION key, refer to the help file of the application software.

1) Macintosh is a registered trademark of Apple Computer, Inc.

⓱ MUTING keys
Cut off the picture and sound.
PIC: Cuts off the picture. Press again to restore the picture.
AUDIO: Cuts off the sound from speakers and AUDIO jack. Press again or press the VOLUME + key to restore the sound.

⓲ HELP key
If you need help information during an operation, press this key to display help messages.

⓳ COMMAND ON/OFF switch
When this switch is set to OFF, no key on the Remote Commander function. This saves the battery power.

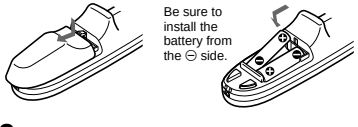
⓴ Transmission indicator
Lights up when you press a key on the Remote Commander.
This indicator does not light up when you use the laser pointer.

㉑ Infrared transmitter

㉒ Laser transmitter

Battery installation

1 Push and slide to open the lid, then install the two size AA (R6) batteries (supplied) with the correct polarity.



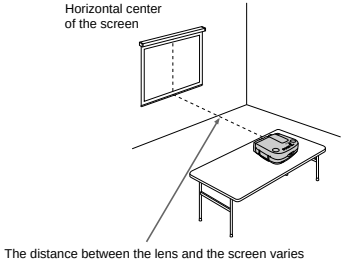
2 Replace the lid.

Notes on batteries
- Make sure that the battery orientation is correct when inserting batteries.
- Do not mix an old battery with a new one, or different types of batteries.
- If you will not use the Remote Commander for a long time, remove the batteries to avoid damage from battery leakage. If batteries have leaked, remove them, wipe the battery compartment dry and replace the batteries with new ones.

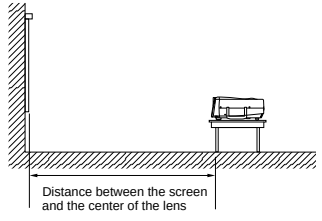
Notes on Remote Commander operation
- Make sure that there is nothing to obstruct the infrared beam between the Remote Commander and the remote control detector on the projector.
- The operation range is limited. The shorter the distance between the Remote Commander and the projector is, the wider the angle within which the commander can control the projector.

Installing the Projector

This section describes the installation arrangements for installing the projector.



The distance between the lens and the screen varies depending on the size of the screen. Use the following table as a guide.



Unit: m (feet)

Screen size (inches)	40	60	80	100	120	150	200	300
Minimum Distance	1.5 (4.9)	2.3 (7.5)	3.1 (10.0)	3.9 (12.6)	4.6 (15.2)	5.8 (19.1)	7.8 (25.5)	11.7 (38.4)
Maximum Distance	1.8 (6.0)	2.8 (9.1)	3.7 (12.3)	4.7 (15.4)	5.7 (18.6)	7.1 (23.3)	9.5 (31.2)	14.3 (46.9)

Connecting

Connecting with a Computer

This section describes how to connect the projector to a computer.
You can control the projector from your computer by using the application software supplied with the projector, and/or you can use USB equipment. For details, see "Using USB equipment (e.g., USB mouse)".

When the projector is connected to a computer, you can control the mouse of a computer by the Remote Commander.
The R/L CLICK keys and joy stick function as follows.

Note
Make sure that there is nothing to obstruct the infrared beam between the Remote Commander and the remoter control detector on the projector.

Key and joy stick	Function	
	IBM PC/AT[1] compatible, Serial	Macintosh
R CLICK (front)	Right button	Mouse button
L CLICK (rear)	Left button	Mouse button
Joy stick	Corresponds with the movements of the mouse	

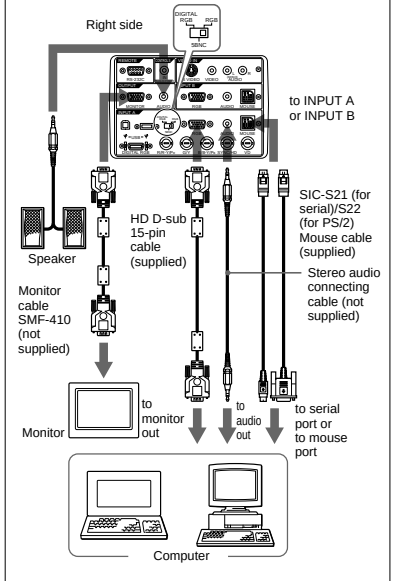
Also refer to the instruction manual of equipment to be connected.

Notes
- This unit accepts the VGA, SVGA, XGA or SXGA signals. However, we recommend you to set the output signal of your computer to the XGA.
- If you set your computer, such as a notebook type IBM PC/AT compatible, to output the signal to both the display of your computer and the external monitor, the picture of the external monitor may not appear properly. In such cases, set the output mode of your computer to output the signal to only the external monitor.
  For details, refer to the operating instructions supplied with your computer.
- The RGB input connectors of the INPUT A/B and DIGITAL RGB connector of the INPUT A comply with the VESA DDC2B. If your computer or graphics board is compatible with DDC, turn on the power of the equipment as follows:
  1 Connect the projector to the computer with the HD D-sub 15-pin cable.
  2 Turn on the power of the projector.
  3 Boot up the computer.

When making connections, be sure to:
- turn off all equipment before making any connections.
- use the proper cables for each connection.
- insert the plugs of the cables properly; plugs that are not fully inserted often generate noise. When pulling out a cable, be sure to pull it out from the plug, not the cable itself.

Notes
- Connect all the connecting cables to the INPUT A connector when you input a signal from the INPUT A connector.
  Connect all the cables to the INPUT B connector when you input a signal from the INPUT B connector as well.
- Supplied mouse cables may not work properly according to your computer.

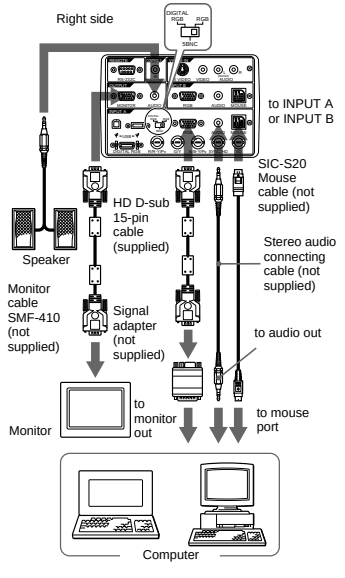
When connecting with an IBM PC/AT compatible computer



Note
Set the DIGITAL RGB/5BNC/RGB switch to RGB (right) when you connect the computer to the INPUT A connector.

1) IBM and PC/AT are a trademark and a registered trademark of International Business Machines Corporation, U.S.A.

When connecting with a Macintosh computer

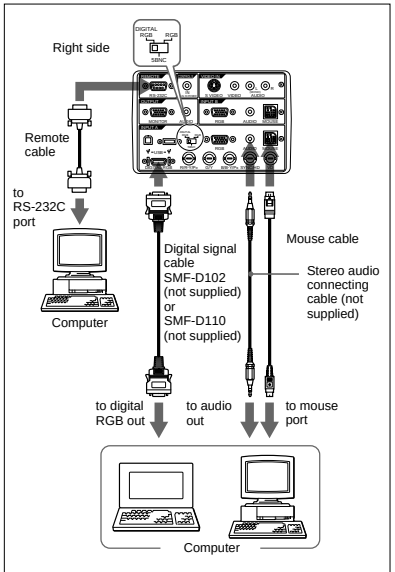


Notes

- Set the DIGITAL RGB/5BNC/RGB switch to RGB (right) when you connect the computer to the INPUT A connector.
- When you connect with a Macintosh computer, you need the optional signal adapter.

Using the DIGITAL RGB (TMDS) connector

Connect the computer to the DIGITAL RGB (TMDS) connector on the connector panel.



Notes

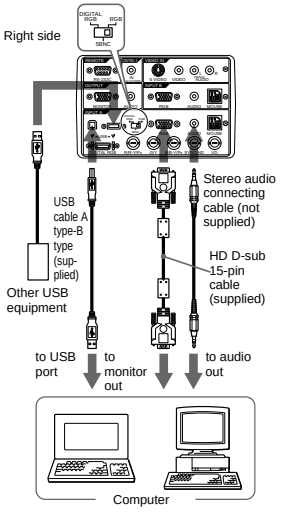
- Use the proper mouse cable for your computer.
- You can use a USB mouse. For details, see "Using USB equipment (e.g., USB mouse)".
- Set the DIGITAL RGB/5BNC/RGB switch to DIGITAL RGB (left).
- To connect digital RGB equipment, use the digital signal cable (SMF-D102 or SMF-D110) (not supplied). Do not use other cables — noise may appear on the image.

Note

If you use the DIGITAL RGB (TMDS) connector, the MONITOR connector will not output image signals.

Using USB equipment (e.g., USB mouse)

Connect the USB equipment to the USB connector on the connector panel.
You can connect your computer to the projector via the RGB connector, 5BNC connector or DIGITAL RGB connector. (The example below uses the RGB connector.)



Note

Set the DIGITAL RGB/5BNC/RGB switch to the suitable position depending on the connection.

Notes

- Your computer may not start correctly when it has been connected to the USB connector on the projector via the USB cable. In this case, first disconnect the USB cable, restart the computer, then connect the computer to the projector using the USB cable supplied with the projector.
- The USB connector on this projector will function only with a computer operated with Windows 98.
- When you connect the mouse to your computer via the USB connector, do not connect another mouse to the MOUSE port. The projector automatically assumes that a USB mouse is connected.

USB hub function

If you connect the projector and your computer using the USB cable for the first time, the following devices will be recognized.

1 General purpose USB hub
2 USB human interface device (for wireless mouse function)
3 USB human interface device (for projector control function)

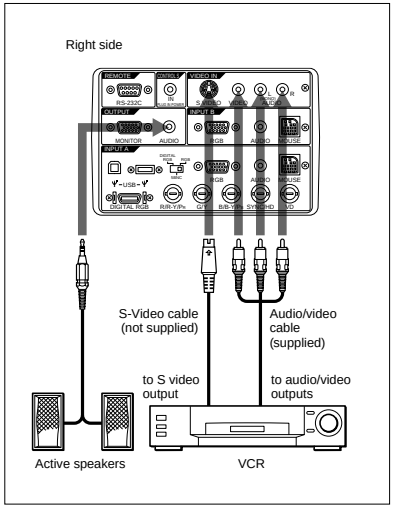
Any other devices connected to the downstream connector of a projector are recognized by your computer.

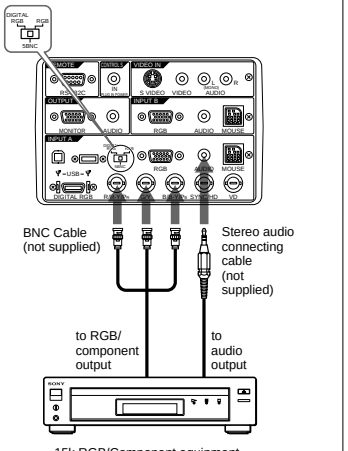
Connecting with a VCR/15k RGB/ Component Equipment

This section describes how to connect the projector with a VCR, external active speakers, and 15k RGB/ component equipment.
Also refer to the instruction manuals of the equipment to be connected.

When making connections, be sure to:

- turn off all equipment before making any connections.
- use the proper cables for each connection.
- insert the plugs of the cables properly; plugs that are not fully inserted often generate noise. When pulling out a cable, be sure to pull it out from the plug, not the cable itself.





Notes

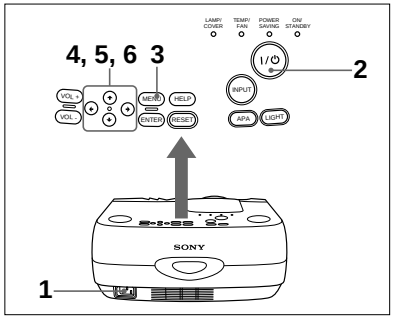
- Set the aspect ratio using ASPECT in the INPUT SETTING menu according to the input signal.
- To connect a 15k RGB/Component equipment, select the COMPUTER/COMPONENT/DTV YPBPR/DTV GBR in the INPUT-A in the SET SETTING menu according to the input signal.
- Use the composite sync signal when you input the external sync signal from 15k RGB/component equipment.

Connecting to a HDTV 1035/60i

Since the screen ratio of a high definition image is 16:9 and 576 lines are displayed in the vertical direction, the image displayed is not a high-definition image.

Selecting the Menu Language

You can select the language for displaying in the menu and other on screen displays. The factory setting is ENGLISH.



1 Plug the AC power cord into the wall outlet.

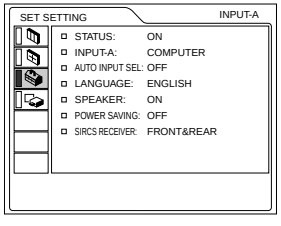
2 Press the I / ⏻ key to turn on the power.

3 Press the MENU key.

The menu display appears.

4 Select the icon of SET SETTING Menu, the third one, with the ↑ or ↓ key, then press the → or ENTER key.

The SET SETTING Menu appears.



5 Select LANGUAGE with the ↑ or ↓ key, then press the → or ENTER key.

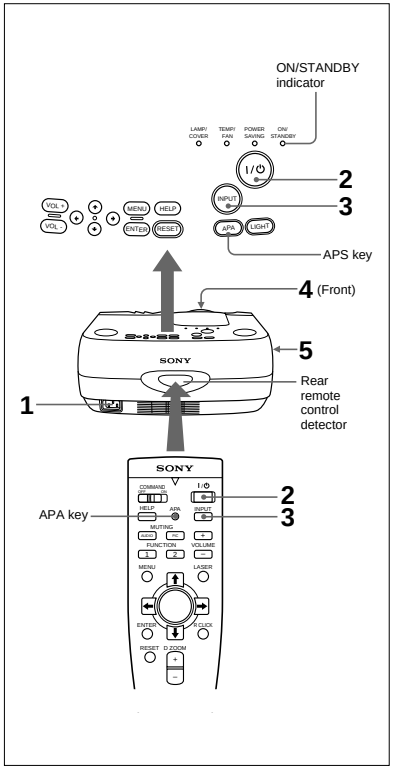
6 Select the language desired with the ↑ or ↓ key, then press the ← or ENTER key.

The menu changes into the selected language .

To clear the menu display

Press the MENU key.
The menu display disappears automatically if no key is pressed for one minute.

Projecting



1 After all equipment is connected completely, plug the AC power cord into the wall outlet.

The ON/STANDBY indicator lights in red and the projector goes into the standby mode.

2 Press the I / ⏻ key.

The ON/STANDBY indicator lights in green.

3 Turn on equipment connected to the projector. Press the INPUT key to select the input source.

INPUT-A: Selects audio and video signals input from the INPUT A connector.

INPUT-B: Selects audio and video signals input from the INPUT B connector.

VIDEO: Selects audio and video signals input from the AUDIO/VIDEO (VIDEO IN) jacks.

S-VIDEO: Selects audio and video signals input from the AUDIO/S VIDEO (VIDEO IN) jacks.

Note

The AUDIO (VIDEO IN) jacks are used as audio outputs of both VIDEO and S-VIDEO.

4 Turn the zoom ring to adjust the size of the picture.

5 Turn the focus ring to adjust the focus.

Note

Looking into the lens when projecting may cause injury to your eyes.

To	Press
Adjust the volume	the VOL +/– keys on the control panel or the VOLUME +/– keys on the Remoter Commander.
Cut off the sound	the AUDIO MUTING key on the Remote Commander. To restore the sound, press the AUDIO MUTING key again or press the VOL + key on the control panel or the VOLUME + key on the Remote Commander.
Cut off the picture	the PIC MUTING key on the Remote Commander. To restore the picture, press the PIC MUTING key again.

To get the clearest picture

You can get the suitable picture when a signal from the computer is input. Press the APA key.
The picture is automatically adjusted to be projected clearest.

Notes

- Adjust the signal when the still picture is displayed on the screen.
- Press the APA key when the full image is displayed on the screen. If there are black edges around the image, the APA function will not function properly and the image may extend beyond the screen.
- If you switch the input signal or re-connect a computer, press the APA key again to get the suitable picture.

- "ADJUSTING" appears on the screen. Press the APA key again during the adjustment to restore the original screen.
- "Complete!" appears on the screen when the picture is adjusted properly. The picture may not be adjusted properly depending on the kinds of input signals.
- Adjust the items in the INPUT SETTING menu when you adjust the picture manually.
  For details, see page 24 (GB).

To correct the trapezoid

When the projecting image is a trapezoid, change the projector's position/height by moving the adjuster.
For details on "How to use the adjuster", see page 10 (GB).

If the image is still a trapezoid, correct it in DIGIT KEYSTONE in the INSTALL SETTING menu.

When the base edge is longer than the upper edge as shown in the figure below:

Set the value to negative.

When the upper edge is longer than the base edge as shown in the figure below:

Set the value to positive.

For details on "DIGIT KEYSTONE", see page 27 (GB).

To turn off the power

1 Press the I / ⏻ key.

"Power OFF?" appears on the screen.

Note

The message will disappear if you press any key except the I / ⏻ key, or if you do not press any key for five seconds.

2 Press the I / ⏻ key.

The ON/STANDBY indicator flashes in green and the fan continues to run for about 120 seconds to reduce the internal heat. Also, the ON/STANDBY indicator flashes quickly for the first 40 seconds. During this time, you will not be able to turn the power back on with the I / ⏻ key.

3 Unplug the AC power cord from the wall outlet after the fan stops running and the ON/STANDBY indicator lights in red.

When you cannot confirm the on-screen message
When you cannot confirm the on-screen message in a certain condition, you can turn off the power by holding the I / ⏻ key for about one second.

Note

Do not unplug the AC power cord while the fan is still running; otherwise, the fan will stop although the internal heat is still high, leading to breakdown of the projector.

About the air filter cleaning

Clean the air filter every 300 hours to ensure optimal performance.

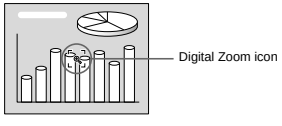
Effective tools for your presentation

To enlarge the image (Digital Zoom function)

You can select a point in the image to enlarge.

1 Press the D ZOOM + key on the Remote Commander.

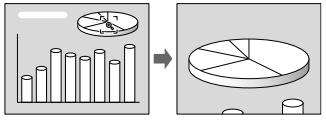
The Digital Zoom icon appears at the center of the image.



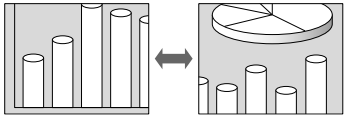
2 Move the icon to the point on the image you want to enlarge. Use the arrow keys (↑/↓/←/→) to move the icon.

3 Press the D ZOOM + key again.

The image where the icon is located is enlarged. By pressing the + key repeatedly, the image size increases. (ratio of enlargement: max. 4 times)



Use the arrow keys(↑/↓/←/→) to scroll the enlarged image.



To return the image back to its original size
Press the D ZOOM – key on the Remote Commander.

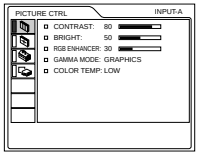
To use the Laser Pointer function

Press the LASER key on the Remote Commander. The laser pointer appears. The pointer is helpful in indicating a particular point on the screen.

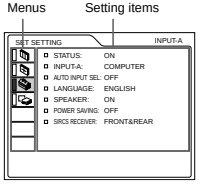
Using the MENU

The projector is equipped with an on-screen menu for making various adjustments and settings.
To select the language used in the menu, see page 26 (GB).

1 Press the MENU key.
The menu display appears.
The bar on the icon of the currently selected menu is highlighted in yellow.



2 Use the ↑ or ↓ key to select a menu, then press the → or ENTER key.
The selected menu appears.



3 Make setting or adjustment on an item.
For details on setting individual items, see the relevant menu pages.

To clear the menu display

Press the MENU key.
The menu display disappears automatically if no key is pressed for one minute.

To reset items that have been adjusted

Press the RESET key.
"Complete!" appears on the screen and the settings appearing on the screen will be reset to their factory preset values.
Items which can be reset are:
- "CONTRAST", "BRIGHT", "COLOR", "HUE", "SHARP" and "RGB ENHANCER" in the PICTURE CTRL menu.
- "DOT PHASE", "SIZE H" and "SHIFT" in the INPUT SETTING menu.

About the memory of the settings

The settings are automatically stored in the projector memory.

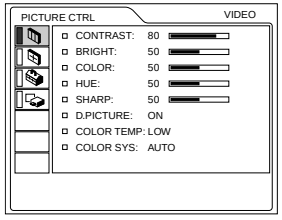
When no signal is input

When there is no input signal, "NO INPUT–Cannot adjust this item." appears on the screen, and each item cannot be adjusted.

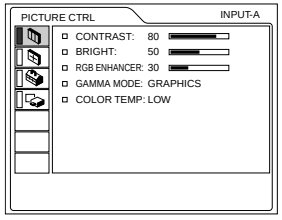
The PICTURE CTRL Menu

The PICTURE CTRL (control) menu is used for adjusting the picture.
Unadjustable items depending on the input signal are not displayed in the menu.

When the video signal is input



When the RGB signal is input



Operation

1. Select an item
Use the ↑ or ↓ key to select the item, then press the → or ENTER key.

2. Adjust an item
- When changing the adjustment level:
  To increase the number, press the ↑ or → key.
  To decrease the number, press the ↓ or ← key.
  Press the ENTER key to restore the original screen.
- When changing the setting:
  Press the ↑ or ↓ key to change the setting.
  Press the ENTER or ← key to restore the original screen.

CONTRAST

Adjusts the picture contrast.
The higher the setting, the greater the contrast.
The lower the setting, the lower the contrast.

BRIGHT

Adjusts the picture brightness.
The higher the setting, the brighter the picture.
The lower the setting, the darker the picture.

COLOR

Adjusts color intensity.
The higher the setting, the greater the intensity.
The lower the setting, the lower the intensity.

HUE

Adjusts color tones.
The higher the setting, the picture becomes greenish.
The lower the setting, the picture becomes purplish.

SHARP

Adjusts the picture sharpness.
The higher the setting, the sharper the picture.
The lower the setting, the softer the picture.

RGB ENHANCER

Adjusts the picture sharpness when the RGB signals are input.
The higher the setting, the sharper the picture.
The lower the setting, the softer the picture.

D. (Dynamic) PICTURE

Emphasizes the black color.
ON: Emphasizes the black color to produce a bolder "dynamic" picture.
OFF: Reproduces the dark portions of the picture accurately, in accordance with the source signal.

GAMMA MODE

Selects a gamma correction curve.
GRAPHICS: Improves the reproduction of half tones. Photos can be reproduced in natural tones.
TEXT: Contrasts black and white. Suitable for images that contain lots of text.

COLOR TEMP

Adjusts the color temperature.
HIGH: Makes the white color bluish.
LOW: Makes the white color reddish.

COLOR SYS (System)

Selects the color system of the input signal.
AUTO: Automatically selects one of the following signals: NTSC 3.58, PAL, SECAM, NTSC4.43.
PAL-M/N: Automatically selects one of the following signals: PAL-M/PAL-N, NTSC3.58.
Normally, set to AUTO.
If the picture is distorted or colorless, select the color system according to the input signal.

Input signals and adjustable/setting items

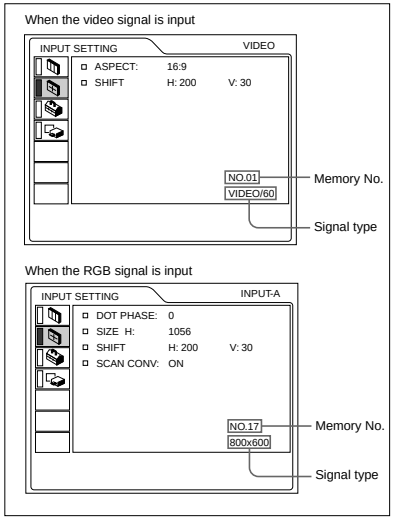
Item	Input signal				
	Video or S video (Y/C)	Compo-nent	HDTV	RGB[1]	B&W
CONTRAST	●	●	●	●	●
BRIGHT	●	●	●	●	●
COLOR	●	●	●	–	–
HUE	● (NTSC3.58/ 4.43 only)	●	●	–	–
SHARP	●	●	●	–	●
RGB ENHANCER	–	–	–	●	–
D. PICTURE	●	● (15k 60/50 only)	–	–	●
GAMMA MODE	–	–	–	●	–
COLOR TEMP	●	●	●	●	●
COLOR SYS	●	–	–	–	●

● : Adjustable/can be set
– : Not adjustable/can not be set

1) The RGB signals of a computer

The INPUT SETTING Menu

The INPUT SETTING menu is used to adjust the input signal.
Unadjustable items depending on the input signal are not displayed in the menu.



Operation

1. Select an item
Use the ↑ or ↓ key to select the item, then press the → or ENTER key.

2. Adjust an item
- When changing the adjustment level:
  To increase the number, press the ↑ or → key.
  To decrease the number, press the ↓ or ← key.
  Press the ENTER key to restore the original screen.
- When changing the setting:
  Press the ↑ or ↓ key to change the setting.
  Press the ENTER or ← key to restore the original screen.

DOT PHASE

Adjusts the dot phase of the LCD panel and the signal input from the INPUT A/B connector. Adjust the picture further for finer picture after the picture is adjusted with pressing the APA key.
Adjust the picture to where it looks clearest.

SIZE H

Adjusts the horizontal size of picture input from the INPUT A/B connector.
The higher the setting, the larger the horizontal size of the picture.
The lower the setting, the smaller the horizontal size of the picture. Adjust the setting according to the dots of the input signal. For details on the suitable value for the preset signals, see page 25 (GB).

SHIFT

Adjusts the position of the picture input from the INPUT A/B connectors or VIDEO IN jacks.
H adjusts the horizontal position of the picture.
V adjusts the vertical position of the picture.
As the setting for H increases, the picture moves to the right, and as the setting decreases, the picture moves to the left.
As the setting for V increases, the picture moves up, and as the setting decreases, the picture moves down.
Use the ← or the → key to adjust the horizontal position and the ↑ and ↓ key for the vertical position.

ASPECT

Sets the aspect ratio of the picture.
When inputting 16:9 (squeezed) signal from equipment such as a DVD player, set to 16:9.
4:3 : When the picture with ratio 4:3 is input.
16:9 : When the picture with ratio 16:9 (squeezed) is input.

SCAN CONV (Scan converter)

Converts the signal to display the picture according to the screen size.
ON: Displays the picture according to the screen size. The picture will lose some clarity.
OFF: Displays the picture while matching one pixel of input picture element to that of the LCD. The picture will be clear but the picture size will be smaller.

Note
When the XGA or SXGA signal is input, this item will not be displayed.

Input signals and adjustable/setting items

Item	Input signal				
	Video or S video (Y/C)	15k RGB/ Component	HDTV	RGB[1]	B&W
DOT PHASE	–	–	●	●	–
SIZE H	–	–	●	●	–
SHIFT	●	●	●	●	●
ASPECT	●	●	–	–	●
SCAN CONV	–	–	–	● (lower than SVGA only)	–

● : Adjustable/can be set
– : Not adjustable/can not be set

About the preset memory No.

This projector has 44 kinds of preset data for input signals (the preset memory). The memory number of the current input signal and the signal type are displayed when the preset signal is input. This projector automatically detects the signal type. When the signal is registered to the preset memory, a suitable picture is displayed on the screen according to the signal type. You can adjust the picture through the INPUT SETTING menu.
This projector also has 20 kinds of user memories for each INPUT-A/B. When an unpreset signal is input for the first time, memory number is displayed as 0. If the input signal is adjusted in the INPUT SETTING menu, the setting via INPUT-A/B is stored. When more than 20 user memories are registered for each INPUT-A/B, the newest memory is automatically stored over the oldest one.

Preset signals

Memory No.	Preset signal		fH (kHz)	fV (Hz)	Sync	SIZE H
1	Video 60 Hz		15.734	59.940	H-neg V-neg	
2	Video 50 Hz		15.625	50.000	H-neg V-neg	
3	15k RGB/Component 60 Hz		15.734	59.940	H-neg V-neg	
4	15k RGB/Component 50 Hz		15.625	50.000	H-neg V-neg	
5	HDTV		33.750	60.000	H-neg V-neg	
6	640 × 350	VGA mode 1	31.469	70.086	H-pos V-neg	800
7		VGA VESA[2] 85 Hz	37.861	85.080	H-pos V-neg	832
8	640 × 400	PC-9801[3] Normal	24.823	56.416	H-neg V-neg	848
9		VGA mode 2	31.469	70.086	H-neg V-pos	800
10		VGA VESA 85 Hz	37.861	85.080	H-neg V-pos	832
11	640 × 480	VGA mode 3	31.469	59.940	H-neg V-neg	800
12		Macintosh 13"	35.000	66.667	H-neg V-neg	864
13		VGA VESA 72 Hz	37.861	72.809	H-neg V-neg	832
14		VGA VESA 75 Hz	37.500	75.000	H-neg V-neg	840
15		VGA VESA 85 Hz	43.269	85.008	H-neg V-neg	832
16	800 × 600	SVGA VESA 56 Hz	35.156	56.250	H-pos V-pos	1024
17		SVGA VESA 60 Hz	37.879	60.317	H-pos V-pos	1056
18		SVGA VESA 72 Hz	48.077	72.188	H-pos V-pos	1040
19		SVGA VESA 75 Hz	46.875	75.000	H-pos V-pos	1056
20		SVGA VESA 85 Hz	53.674	85.061	H-pos V-pos	1048
21	832 × 624	Macintosh 16"	49.724	74.550	H-neg V-neg	1152
22	1024 × 768	XGA VESA 43 Hz	35.524	43.479	H-pos V-pos	1264
23		XGA VESA 60 Hz	48.363	60.004	H-neg V-neg	1344
24		XGA VESA 70 Hz	56.476	69.955	H-neg V-neg	1328
25		XGA VESA 75 Hz	60.023	75.029	H-pos V-pos	1312
26		XGA VESA 85 Hz	68.677	84.997	H-pos V-pos	1376
27	1152 × 864	SXGA VESA 70 Hz	63.995	70.016	H-pos V-pos	1472
28		SXGA VESA 75 Hz	67.500	75.000	H-pos V-pos	1600
29		SXGA VESA 85 Hz	77.487	85.057	H-pos V-pos	1568
30	1152 × 900	Sunmicro LO	61.795	65.960	H-neg V-neg	1504
31		Sunmicro HI	71.713	76.047	H-neg V-neg	1472
32	1280 × 960	SXGA VESA 60 Hz	60.000	60.000	H-pos V-pos	1800
33		SXGA VESA 75 Hz	75.000	75.000	H-pos V-pos	1728
34	1280 × 1024	SXGA VESA 43 Hz	46.433	43.436	H-pos V-pos	1696
35		SGI-5	53.316	50.062	H-neg V-neg	1680
36		SXGA VESA 60 Hz	63.974	60.013	H-pos V-pos	1696
37		SXGA VESA 75 Hz	79.976	75.025	H-pos V-pos	1688
38		SXGA VESA 85 Hz	91.146	85.024	H-pos V-pos	1728

43	PC Component 480/60P	480/60P (Double frequency NTSC)	31.470	60.000	SonG	
44	575/50P	575/50P (Double frequency PAL)	31.250	50.000	SonG	
45	1080/50I	1080/50I	28.130	50.000		
46	1080& 1152/60	1080/50I-2	31.250	50.000		
47	720/60P	720/60P	45.000	60.000		
48	720/50P	720/50P	37.500	50.000		

1) The RGB signals of a computer
2) VESA is a registered trademark of Video Electronics Standard Association.
3) PC-98 is a registered trademark of NEC Corporation.

Since the data is recalled from the preset memory about the following signals, you can use these preset data by adjusting SIZE H. Make fine adjustment by adjusting SHIFT.

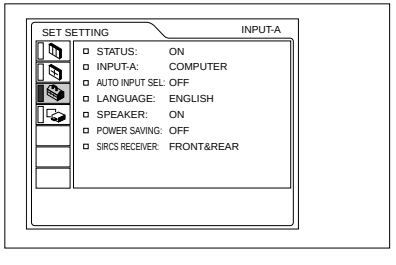
Signal	Memory No.	SIZE H
Super Mac-2	23	1312
SGI-1	23	1320
Macintosh 19"	25	1328
Macintosh 21"	28	1456
Sony News	36	1708
PC-9821 1280 × 1024	36	1600
WS Sunmicro	37	1664

Note

When the aspect ratio of input signal is other than 4:3, a part of the screen is displayed in black.

The SET SETTING Menu

The SET SETTING menu is used for changing the settings of the projector.



Operation

1. Select an item

Use the ↑ or ↓ key to select the item, then press the → or ENTER key.

2. Change the setting

Press the ↑ or ↓ key to change the setting.
To restore the original screen, press the ENTER or ← key.

STATUS (on-screen display)

Sets up the on-screen display.
ON: Shows all of the on-screen displays.
OFF: Turns off the on-screen displays except for the menus, a message when turning off the power, and warning messages.

For details on the warning messages, see page 35 (GB).

INPUT-A

Selects the computer, component, DTV YPBPR or DTV GBR signal input from the 5BNC connector.

Note

If the setting is not correct, "Please check INPUT-A setting." appears on the screen and the color of the picture becomes strange or the picture is not displayed.

AUTO INPUT SEL

When set to ON, the projector detects input signals in the following order: INPUT-A/INPUT-B/VIDEO/S-VIDEO. It indicates the input channel when the power is turned on or the INPUT key is pressed.

LANGUAGE

Selects the language used in the menu and on-screen displays.
Available languages are: English, French, German, Italian, Spanish, Japanese and Chinese.

SPEAKER

Set to OFF to cut off the sound of the internal speakers. When set to OFF, "SPEAKER OFF" appears on the screen when you turn on the power.

POWER SAVING

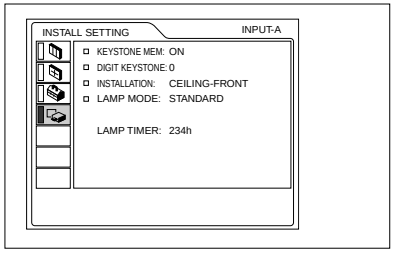
When set to ON, the projector goes into the power saving mode if no signal is input for 10 minutes.

SIRCS RECEIVER

Selects the remote control detectors (SIRCS receiver) on the front and rear of the projector.
FRONT & REAR: Activates both the front and rear detectors.
FRONT: Activates the front detector only.
REAR: Activates the rear detector only.

The INSTALL SETTING Menu

The INSTALL SETTING menu is used for changing the settings of the projector.



Operation

1. Select an item

Use the ↑ or ↓ key to select the item, then press the → or ENTER key.

2. Adjust an item

- When changing the adjustment level:
  To increase the number, press the ↑ or → key.
  To decrease the number, press the ↓ or ← key.
  Press the ENTER key to restore the original screen.
- When changing the setting:
  Press the ↑ or ↓ key to change the setting.
  Press the ENTER or ← key to restore the original screen.

KEYSTONE MEM

ON: DIGIT KEYSTONE setting is stored.
The data is retrieved when the projector power is turned on. The setting will remain the same every time.
OFF: DIGIT KEYSTONE is reset to 0 when the power is turned on next time.

DIGIT KEYSTONE

Corrects the trapezoid caused by the projection angle. If the base edge is longer, set a negative value; if the upper edge is longer, set a positive value to square the image.

INSTALLATION

Sets to reverse the picture horizontally or vertically.

FLOOR-FRONT: The picture is not reversed.
CEILING-FRONT: The picture is reversed horizontally and vertically.
FLOOR-REAR: The picture is reversed horizontally.
CEILING-REAR: The picture is reversed vertically.

Note

In case of using a mirror, be careful of installation since the picture may be reversed.

LAMP MODE

Sets the lamp brightness in the projection.
STANDARD: Illuminates with normal brightness.
LOW: Reduces fan noise and power consumption.

Compared with the STANDARD setting, the brightness of an image projecting under the LOW setting will be low.

LAMP TIMER

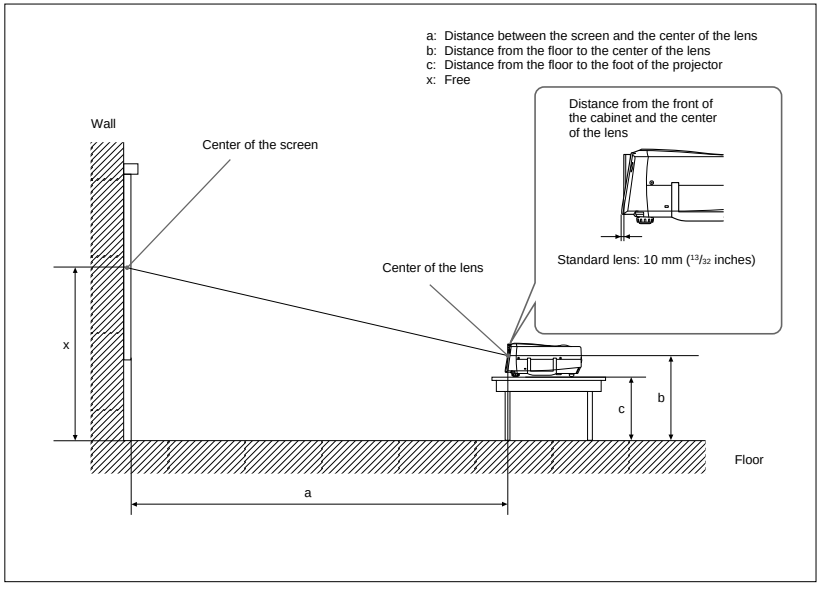
Indicates how long the lamp has been turned on.

Note

This only displays the time. You cannot alter the display.

Installation Examples

Floor Installation



Unit: mm (inches)

Screen size (inches)		40	60	80	100	120	150	180	200	250	300
a	Minimum	1490 (58 3/4)	2280 (89 7/8)	3060 (120 1/2)	3850 (151 5/8)	4630 (182 3/8)	5810 (228 7/8)	6990 (275 1/4)	7770 (306)	9740 (383 5/8)	11700 (460 3/4)
	Maximum	1820 (71 3/4)	2780 (109 1/2)	3740 (147 3/8)	4700 (185 1/8)	5660 (222 1/8)	7100 (279 3/8)	8540 (336 3/8)	9500 (374 1/8)	11900 (468 5/8)	14300 (563 1/8)
b		x–305 (12)	x–457 (18)	x–610 (24)	x–762 (30)	x–914 (36)	x–1143 (45)	x–1372 (54)	x–1524 (60)	x–1905 (75 1/8)	x–2286 (90 1/8)
c		x–394 (15 5/8)	x–546 (21 5/8)	x–699 (27 5/8)	x–851 (33 5/8)	x–1003 (39 5/8)	x–1232 (48 5/8)	x–1461 (57 5/8)	x–1613 (63 5/8)	x–1994 (78 5/8)	x–2375 (93 5/8)

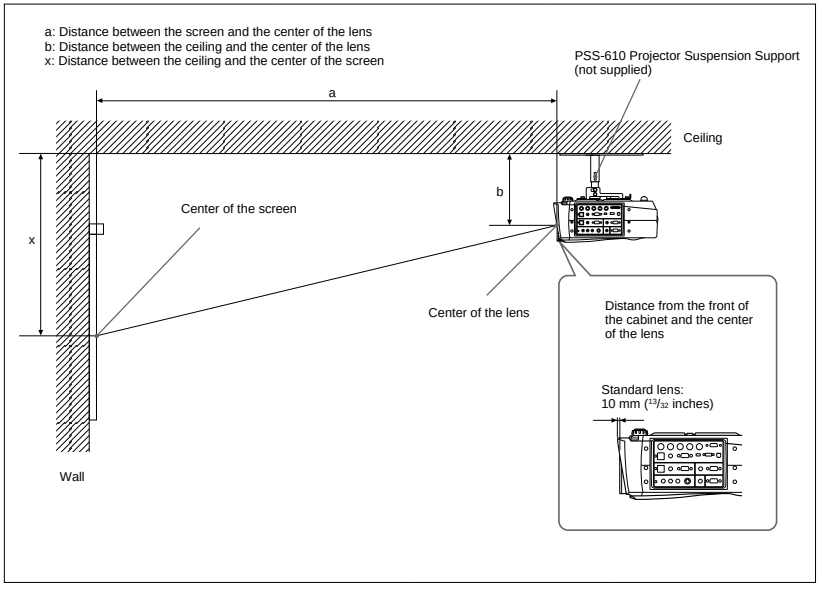
To calculate the installation measurement (unit: mm)

SS: screen size diagonal (inches)
a (minimum) = {(SS × 50.18/1.3102) – 75.10104} × 1.025
a (maximum) = {(SS × 64.518746/1.3102) – 107.8977} × 0.975
b = x – (SS/1.3102 × 9.984)
c = x – (SS/1.3102 × 9.984 + 89)

Ceiling Installation

When installing the projector on the ceiling, use the PSS-610 Projector Suspension Support.

For ceiling installation, consult with qualified Sony personnel.



Unit: mm (inches)

Screen size (inches)		80	100	120	150	180	200	250	300
a	Minimum	3060 (120 1/2)	3850 (151 5/8)	4630 (182 3/8)	5810 (228 7/8)	6990 (275 1/4)	7770 (306)	9740 (383 5/8)	11700 (460 3/4)
	Maximum	3740 (147 3/8)	4700 (185 1/8)	5660 (222 7/8)	7100 (279 5/8)	8540 (336 3/8)	9500 (374 1/8)	11900 (468 5/8)	14300 (563 1/8)
x		b+610 (24)	b+762 (30)	b+914 (36)	b+1143 (45)	b+1372 (54)	b+1524 (60)	b+1905 (75 1/8)	b+2286 (90 1/8)
b		231/256/281/331/356/381 mm (9 1/8/10 1/8/11 1/8/13 1/8/14 1/8/15 inches) adjustable when using PSS-610							

To calculate the installation measurement (unit: mm)

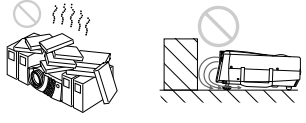
SS: screen size diagonal (inches)
a (minimum) = {(SS × 50.18/1.3102) – 75.10104} × 1.025
a (maximum) = {(SS × 64.518746/1.3102) – 107.8977} × 0.975
x = b + (SS/1.3102 × 9.984)

Tips for Installation

Unsuitable Installation

Do not install the projector in the following situations. These installations may cause malfunction or damage to the projector.

Poorly ventilated



- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes. When the internal heat builds up due to the block-up, the temperature sensor will function with the message “High temp.! Lamp off in 1 min.” The power will be turned off automatically after one minute.
- Leave space of more than 30 cm (11 7/8 inches) around the unit.
- Be careful that the ventilation holes may inhale tininess such as a piece of paper.
- If you put something in front of the front ventilation holes, the exhaust may be inhaled into the projector through the ventilation holes at the bottom, causing the internal temperature to rise, which activates the protection circuit. Install the projector so that the exhaust is not blocked.

Highly heated and humid

- Avoid installing the unit in a location where the temperature or humidity is very high, or temperature is very low.
- To avoid moisture condensation, do not install the unit in a location where the temperature may rise rapidly.

Very dusty

Avoid installing the unit in a location where there is a lot of dust; otherwise, the air filter will be obstructed. The dust blocking the air through the filter may cause raising the internal heat of the projector. Clean it up periodically.

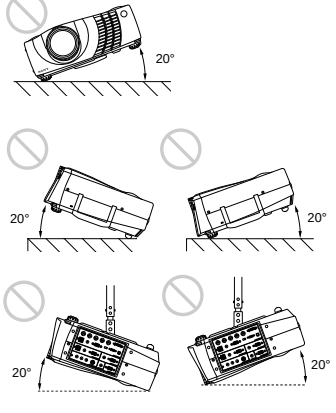
Notes on Installation

Carry out the followings.

No toppling of the unit

Avoid using as the unit topples over on its side. It may cause malfunction.

Use to be level



Avoid using as the unit tilts more than 20 degrees. Do not install the unit other than on the floor or ceiling. These installation may cause malfunction.

No blocking the ventilation holes

Avoid using something to cover over the ventilation holes; otherwise, the internal heat may build up.

Maintenance

Replacing the Lamp

When it is time to replace the lamp, replace the lamp promptly with a new LMP-P200 Projector Lamp. The lamp reaches the end of its life after about 1000 hours for the STANDARD setting, or about 2000 hours for the LOW setting in the LAMP MODE.

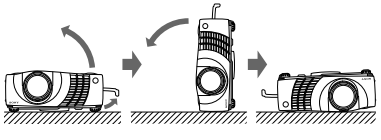
When replacing the lamp after using the projector

Turn off the projector, then unplug the power cord. Wait for at least an hour for the lamp to cool.

Note

The lamp becomes a high temperature after turning off the projector with the I / ⏻ key. If you touch the lamp, you may scald your finger. When you replace the lamp, wait for at least an hour for the lamp to cool.

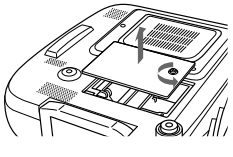
1 Place a protective sheet (cloth) beneath the projector.
Hold the projector handle and turn the projector toward the control panel as shown below.



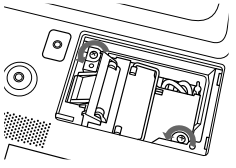
Note

When replacing the lamp, be sure it is on a flat and stable surface.

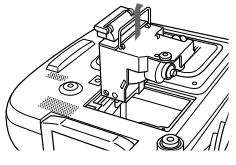
2 Open the lamp cover by loosening one screw with the Philips screwdriver (supplied with the LMP-P200 Projector Lamp).



3 Loosen two screws on the lamp unit with the Philips screwdriver.



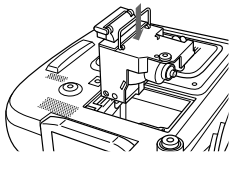
4 While holding the handle and keeping the lamp unit horizontal, pull straight up.



Notes

- Pull out the lamp unit by holding the handle. If you touch the lamp unit, you may be burned or injured.
- When removing the lamp unit, make sure it remains horizontal, then pull straight up. Do not tilt the lamp unit. If you pull out the lamp unit while tilted and if the lamp breaks, the pieces may scatter, causing injury.
- If the lamp breaks, consult with qualified Sony personnel.

5 Insert the new lamp all the way in until it is securely in place. Tighten the screws. Fold down the handle.



Notes

- Be careful not to touch the glass surface of the lamp.
- The power will not turn on if the lamp is not secured properly.

6 Close the lamp cover and tighten the screw.

7 Turn the projector back over.

8 Connect the power cord and turn the projector to the standby mode.

9 Press the following keys on the control panel in the following order for less than in five seconds each: RESET, ←, →, ENTER.

Notes

- Be sure to use the LMP-P200 Projector Lamp for replacement. If you use lamps other than LMP-P200, the projector may cause a malfunction.
- Be sure to turn off the projector and unplug the power cord before replacing the lamp.
- Do not put your hands into the lamp replacement spot, or not fall any liquid or object into it to avoid electrical shock or fire.

Disposal of used projector lamp

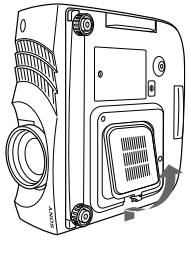
As the materials used in this lamp are similar to those of a fluorescent lamp, you should dispose of a used projector lamp in the same way as a fluorescent lamp.

Cleaning the Air Filter

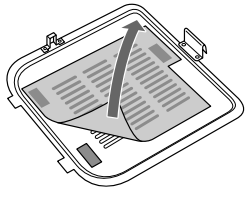
The air filter should be cleaned every 300 hours.
When it becomes difficult to remove the dust from the filter, replace the filter with a new one.
To clean the air filter, follow the steps below:

1 Turn off the power and unplug the power cord.

2 Remove the air filter cover while holding down the air filter cover button on the filter cover.

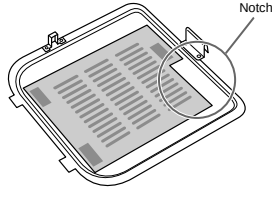


3 Peel off the air filter. (The air filter is secured with Velcro tape (3).)



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

5 Install the air filter as shown in the figure. Install the air filter cover on the projector.



Notes

- Just placing the air filter on the Velcro tapes will not lock the air filter in place. When installing the air filter, place it on the air filter cover and attach by pressing down hard on the three Velcro tapes. Make sure that the air filter is not bent.
- Set the air filter correctly (straight) in the air filter cover. If the air filter is not straight, the filter may malfunction.
- If the air filter is excessively dirty, wash it with a mild detergent solution and dry it in a shaded place. If the dust cannot be removed, replace the air filter with the supplied new one.
- The air filter has front and back sides. Make sure you install the air filter in the right direction. Check the notch on the filter as shown in the figure above and install properly.
- Be sure to attach the air filter cover firmly; the power will not be turned on if it is not closed securely.

Troubleshooting

If you encounter a problem during operation, press the HELP key to display the help messages.

You can get these kinds of help messages:
• Image: A menu is not displayed. Colors are not correct.
• Sound: Sound is not output correctly.
• Other: The indicator lights up/flashes.

If you still have a problem after consulting the help messages, please check the following. If the problem persists, contact your Sony dealer.

Power

Symptom	Cause	Remedy
The power is not turned on.	The power has been turned off and on with the I / ⏻ key at a short interval.	Wait for about 120 seconds before turning on the power *(see page 19 (GB))*.
	The lamp cover is detached.	Close the lamp cover securely *(see page 32 (GB))*.
	The air filter cover is detached.	Close the air filter cover securely *(see page 33 (GB))*.

Image

Symptom	Cause	Remedy
No picture.	Cable is disconnected or not connected properly.	Check that the proper connections have been made *(see pages 15 (GB) to 18 (GB))*.
	Input selection is incorrect.	Select the input source correctly using the INPUT key *(see page 19 (GB))*.
	The picture is cut off.	Press the PIC MUTING key to release the muting function *(see page 19 (GB))*.
	The computer signal is not set to output to external monitor.	Set the computer signal to output to external monitor *(see page 15 (GB))*.
	The computer signal is set to output to both the LCD of the computer and external monitor.	Set the computer signal to output only to external monitor *(see page 15 (GB))*.
The picture is noisy.	Noise may appear on the background depending on the combination of the numbers of dot input from the connector and numbers of pixel on the LCD panel.	Change the desktop pattern on the connected computer.
On-screen display does not appear.	STATUS in the SET SETTING menu has been set to OFF.	Set STATUS in the SET SETTING menu to ON *(see page 26 (GB))*.

Sound

Symptom	Cause	Remedy
No Sound.	Cable is disconnected or not connected properly.	Check that the proper connections have been made *(see pages 15 (GB) to 18 (GB))*.
	The sound is cut off.	Press the AUDIO MUTING key to release the muting function *(see page 19 (GB))*.
When inputting sound through AUDIO jack, sound comes through one channel only.	Monaural sound is being input through the AUDIO jack.	Input stereo sound.

Others

Symptom	Cause	Remedy
The LAMP/COVER indicator flashes.	The lamp cover or the air filter cover is detached.	Attach the cover securely *(see pages 32 (GB) and 33 (GB))*.
The LAMP/COVER indicator lights up.	The lamp has reached the end of its life.	Replace the lamp *(see page 32 (GB))*.
	The lamp becomes a high temperature.	Wait for 120 seconds to cool down the lamp and turn on the power again *(see page 19 (GB))*.
The TEMP/FAN indicator flashes.	The fan is broken.	Consult with qualified Sony personnel.
The TEMP/FAN indicator lights up.	The internal temperature is unusually high.	Check to see if nothing is blocking the ventilation holes.
Both LAMP/COVER and TEMP/FAN indicators light up.	The electric system failed.	Consult with qualified Sony personnel.

Warning messages

Use the list below to check the meaning of the messages displayed on the screen.

Message	Meaning	Remedy
High temp.! Lamp off in 1 min.	Internal temperature is too high.	Turn off the power. Check to see if nothing is blocking the ventilation holes.
Frequency is out of range!	This input signal cannot be projected as the frequency is out of the acceptable range of the projector.	Input a signal that is within the range of the frequency.
	The resolution setting of the output signal of a computer is too high.	Set the setting of output to the XGA *(see page 15 (GB))*.
Please check INPUT-A setting.	You have input RGB signal from the computer when INPUT-A in the SET SETTING menu is set to COMPONENT, DTV YP_BP_R or DTV GBR.	Set INPUT-A correctly *(see page 26 (GB))*.

Caution messages

Use the list below to check the meaning of the messages displayed on the screen.

Message	Meaning	Remedy
NO INPUT	No input signal	Check connections *(see page 15 (GB) to 18 (GB))*.
Not applicable!	You have pressed the wrong key.	Press the appropriate key.
SPEAKER OFF	SPEAKER in the SET SETTING menu has been set to OFF.	Set SPEAKER to ON if necessary *(see page 26 (GB))*.

Specifications

Optical characteristics

Projection system	3 LCD panels, 1 lens, projection system
LCD panel	VPL-PX20: 1.3-inch TFT SONY LCD panel VPL-PX30: 1.3-inch TFT SONY LCD panel with micro-lens array, 2,359,296 pixels (786,432 pixels × 3)
Lens	Approx. 1.3 times zoom lens f 36.7 to 47.8 mm/F 1.7 to 2.0
Lamp	200 W UHP
Projection picture size	Range: 40 to 300 inches (diagonal measure)
Light output	VPL-PX20: ANSI lumen[1] 1400 lm VPL-PX30: ANSI lumen[1] 2400 lm
Throwing distance	40-inch: 1490 to 1820 mm (58 3/4 to 71 3/4 inches) 60-inch: 2280 to 2780 mm (89 7/8 to 109 1/2 inches) 80-inch: 3060 to 3740 mm (120 1/2 to 147 3/8 inches) 100-inch: 3850 to 4700 mm (151 5/8 to 185 1/8 inches) 120-inch: 4630 to 5660 mm (182 3/8 to 222 7/8 inches) 150-inch: 5810 to 7100 mm (228 7/8 to 279 5/8 inches) 180-inch: 6990 to 8540 mm (275 1/4 to 336 3/8 inches) 200-inch: 7770 to 9500 mm (306 to 374 1/8 inches) 250-inch: 9740 to 11900 mm (383 5/8 to 468 5/8 inches) 300-inch: 11700 to 14300 mm (460 3/4 to 563 1/8 inches)

Electrical characteristics

Color system	$NTSC_{3.58}$/PAL/SECAM/$NTSC_{4.43}$/PAL-M/PAL-N system, switched automatically/manually
Resolution	750 horizontal TV lines (Video input) 1024 × 768 pixels (RGB input)
Acceptable computer signals	fH: 15 to 91 kHz fV: 43 to 85 Hz
Speaker	Wide frequency range 3 speakers system, Woofer: 65 mm (2 5/8 inches) diameter, max. 3 W Tweeter: 45 mm (1 3/16 inches) diameter, max. 1 W × 2 (stereo)

Input/Output

Video/audio input	VIDEO: phono type Composite video: 1 Vp-p ±2 dB sync negative (75 ohms terminated) S VIDEO: Y/C mini DIN 4-pin type (male) Y (luminance): 1 Vp-p ±2 dB sync negative (75 ohms terminated) C (chrominance): burst 0.286 Vp-p ±2 dB (NTSC) (75 ohms terminated), burst 0.3 Vp-p ±2 dB (PAL) (75 ohms terminated) AUDIO: Phono type × 2 500 mVrms, impedance more than 47 kilohms
INPUT A	HD D-sub15-pin (female)/ 5BNC (female)/ Digital Interface Switched Analog RGB:HD D-sub15-pin (female) R: 0.7 Vp-p ±2 dB (75 ohms terminated) G: 0.7 Vp-p ±2 dB (75 ohms terminated) G with sync: 1 Vp-p ±2 dB sync negative (75 ohms terminated) B: 0.7 Vp-p ±2 dB (75 ohms terminated) SYNC/HD: Composite sync input: 1-5 Vp-p high impedance, positive/ negative Horizontal sync input: 1-5 Vp-p high impedance, positive/ negative VD: Vertical sync input: 1-5 Vp-p high impedance, positive/ negative Analog RGB/component: 5BNC (female) R/R-Y: 0.7 Vp-p ±2 dB (75 ohms terminated) G: 0.7 Vp-p ±2 dB (75 ohms terminated) G with sync/Y: 1 Vp-p ±2 dB sync negative (75 ohms terminated) B/B-Y: 0.7 Vp-p ±2 dB (75 ohms terminated) SYNC/HD: Composite sync input: 1-5 Vp-p high impedance, positive/ negative Horizontal sync input: 1-5 Vp-p high impedance, positive/ negative VD: Vertical sync input: 1-5 Vp-p high impedance, positive/ negative DIGITAL RGB: DFP 20-pin (TMDS) USB HUB: Up (B type: female) × 1, Down (A type: female) × 1 MOUSE (output): 13-pin (female) *(For details, see "Pin assignment" on page 38 (GB).)* AUDIO: Stereo minijack 500 mVrms, impedance more than 47 kilohms
INPUT B	Analog RGB: HD D-sub15-pin (female) R: 0.7 Vp-p ±2 dB (75 ohms terminated) G: 0.7 Vp-p ±2 dB (75 ohms terminated) G with sync: 1 Vp-p ±2 dB sync negative (75 ohms terminated) B: 0.7 Vp-p ±2 dB (75 ohms terminated) SYNC/HD: Composite sync input: 1-5 Vp-p high impedance, positive/ negative Horizontal sync input: 1-5 Vp-p high impedance, positive/ negative VD: Vertical sync input: 1-5 Vp-p high impedance, positive/ negative MOUSE (output): 13-pin (female) *(For details, see "Pin assignment" on page 38 (GB).)* AUDIO: Stereo minijack 500 mVrms, impedance more than 47 kilohms
OUTPUT	MONITOR OUT: HD D-sub 15-pin (female) R/R-Y,G/Y,B/B-Y: Gain Unity,75ohms SYNC/HD,VD: 4Vp-p (open), 1Vp-p (75ohms) * DIGITAL RGB signal is not output from MONITOR OUT terminal. AUDIO OUT (variable out): Stereo minijack max. 1 Vrms, When an input signal is 500 mVrms, impedance less than 5 kilohms
REMOTE	RS-232C: D-sub 9-pin (female)
CONTROL S IN/PLUG IN POWER	Stereo minijack 5Vp-p, plug in power, DC5V
Safety regulations	UL1950, CSA No.950, DHHS (Laser), DNHW (Laser), FCC Class A, IC Class A, EN60 950 (NEMKO), CE, C-Tick, CCIB, EN60 825-1 (Laser), VCCI class B, JEIDA

Laser beam

Laser type	Class 2
Wavelength	645 nm
Output	1 mW

General

Dimensions	339 × 142 × 335 mm (13 3/8 × 5 5/8 × 13 1/4 inches) (w/h/d)
Mass	Approx. 7.2 kg (15 lb 14 oz)
Power requirements	AC 100 to 240 V, 50/60 Hz
Power consumption	Max. 290 W (Standby mode: 5 W)
Heat dissipation	989.6 BTU
Operating temperature	0°C to 40°C (32°F to 104°F)
Operating humidity	35% to 85% (no condensation)
Storage temperature	–20°C to 60°C (32°F to 140°F)
Storage humidity	10% to 90%
Supplied accessories	Remote Commander RM-PJM610 (1) Size AA (R6) batteries (2) HD D-sub 15-pin Cable SMF-410 (1)

(Continued)

1) ANSI lumen is a measuring method of American National Standard IT 7.228.

Mouse Cable
SIC-S21 (for Serial) (2 m) (1)
SIC-S22 (for PS/2) (2 m) (1)
Audio/video cable (1.5 m) (1)
USB Cable A type – B type (2 m) (1)
Application software, Projector Station (1)
Lens Cap (1)
Strap for Remote Commander (1)
AC power cord (1)
Air filter (for replacement) (1)
Operating Instructions (1)
Installation Manual for Dealers (1)
Quick Reference Card (1)
Warranty Card (1)

Design and specifications are subject to change without notice.

Optional accessories

Projector Lamp LMP-P200 (for replacement)
Projector Suspension Support PSS-610
Carrying Case VLC-600[1)]
Signal Selector IFU-SC50
Monitor Cable
SMF-400 (HD D-sub 15-pin (male) ⟷ 5 × BNC (male))
SMF-410 (HD D-sub 15-pin (male) ⟷ HD D-sub 15-pin (male))
Signal cable
SMF-401 (HD D-sub 15-pin (male) ⟷ HD D-sub 15-pin (male))
Signal Interface Cable
SIC-10 (5 × BNC (male) ⟷ 5 × BNC (male))
Digital Signal Cable
SMF-D102 (DFP 20-pin ⟷ DFP 20-pin)
SMF-D110 (DFP 20-pin ⟷ DFP 20-pin)
Mouse Cable
SIC-S20 (for Macintosh) (2 m)
SIC-S21 (for Serial) (2 m)
SIC-S22 (for PS/2) (2 m)
Signal Adapter
ADP-20 (Macintosh ⟷ HD D-sub 15-pin)
Projection Lens
Long Focus Zoom Lens VPLL-ZM101
Short Focus Zoom Lens VPLL-ZM31
Fixed Short Focus Lens VPLL-FM21
Screens
50-inch Portable VPS-50C[1)]

Some of the items may not be available in some areas. For details, please consult your nearest Sony office.

Pin assignment

RGB input connector (HD D-sub 15-pin, female)

1	R/R-Y	9	N.C.
2	G/Y	10	GND
3	B/B-Y	11	GND
4	N.C.	12	N.C.
5	GND	13	HD/C.Sync
6	GND (R)	14	VD
7	GND (G)	15	N.C.
8	GND (B)		

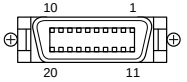
MOUSE connector (13-pin, female)

1	RTS	8	R
2	GND	9	98/AT/TXD
3	XA	10	+5V/DTR
4	XB	11	CLOCK
5	YA	12	DATA
6	YB	13	RXD
7	L/PS		

RS-232C connector (D-sub 9-pin, female)

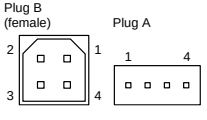
1	DCD	6	DSR
2	RX DA	7	RTS
3	TX DA	8	CTS
4	DTR	9	RI
5	GND		

DIGITAL RGB input connector (DFP 20-pin, female)



1	TX0–	11	TXC–
2	TX0+	12	TXC+
3	TX0 SHIELD	13	TXC SHIELD
4	TX2 SHIELD	14	TX1 SHIELD
5	TX2–	15	TX1–
6	TX2+	16	TX1+
7	DDC/SCL	17	NC
8	DDC/SDA	18	SENSE
9	NC	19	+5V DC
10	NC	20	GND

USB connector



1	+5V
2	D–
3	D+
4	GND

1) VLC-600 and VPS-50C may not be available in some areas. For details, please consult your nearest Sony office.

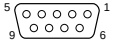
Mouse cable pin assignment

SIC-S21

13-pin

1	RTS	8	R
2	GND	9	98/AT/TXD
3	XA	10	+5V/DTR
4	XB	11	CLOCK
5	YA	12	DATA
6	YB	13	RXD
7	L/PS		

D-sub 9-pin



1	DCD
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

SIC-S22

13-pin

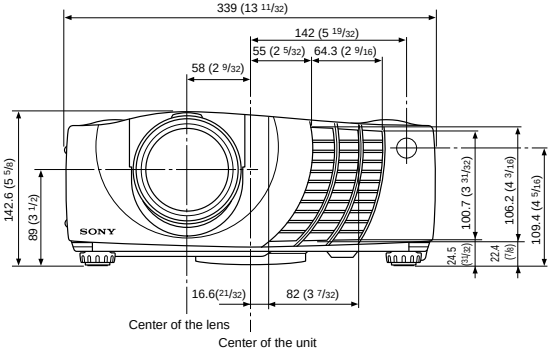
1	RTS	8	R
2	GND	9	98/AT/TXD
3	XA	10	+5V/DTR
4	XB	11	CLOCK
5	YA	12	DATA
6	YB	13	RXD
7	L/PS		

mini DIN 6-pin

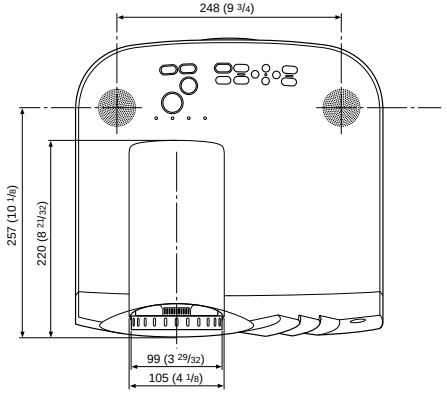
1	DATA
2	NC
3	GND
4	+5V
5	CLOCK
6	NC

Dimensions

Front

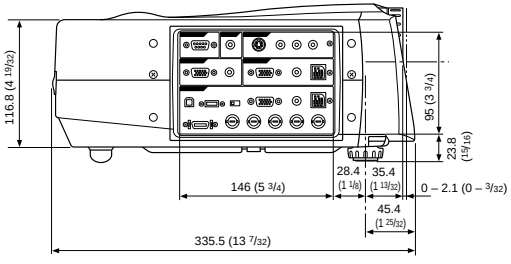


Top

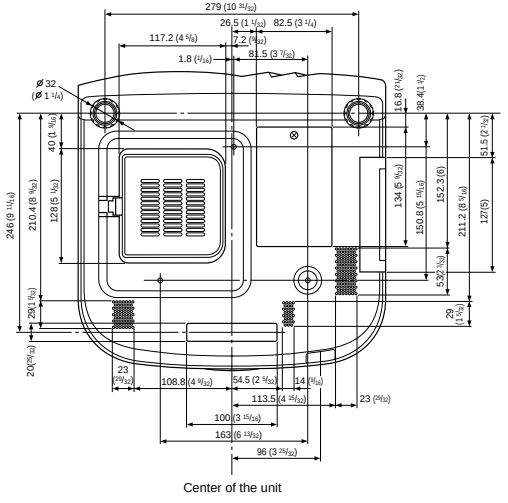


Unit: mm (inches)

Side



Bottom



Unit: mm (inches)

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SONY

4-073-987-**01** (1)

LCD Data Projector

特約店様用設置説明書　3～10、46～59ページ
この特約店様用設置説明書には、レンズの交換方法、別売りのレンズ使用時や天井吊りの場合の設置寸法など、製品の設置時に必要な情報を記載しています。

Installation Manual for Dealers　Pages 3, 11 to 16 and 46 to 59
This installation Manual for Dealers explains how to install the projector. For example, it explains lens replacement, installation measurements when using the optional lens and hanging the projector from the ceiling.

Manuel d’installation pour les revendeurs　Pages 3, 17 à 22 et 46 à 59
Le manuel d’installation pour les revendeurs explique comment installer le projecteur. Par exemple, il explique la procédure de remplacement de l’objectif, les dimensions d’installation lorsque vous employez l’objectif en option et comment suspendre le projecteur au plafond.

Manual de instalación para proveedores　Páginas 3, 23 a 28 y 46 a 59
En este manual de instalación para proveedores se describe cómo instalar el proyector. Por ejemplo, se describe cómo sustituir el objetivo, las medidas de instalación cuando se utiliza el objetivo opcional y cómo colgar el proyector en el techo.

Installationsanleitung für Händler　Seite 3, 29 bis 34 und 46 bis 59
In dieser Installationsanleitung für Händler wird erläutert, wie Sie den Projektor installieren. Beispielsweise werden das Austauschen des Objektivs, die Installationsabmessungen beim Verwenden des gesondert erhältlichen Objektivs und das Installieren des Projektors an der Decke beschrieben.

Manuale d’installazione per i rivenditori　Pagine 3, 35 a 40 e 46 a 59
Il presente manuale contiene le istruzioni relative all’installazione del proiettore. Vengono riportate ad esempio le istruzioni su come sostituire l’obiettivo, le misure di installazione quando si utilizza l’obiettivo opzionale e le procedure dell’installazione al soffitto.

Installation Manual for Dealers　Pages 3, 41 to 45 and 60 to 64
This installation Manual for Dealers explains how to install the projector. For example, it explains lens replacement, installation measurements when using the optional lens and hanging the projector from the ceiling.

VPL-PX20
VPL-PX30

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Precautions

On safety

- Check that the operating voltage of your unit is identical with the voltage of your local power supply. If voltage adaptation is required, consult with qualified Sony personnel.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified Sony personnel before operating it further.
- Unplug the unit from the wall outlet if it is not to be used for several days.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- The wall outlet should be near the unit and easily accessible.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Do not look into the lens while the lamp is on.
- Do not place your hand or objects near the ventilation holes — the air coming out is hot.
- Avoid using an extension cord with a low voltage limited since it may cause the short-circuit and physical incidents.
- To carry the projector, be sure to use the carrying handle. Do not hold other parts of the projector, especially the lens, nor catch your finger between the handle, floor, and the projector.
- Do not catch your finger between the unit and surface of the floor when moving the projector installed on the floor.
- Be careful not to catch your finger in the cooling fan.
- Do not carry the projector with the cabinet on and with its cover open.

On installation

- When the projector is mounted on the ceiling, the Sony PSS-610 Projector Suspension Support must be used for installation.
- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes. Leave space of more than 30 cm (11 7/8 inches) between the wall and the projector. Be aware that room heat rises to the ceiling; check that the temperature near the installation location is not excessive.
- Install the projector on the floor or ceiling. Any other installation causes a mulfunction such as color irregularity or shortening lamp life.
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust or humidity, mechanical vibration or shock.
- To avoid moisture condensation, do not install the unit in a location where the temperature may rise rapidly.
- Be sure to secure the cabinet cover firmly when installing to the ceiling firmly.

On illumination

- To obtain the best picture, the front of the screen should not be exposed to direct lighting or sunlight.
- Ceiling-mounted spot lighting is recommended. Use a cover over fluorescent lamps to avoid lowering the contrast ratio.
- Cover any windows that face the screen with opaque draperies.
- It is desirable to install the projector in a room where floor and walls are not of light-reflecting material. If the floor and walls are of reflecting material, it is recommended that the carpet and wall paper be changed to a dark color.

On preventing internal heat build-up

- After you turn off the power with the I / ⏻ key on the control panel or on the Remote Commander, do not disconnect the unit from the wall outlet while the cooling fan is still running.
- Do not disconnect the AC power cord from the wall outlet while the fan is still running.

Caution

The projector is equipped with ventilation holes (intake) at the bottom and ventilation holes (exhaust) at the front. Do not block or place anything near these holes, or internal heat build-up may occur, causing picture degradation or damage to the projector.

On cleaning

- To keep the cabinet looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents, such as thinner, benzene, or abrasive cleansers, since these will damage the cabinet.
- Avoid touching the lens. To remove dust on the lens, use a soft dry cloth. Do not use a damp cloth, detergent solution, or thinner.
- Clean the filter at regular intervals.

On repacking

- Save the original shipping carton and packing material; they will come in handy if you ever have to ship your unit. For maximum protection, repack your unit as it was originally packed at the factory.

Overview

This manual describes how to install the Sony LCD Data Projector VPL-PX20/PX30, how to replace the lens, how to change the lens position for rear projection (optical axis angle: 0 degree), and installation diagrams. When you replace the lens or change the lens position, also refer to the Operating Instructions.

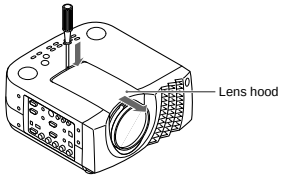
Replacing the Lens

You can install the following two types of lenses in the projector.
- VPLL-ZM101 Long Focus Zoom Lens
- VPLL-ZM31 Short Focus Zoom Lens

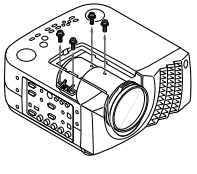
Follow the steps below to replace the lens.
For details on replacing the lens, also refer to the installation manual supplied with the lens.

1 Turn off the power and disconnect the power cable.

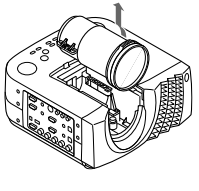
2 Remove the lens hood. To remove the lens hood, insert a screwdriver into the lens hood slit then lightly push down on the hood with the screwdriver and slide the lens hood forward.



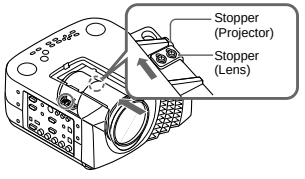
3 Remove the four screws (M4×12, with washers) locking the lens by using a Philips screwdriver.



4 Lift and remove the lens.



5 Install the lens with the lens stopper and the projector stopper met at their edges.

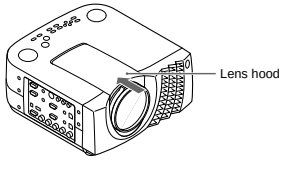


Note

For ease in identification when you install the lens, make sure that the label on the lens is facing up.

6 Tighten the four screws to secure the replacement lens firmly.

7 Install the lens hood by sliding it from front to back until it snaps into the lock position.



Notes

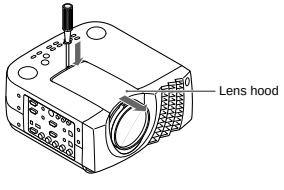
- The lens scratches easily, so when handling it, always place it gently on a stable and level surface in a horizontal position.
- Avoid touching the lens surface.

Changing the Lens Position for Rear Projection (Optical Axis Angle: 0 degree)

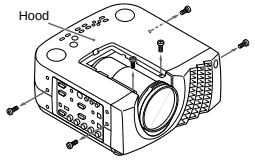
For rear projection, you can set the optical axis angle to 0 (zero). In this case, you will need to set the lens position as follows.
You can install the following types of lenses for a zero optical axis angle.
• Standard lens
• VPLL-ZM101 Long Focus Zoom Lens
• VPLL-ZM31 Short Focus Zoom Lens
• VPLL-FM21 Fixed Short Focus Lens

1 Turn off the power and disconnect the power cable.

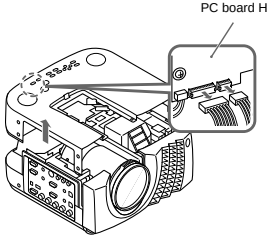
2 Remove the lens hood. To remove the lens hood, insert a screwdriver into the lens hood slit then lightly push down on the hood with the screwdriver and slide the lens hood forward.



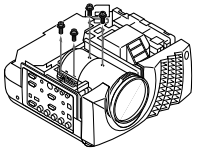
3 Remove the four silver screws (M3×8) on the both sides and two silver screws (M3×8) on the top locking the hood.



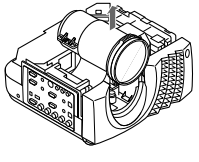
4 Disconnect the 12-pin connector and 4-pin connector (connected to the PC board H) from the hood. Lift the hood and set it behind the unit.



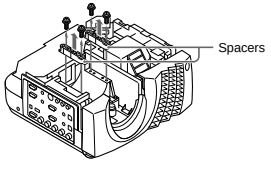
5 Remove the lens hood locking the lens by loosening the four screws (M4×12, with washers) with a Philips screwdriver.



6 Lift and remove the lens.

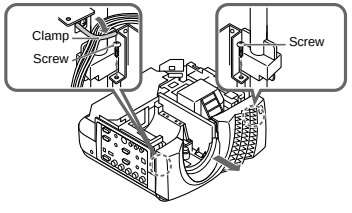


7 Remove the left and right spacers by loosening the four screws (M4×12, with washers).

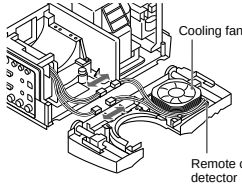


Note
The spacer and the screws may be needed later on. Store them.

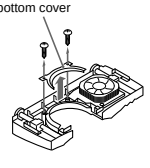
8 Remove two screws (M3×6, with washers) that lock the front panel. Free the wires from the clamp.



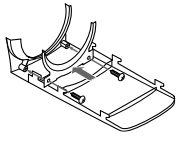
9 Disconnect the two connectors on the back of the front panel, one for cooling fan and the other for remote control detector, and then remove the front panel.



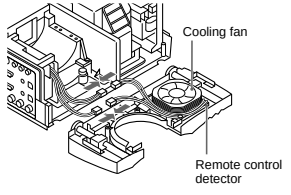
10 Remove the two screws (M3×6, with washers) from the front panel. Remove the lens bottom cover.



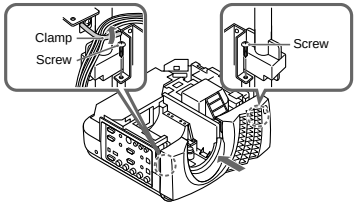
11 Install the lens bottom cover on the lens hood (removed in Step **2**) with the two screws.



12 Connect the connector for remote control detector and the connector for cooling fan.

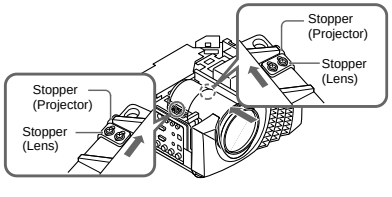


13 Install the front panel on the unit with the two screws (M3×6, with washers). Fasten the wires with the clamp.



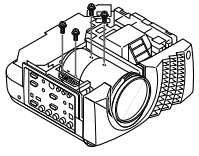
14 Install the lens with the lens stopper and the projector stopper met at their edges.

Notes
• Make sure that lens stoppers and projector stoppers are met on both sides.
• For ease in identification when you install the lens, make sure that the lens stopper is facing up.

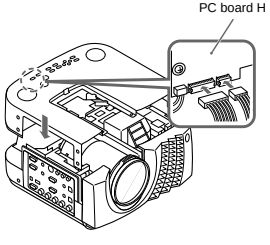


(continued)

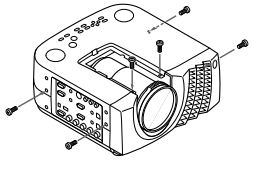
15 Lock the lens by tightening the four screws (M4×12, with washers).



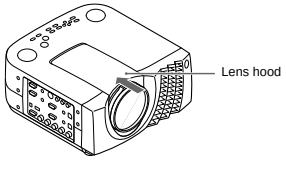
16 Connect the 12-pin connector and 4-pin connector to the PC board H (disconnected in Step **4**).



17 Install the hood and lock with the six screws (M3×8).



18 Install the lens hood by sliding it from front to back until it snaps into position.



English

Installation Diagram

Floor Installation (Front Projection)

Français

Schéma d'installation

Installation au sol (projection frontale)

Español

Diagrama de instalación

Instalación en el suelo (proyección frontal)

Deutsch

Installations-diagramm

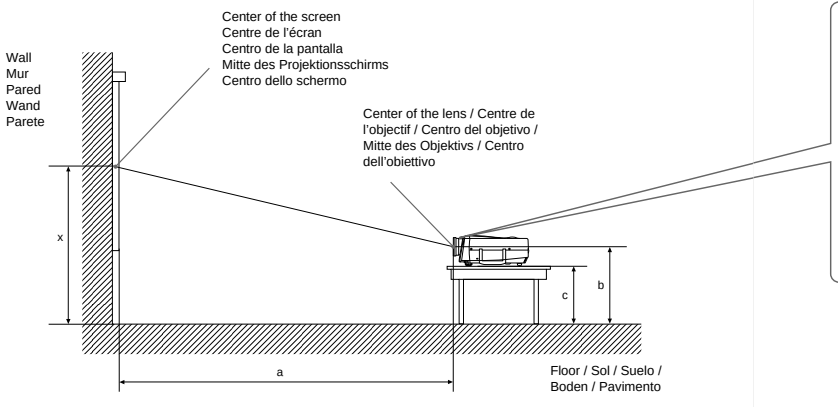
Installation am Boden (Frontprojektion)

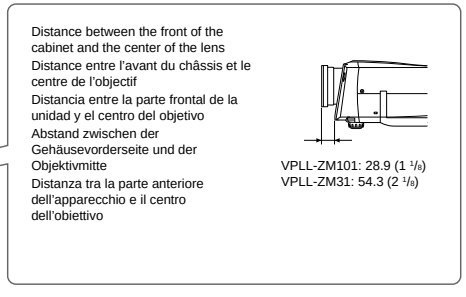
Italiano

Diagramma di installazione

Installazione sul pavimento (proiezione frontale)

A





Unit: mm (inches) / Unité: mm (pouces) / Unidad: mm (pulgadas) / Einheit: mm (Zoll) / Unità: mm (pollici)

This section describes the examples for installing the projector on the desk, etc. **A**

See the charts on pages 48 and 49 concerning the installation measurements.

The alphabetical letters in the illustration indicate the distances below.
- a : distance between the screen and the center of the lens
- b : distance between the floor and the center of the lens
- c : distance between the floor and the bottom of the adjusters of the projector
- x : free

Cette section décrit des exemples d'installation du projecteur sur un bureau, etc. **A**

Reportez-vous aux tableaux des pages 48 à 49 sur les mesures d'installation.

Les caractères alphabétiques dans l'illustration indiquent les distances ci-dessous.
- a : distance entre l'écran et le centre de l'objectif
- b : distance entre le sol et le centre de l'objectif
- c : distance entre le sol et la base des pieds réglables du projecteur
- x : libre

En esta sección se muestran ejemplos para instalar el proyector sobre una mesa, etc. **A**

Consulte las tablas de las páginas 48 a 49 en relación con las medidas de instalación.

Las letras alfabéticas de la ilustración indican las distancias mostradas a continuación.
- a : distancia entre la pantalla y el centro del objetivo
- b : distancia entre el suelo y el centro del objetivo
- c : distancia entre el suelo y la base de los ajustadores del proyector
- x : libre

In diesem Abschnitt finden Sie Beispiele für das Installieren des Projektors auf einem Tisch usw. **A**

In den Tabellen auf Seite 48 bis 49 finden Sie die Installationsabmessungen.

Die Buchstaben in der Abbildung beziehen sich auf die unten beschriebenen Abstände.
- a : Abstand zwischen dem Projektionsschirm und der Mitte des Objektivs
- b : Abstand zwischen dem Boden und der Mitte des Objektivs
- c : Abstand zwischen dem Boden und der Unterseite der Ausgleichsfüße des Projektors
- x : frei

Questa sezione descrive gli esempi di installazione del proiettore su un tavolo, ecc. **A**

Vedere i diagrammi da pagina 48 a pagina 49 relativi alle misure di installazione.

Le lettere nell'illustrazione indicano le distanze descritte di seguito.
- a : distanza fra lo schermo e il centro dell'obiettivo
- b : distanza tra il pavimento e il centro dell'obiettivo
- c : distanza fra il pavimento e la base dei dispositivi di regolazione del proiettore
- x : libero

English

Installation Diagram

Floor Installation (Front Projection)

Français

Schéma d'installation

Installation au sol (projection frontale)

Español

Diagrama de instalación

Instalación en el suelo (proyección frontal)

Deutsch

Installations-diagramm

Installation am Boden (Frontprojektion)

Italiano

Diagramma di installazione

Installazione sul pavimento (proiezione frontale)

■ **VPLL-ZM101**

Unit: mm (inches) / Unité: mm (pouces) / Unidad: mm (pulgadas) / Einheit: mm (Zoll) / Unità: mm (pollici)

SS		40	60	80	100	120	150	180	200	250	300
a	N	2600 (102 3/8)	4000 (157 1/2)	5410 (213 1/8)	6810 (268 1/4)	8220 (323 3/4)	10330 (406 3/4)	12430 (489 1/2)	13840 (545)	17350 (683 1/4)	20870 (821 7/8)
	M	3890 (153 1/4)	5940 (234)	7980 (314 1/4)	10030 (394 15/16)	12080 (475 3/4)	15150 (596 5/8)	18220 (717 1/2)	20270 (798 1/4)	25380 (999 3/8)	30500 (1201)
b		x–305 (12)	x–457 (18)	x–610 (24)	x–762 (30)	x–914 (36)	x–1143 (45)	x–1372 (54)	x–1524 (60)	x–1905 (75 1/8)	x–2286 (90 1/8)
c		x–394 (15 5/8)	x–546 (21 5/8)	x–699 (27 5/8)	x–851 (33 5/8)	x–1003 (39 5/8)	x–1232 (48 5/8)	x–1461 (57 5/8)	x–1613 (63 5/8)	x–1994 (78 5/8)	x–2375 (93 5/8)

a (N) = {(SS × 89.82/1.3102) – 209.2626} × 1.025
a (M) = {(SS × 137.56012/1.3102) – 211.5915} × 0.975
b = x – (SS/1.3102 × 9.984)
c = x – (SS/1.3102 × 9.984 + 89)

The installation measurements and their calculation method for each lens are shown above.

The alphabetical letters in the charts and calculation methods indicate the following.
SS : screen size measured diagonally (inches)
a : distance between the screen and the center of the lens
b : distance between the floor and the center of the lens
c : distance between the floor and the bottom of the adjusters of the projector
x : free
N : minimum
M : maximum

Les mesures d'installation et leur méthode de calcul pour chaque objectif sont indiquées ci-dessus.

Les caractères alphabétiques dans l'illustration indiquent ce qui suit.
SS : dimension de l'écran en diagonale (pouces)
a : distance entre l'écran et le centre de l'objectif
b : distance entre le sol et le centre de l'objectif
c : distance entre le sol et la base des pieds réglables du projecteur
x : libre
N : minimum
M : maximum

■ **VPLL-ZM31**

Unit: mm (inches) / Unité: mm (pouces) / Unidad: mm (pulgadas) / Einheit: mm (Zoll) / Unità: mm (pollici)

SS		40	60	80	100	120	150	180	200	250	300
a	N	1190 (46 7/8)	1840 (72 1/2)	2490 (98 1/8)	3150 (124 1/8)	3800 (149 5/8)	4780 (188 1/4)	5760 (226 7/8)	6410 (252 1/2)	8050 (317)	9680 (381 1/4)
	M	1250 (49 1/4)	1940 (76 1/2)	2620 (103 1/4)	3300 (130)	3980 (156 3/4)	5000 (196 7/8)	6030 (237 7/16)	6710 (264 1/4)	8410 (331 1/4)	10120 (398 1/2)
b		x–305 (12)	x–457 (18)	x–610 (24)	x–762 (30)	x–914 (36)	x–1143 (45)	x–1372 (54)	x–1524 (60)	x–1905 (75 1/8)	x–2286 (90 1/8)
c		x–394 (15 5/8)	x–546 (21 5/8)	x–699 (27 5/8)	x–851 (33 5/8)	x–1003 (39 5/8)	x–1232 (48 5/8)	x–1461 (57 5/8)	x–1613 (63 5/8)	x–1994 (78 5/8)	x–2375 (93 5/8)

a (N) = {(SS × 41.75/1.3102) – 116.2604} × 1.025
a (M) = {(SS × 45.821033/1.3102) – 112.9154} × 0.975
b = x – (SS/1.3102 × 9.984)
c = x – (SS/1.3102 × 9.984 + 89)

Las medidas de instalación y sus métodos de cálculo para cada objetivo se muestran anteriormente.

Las letras alfabéticas de las tablas y los métodos de cálculo indican lo siguiente.
SS : tamaño de pantalla medida diagonalmente (pulgadas)
a : distancia entre la pantalla y el centro del objetivo
b : distancia entre el suelo y el centro del objetivo
c : distancia entre el suelo y la base de los ajustadores del proyector
x : libre
N : mínimo
M : máximo

Die Installationsabmessungen und das jeweilige Berechnungsverfahren für die einzelnen Objektive sind oben angegeben.

Die Buchstaben in den Tabellen und den Berechnungsverfahren haben folgende Bedeutung:
SS : Projektionsschirmgröße in Zoll, diagonal gemessen
a : Abstand zwischen dem Projektionsschirm und der Mitte des Objektivs
b : Abstand zwischen dem Boden und der Mitte des Objektivs
c : Abstand zwischen dem Boden und der Unterseite der Ausgleichsfüße des Projektors
x : frei
N : Mindestens
M : Höchstenss

Le misure di installazione e il loro metodo di calcolo per ogni obiettivo sono mostrati qui sopra.

Le lettere nei diagrammi e i metodi di calcolo indicano quanto segue.
SS : dimensione schermo misurata diagonalmente (pollici)
a : distanza fra lo schermo e il centro dell'obiettivo
b : distanza tra il pavimento e il centro dell'obiettivo
c : distanza fra il pavimento e la base dei dispositivi di regolazione del proiettore
x : libero
N : Minima
M : Massima

English

Ceiling Installation (Front Projection)

Français

Installation au platfond (projection frontale)

Español

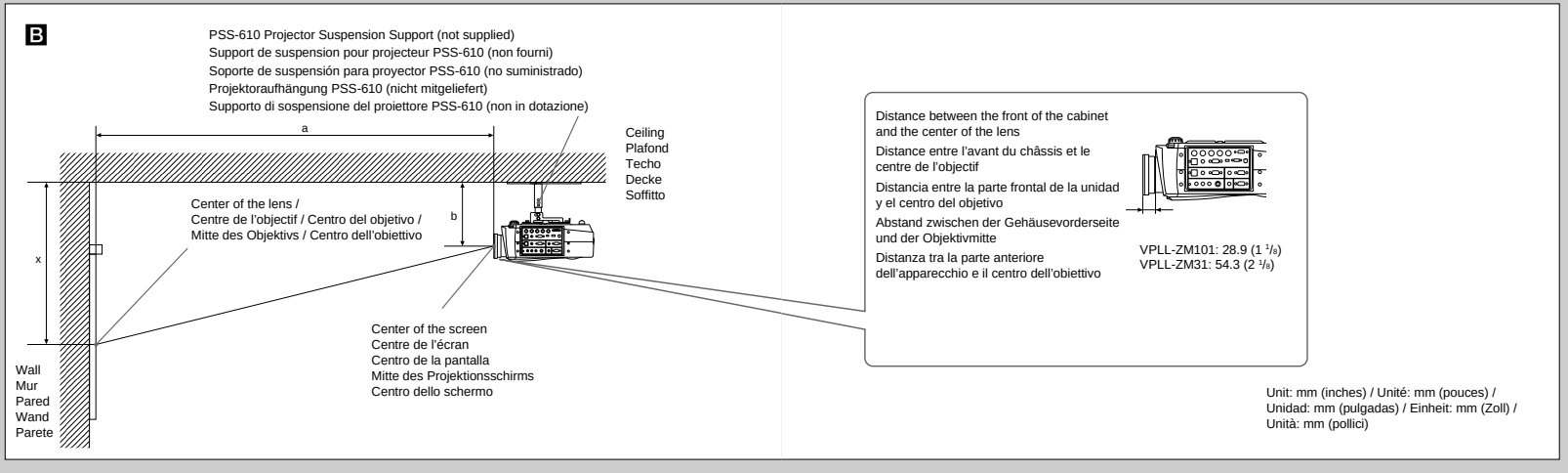
Instalación en el techo (proyección frontal)

Deutsch

Installation an der Decke (Frontprojektion)

Italiano

Installazione sul soffitto (proiezione frontale)



This section describes the examples for installing the projector on the ceiling. **B**
When installing the projector on the ceiling, use the PSS-610 Projector Suspension Support.
For ceiling installation, ask for qualified Sony personnel only.

See the charts on pages 52 to 53 concerning the installation measurements.

The alphabetical letters in the illustration indicate the distances below.
a : Distance between the screen and the center of the lens
b : Distance between the ceiling and the center of the lens
x : Distance between the ceiling and the center of the screen

Cette section décrit des exemples d'installation du projecteur au plafond. **B**
Lorsque vous installez le projecteur au plafond, utilisez le support de suspension pour projecteur PSS-610.
Pour une installation au plafond, adressez-vous uniquement à un personnel qualifié Sony.

Reportez-vous aux tableaux des pages 52 à 53 sur les mesures d'installation.

Les caractères alphabétiques dans l'illustration indiquent les distances ci-dessous.
a : distance entre l'écran et le centre de l'objectif
b : distance entre le plafond et le centre de l'objectif
x : distance entre le plafond et le centre de l'écran

En esta sección se muestran ejemplos para instalar el proyector en el techo. **B**
Para instalar el proyector en el techo, utilice el soporte de suspensión para proyector PSS-610.
Para realizar la instalación en el techo, solicite asistencia técnica únicamente a personal especializado de Sony.

Consulte las tablas de las páginas 52 a 53 en relación con las medidas de instalación.

Las letras alfabéticas de la ilustración indican las distancias mostradas a continuación.
a : distancia entre la pantalla y el centro del objetivo
b : distancia entre el techo y el centro del objetivo
x : distancia entre el techo y el centro de la pantalla

In diesem Abschnitt finden Sie Beispiele für das Installieren des Projektors an der Decke. **B**
Zur Installation des Projektors an der Decke benötigen Sie die Projektoraufhängung PSS-610.
Wenn Sie das Gerät an der Decke montieren wollen, wenden Sie sich bitte an qualifiziertes Sony-Personal.

In den Tabellen auf Seite 52 bis 53 finden Sie die Installationsabmessungen.

Die Buchstaben in der Abbildung beziehen sich auf die unten beschriebenen Abstände.
a : Abstand zwischen dem Projektionsschirm und der Mitte des Objektivs
b : Abstand zwischen der Decke und der Mitte des Objektivs
x : Abstand zwischen der Decke und der Mitte des Projektionsschirms

Questa sezione descrive gli esempi di installazione al soffitto del proiettore. **B**
Quando viene installato il proiettore sul soffitto utilizzare il supporto di sospensione del proiettore PSS-610.
Per l'installazione al soffitto, rivolgersi esclusivamente a personale qualificato Sony.

Vedere i diagrammi da pagina 52 a pagina 53 relative alle misure di installazione.

Le lettere nell'illustrazione indicano le distanze descritte di seguito.
a : distanza tra lo schermo e il centro dell'obiettivo
b : distanza tra il soffitto e il centro dell'obiettivo
x : distanza tra il soffitto e il centro dello schermo

English

Ceiling Installation (Front Projection)

■ VPLL-ZM101

Unit: mm (inches) / Unité: mm (pouces) / Unidad: mm (pulgadas) / Einheit: mm (Zoll) / Unità: mm (pollici)

SS		80	100	120	150	180	200	250	300
a	N	5410 (213 1/8)	6810 (268 1/4)	8220 (323 3/4)	10330 (406 3/4)	12430 (489 1/2)	13840 (545)	17350 (683 1/4)	20870 (821 7/8)
	M	7980 (314 1/4)	10030 (394 15/16)	12080 (475 3/4)	15150 (596 5/8)	18220 (717 1/2)	20270 (798 1/4)	25380 (999 3/8)	30500 (1201)
x		b+610 (24)	b+762 (30)	b+914 (36)	b+1143 (45)	b+1372 (54)	b+1524 (60)	b+1905 (75 1/8)	b+2286 (90 1/8)
b		P							

a (N) = {(SS × 89.82/1.3102) – 209.2626} × 1.025
a (M) = {(SS × 137.56012/1.3102) – 211.5915} × 0.975
x = b + (SS/1.3102 × 9.984)

The installation measurements and their calculation method for each lens are shown above.

The alphabetical letters in the charts and calculation methods indicate the following.

SS : screen size measured diagonally (inches)
a : Distance between the screen and the center of the lens
b : Distance between the ceiling and the center of the lens
x : Distance between the ceiling and the center of the screen
N : minimum
M : maximum
P : 231, 256, 281, 331, 356, 381 mm (9 1/8, 10 1/8, 11 1/8, 13 1/8, 14 1/8, 15 inches) adjustable when using PSS-610

Français

Installation au platfond (projection frontale)

Les mesures d'installation et leur méthode de calcul pour chaque objectif sont indiquées ci-dessus.

Les caractères alphabétiques dans l'illustration indiquent ce qui suit.

SS : dimension de l'écran en diagonale (pouces)
a : distance entre l'écran et le centre de l'objectif
b : distance entre le plafond et le centre de l'objectif
x : distance entre le plafond et le centre de l'écran
N : minimum
M : maximum
P : Si vous utilisez le PSS-610, la hauteur peut être réglée à 231, 256, 281, 331, 356, 381 mm (9 1/8, 10 1/8, 11 1/8, 13 1/8, 14 1/8, 15 pouces).

Español

Instalación en el techo (proyección frontal)

■ VPLL-ZM31

Unit: mm (inches) / Unité: mm (pouces) / Unidad: mm (pulgadas) / Einheit: mm (Zoll) / Unità: mm (pollici)

SS		80	100	120	150	180	200	250	300
a	N	2490 (98 1/8)	3150 (124 1/8)	3800 (149 5/8)	4780 (188 1/4)	5760 (226 7/8)	6410 (252 1/2)	8050 (317)	9680 (381 1/4)
	M	2620 (103 1/4)	3300 (130)	3980 (156 3/4)	5000 (196 7/8)	6030 (237 7/16)	6710 (264 1/4)	8410 (331 1/4)	10120 (398 1/2)
x		b+610 (24)	b+762 (30)	b+914 (36)	b+1143 (45)	b+1372 (54)	b+1524 (60)	b+1905 (75 1/8)	b+2286 (90 1/8)
b		P							

a (N) = {(SS × 41.75/1.3102) – 116.2604} × 1.025
a (M) = {(SS × 45.821033/1.3102) – 112.9154} × 0.975
x = b + (SS/1.3102 × 9.984)

Las medidas de instalación y sus métodos de cálculo para cada objetivo se muestran anteriormente.

Las letras alfabéticas de las tablas y los métodos de cálculo indican lo siguiente.

SS : tamaño de pantalla medida diagonalmente (pulgadas)
a : distancia entre la pantalla y el centro del objetivo
b : distancia entre el techo y el centro del objetivo
x : distancia entre el techo y el centro de la pantalla
N : mínimo
M : máximo
P : Si utiliza la unidad PSS-610, la altura podrá ajustarse en 231, 256, 281, 331, 356, 381 mm (9 1/8, 10 1/8, 11 1/8, 13 1/8, 14 1/8, 15 pulgadas).

Deutsch

Installation an der Decke (Frontprojektion)

Die Installationsabmessungen und das jeweilige Berechnungsverfahren für die einzelnen Objektive sind oben angegeben.

Die Buchstaben in den Tabellen und den Berechnungsverfahren haben folgende Bedeutung:

SS : Projektionsschirmgröße in Zoll, diagonal gemessen
a : Abstand zwischen dem Projektionsschirm und der Mitte des Objektivs
b : Abstand zwischen der Decke und der Mitte des Objektivs
x : Abstand zwischen der Decke und der Mitte des Projektionsschirms
N : Mindestens
M : Höchstens
P : Wenn Sie die PSS-610 verwenden, kann die Höhe auf die folgenden Zahlenwerte eingestellt werden 231, 256, 281, 331, 356, 381 mm.

Italiano

Installazione sul soffitto (proiezione frontale)

Le misure di installazione e il loro metodo di calcolo per ogni obiettivo sono mostrati qui sopra.

Le lettere nei diagrammi e i metodi di calcolo indicano quanto segue.

SS : dimensione schermo misurata diagonalmente (pollici)
a : distanza tra lo schermo e il centro dell'obiettivo
b : distanza tra il soffitto e il centro dell'obiettivo
x : distanza tra il soffitto e il centro dello schermo
N : Minima
M : Massima
P : Quando si usa il PSS-610, l'altezza può essere regolata su 231, 256, 281, 331, 356, 381 mm.

English

Attaching the projector suspension support PSS-610

Français

Fixation du support de suspension de projecteur PSS-610

Español

Instalación del soporte de suspensión del proyector PSS-610

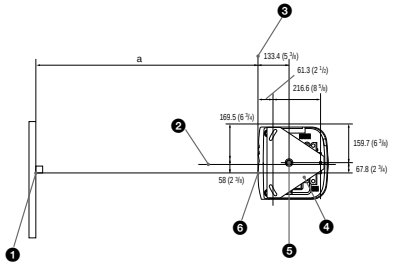
Deutsch

Anbringen der Projektoraufhängung PSS-610

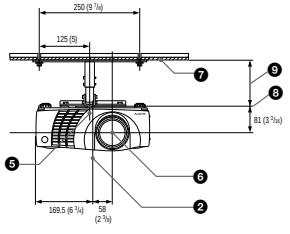
Italiano

Applicazione del supporto di sospensione del proiettore PSS-610

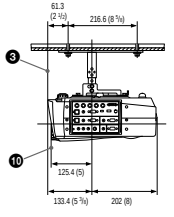
C



D



E



• When using the standard lens equipped with the VPL-PX20/PX30 / Si vous utilisez l'objectif standard qui équipe le VPL-PX20/PX30 / Installation mit dem Standardobjektiv des VPL-PX20/PX30 / Al emplear el objetivo estándar equipado con el VPL-PX20/PX30 / Quando si utilizza l'obiettivo standard in dotazione con il VPL-PX20/PX30

Unit: mm (inches) / Unité: mm (pouces) / Unidad: mm (pulgadas) / Einheit: mm (Zoll) / Unità: mm (pollici)

For more details on the ceiling installation, refer to the Installation manual for Dealers of the PSS-610. The installation measurements are shown above when you install the projector on the ceiling.

Top view C

Align the center of the lens with the center of the screen.

Front view D

The lens is offset 67.8 mm (2 3/4 inches) to the right from the center of the supporting pole. When mounting, take care to align the center of the lens with the center of the screen; not the center of the supporting pole.

Side view E

a) Distance between the screen and the center of the lens
❶ Center of the screen
❷ Center of the unit
❸ Front of the cabinet
❹ Upper ceiling mount bracket
❺ Center of the supporting pole (The center of the supporting pole is different from that of the unit.)
❻ Center of the lens
❼ Ceiling
❽ The bottom surface of the mounting bracket
❾ Distance between the ceiling and the surface of the mounting bracket
Using adjustment pipe (b): 150/175/200 mm (6/7/7 7/8 inches)
Using adjustment pipe (c): 250/275/300 mm (9 7/8 /10 7/8 /11 7/8 inches)
❿ Front of the lens

Pour plus de détails sur l'installation au plafond, reportez-vous au manuel d'installation pour les revendeurs du PSS-610. Les dimensions d'installation pour le montage au plafond sont indiquées ci-dessus.

Vue du dessus C

Alignez le centre de l'objectif sur le centre de l'écran.

Vue frontal D

L'objectif est décalé de 67,8 mm (2 3/4 pouces) vers la droite du centre du pivot de support. Au moment du montage, veillez à aligner correctement le centre de l'objectif sur le centre de l'écran; pas le centre du pivot de support.

Vue latérale E

a) Distance entre l'écran et le centre de l'objectif
❶ Centre de l'écran
❷ Centre de l'appareil
❸ Avant du meuble
❹ Support de montage de plafond supérieur
❺ Centre du pivot de support (Le centre du pivot de support est différent de celui de l'appareil.)
❻ Centre de l'objectif
❼ Plafond
❽ Le dessous du support de montage
❾ Distance entre le plafond et la surface du supprt de montage
Utilisation du tube de réglage (b): 150/175/200 mm (6/7/7 7/8 pouces)
Utilisation du tube de réglage (c): 250/275/300 mm (9 7/8 /10 7/8 /11 7/8 pouces)
❿ Avant de l'objectif

Para más información sobre la instalación en el techo, consulte el manual de instalación para proveedores de la unidad PSS-610. Las medidas de instalación se muestran anteriormente para cuando instale el proyector en el techo.

Vista superior C

Alinee el centro del objetivo con el centro de la pantalla.

Vista frontal D

El objetivo está desplazado 67,8 mm (2 3/4 pulgadas) a la derecha del centro de la columna de soporte. Al realizar el montaje, alinee el centro del objetivo con el centro de la pantalla y no con el centro de la columna de soporte.

Vista lateral E

a) Distancia entre la pantalla y el centro del objetivo
❶ Centro de la pantalla
❷ Centro de la unidad
❸ Parte frontal de la caja
❹ Soporte de montaje superior para techo
❺ Centro de la columna de soporte (El centro de la columna de soporte no es el mismo que el de la unidad.)
❻ Centro del objetivo
❼ Techo
❽ La base del la superficie del soporte de montaje
❾ Distancia entre el techo y la base del proyector
Uso del tubo de ajuste (b): 150/175/200 mm (6/7/7 7/8 pulgadas)
Uso del tubo de ajuste (c): 250/275/300 mm (9 7/8 /10 7/8 /11 7/8 pulgadas)
❿ Parte frontal del objetivo

Näheres zur Deckenmontage finden Sie in der Installationsanleitung zur PSS-610 für Händler. Die Installationsabmessungen für das Montieren des Projektors an der Decke sind oben angegeben.

Draufsicht C

Richten Sie die Mitte des Objektivs an der Mitte des Projektionsschirms aus.

Vorderansicht D

Das Objektiv am Projektor ist 67,8 mm nach rechts von der Mitte des Ständers versetzt. Achten Sie beim Installieren darauf, die Mitte des Objektivs, nicht die Mitte des Ständers, an der Mitte des Projektionsschirms auszurichten.

Seitenansicht E

a) Abstand zwischen dem Projektionsschirm und der Mitte des Objektivs
❶ Mitte des Projektionsschirms
❷ Mitte des Geräts
❸ Vorderseite des Gehäuses
❹ Deckenmontagehalterung
❺ Mitte des Ständers (Die Mitte des Ständers entspricht nicht der des Geräts.)
❻ Mitte des Objektivs
❼ Decke
❽ Die Unterseite der Halterung
❾ Abstand zwischen der Decke und der Oberfläche der Hlaterung
Mit Einstellrohr (b): 150/175/200 mm
Mit Einstellrohr (c): 250/275/300 mm
❿ Vorderseite des Objektivs

Per ulteriori informazioni sull'installazione al soffitto, fare riferimento al manuale di installazione per rivenditori relativo al supporto di sospensione PSS-610. Le misure di installazione per l'installazione al soffitto sono indicate di seguito.

Vista dall'alto C

Allineare il centro della lente con il centro dello schermo.

Vista frontale D

Rispetto al centro per l'asta di supporto, la lente del proiettore è spostata verso destra di 67,8 mm. Durante il montaggio, assicurarsi di allineare il centro della lente del proiettore e non il centro per l'asta di supporto con il centro dello schermo.

Vista laterale E

a) Distanza fra lo schermo e il centro dell'obiettivo
❶ Centro dello schermo
❷ Centro dell'apparecchio
❸ Parte anteriore dell'apparecchio
❹ Staffa di montaggio al soffitto
❺ Centro per l'asta di supporto (Il centro per l'asta di supporto è diverso da quello dell'apparecchio.)
❻ Centro della lente
❼ Soffitto
❽ La superficie inferiore della staffa di montaggio
❾ Distanza fra il soffitto e la superficie della staffa di montaggio
Utilizzando il tubo di regolazione (b): 150/175/200 mm
Utilizzando il tubo di regolazione (c): 250/275/300 mm
❿ Parte anteriore della lente

English

Floor Installation (Rear Projection: Optical Axis Angle 0 Degree)

Français

Installation au sol (Rétroprojection: angle d'axe optique de 0 degré)

Español

Instalación en el suelo (proyección posterior: ángulo de eje óptico de 0 grados)

Deutsch

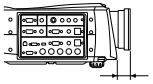
Installation am Boden (Rückprojektion: Winkel der optischen Achse = 0 Grad)

Italiano

Installazione sul pavimento (proiezione posteriore: grado zero dell'angolo di asse ottico)

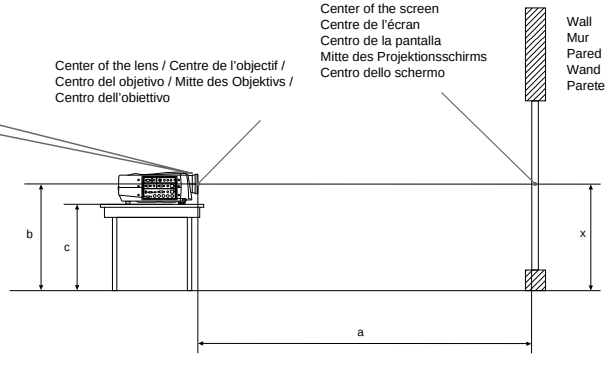
F

Distance between the front of the cabinet and the center of the lens
Distance entre l'avant du châssis et le centre de l'objectif
Distancia entre la parte frontal de la unidad y el centro del objetivo
Abstand zwischen der Gehäusevorderseite und der Objektivmitte
Distanza tra la parte anteriore dell'apparecchio e il centro dell'obiettivo



Standard: 10 ($^{13}/_{32}$)
VPLL-ZM101: 28.9 (1 $^{1}/_{8}$)
VPLL-ZM31: 54.3 (2 $^{1}/_{8}$)
VPLL-FM21: 35.7 (1 $^{13}/_{32}$)

Unit: mm (inches) / Unité: mm (pouces) / Unidad: mm (pulgadas) / Einheit: mm (Zoll) / Unità: mm (pollici)



This section describes the examples for installing the projector behind the screen, etc. F

See the charts on pages 58 and 59 concerning the installation measurements.

The alphabetical letters in the illustration indicate the distances below.
a : distance between the screen and the center of the lens
b : distance between the floor and the center of the lens
c : distance between the floor and the bottom of the adjusters of the projector
x : free

Note

If the projector has been set at the factory and if you project a picture from the rear, the picture will be upside down. If you use a mirror, the picture may be reversed. In these cases, change the INSTALLATION in the INSTALL SETTING menu.
For details, refer to the "INSTALL SETTING" menu in the Operating Instructions for your LCD data projector.

Cette section décrit les exemples d'installation du projecteur derrière l'écran, etc. F

Reportez-vous aux tableaux des pages 58 à 59 sur les mesures d'installation.

Les caractères alphabétiques dans l'illustration indiquent les distances ci-dessous.
a : distance entre l'écran et le centre de l'objectif
b : distance entre le sol et le centre de l'objectif
c : distance entre le sol et la base des pieds réglables du projecteur
x : libre

Remarque

Si le projecteur est réglé par défaut et si vous rétroprojetez une image, l'image sera retournée. Vous pouvez redresser l'image en utilisant un miroir. Dans ces cas, changez INSTALLATION dans le menu REGL. INSTAL.
Pour plus de détails, voir le menu "REGL. INSTAL." dans le mode d'emploi de votre projecteur de données LCD.

En esta sección se muestran ejemplos para instalar el proyector detrás de la pantalla, etc. F

Consulte las tablas de las páginas 58 a 59 en relación con las medidas de instalación.

Las letras alfabéticas de la ilustración indican las distancias mostradas a continuación.
a : distancia entre la pantalla y el centro del objetivo
b : distancia entre el suelo y el centro del objetivo
c : distancia entre el suelo y la base de los ajustadores del proyector
x : libre

Nota

Si el proyector se ha ajustado en fábrica y proyecta una imagen desde la parte posterior, la imagen aparecerá invertida. Si utiliza un espejo, es posible que aparezca al revés. En estos casos, cambie la opción INSTALACION del menú AJUSTE INST.
Para obtener información más detallada, consulte el menú "AJUSTE INST" en las instrucciones de uso de vuestro proyector LCD de datos.

In diesem Abschnitt finden Sie Beispiele für das Installieren des Porjektors hinter dem Projektionsschirm usw. F

In den Tabellen auf Seite 58 bis 59 finden Sie die Installationsabmessungen.

Die Buchstaben in der Abbildung beziehen sich auf die unten beschriebenen Abstände.
a : Abstand zwischen dem Projektionsschirm und der Mitte des Objektivs
b : Abstand zwischen dem Boden und der Mitte des Objektivs
c : Abstand zwischen dem Boden und der Unterseite der Ausgleichsfüße des Projektors
x : frei

Hinweis

Wenn der Projektor werkseitig eingestellt wurde und Sie ein Bild mit dem Rückprojektionsverfahren projizieren, erscheint das Bild auf dem Kopf. Wenn Sie einen Spiegel verwenden, erscheint das Bild möglicherweise seitenverkehrt. Ändern Sie in diesem Fall die Einstellung für INSTALLATION im Menü ANFANGSWERTE.
Näheres können Sie im Abschnitt zum Menü "ANFANGSWERTE" in der Bedienungsanleitung Ihres LCD-Datenprojektors nachlesen.

Questa sezione descrive gli esempi di installazione del proiettore dietro allo schermo, ecc. F

Vedere i diagrammi da pagina 58 a pagina 59 relativi alle misure di installazione.

Le lettere nell'illustrazione indicano le distanze descritte di seguito.
a : distanza fra lo schermo e il centro dell'obiettivo
b : distanza tra il pavimento e il centro dell'obiettivo
c : distanza fra il pavimento e la base dei dispositivi di regolazione del proiettore
x : libero

Nota

Se il proiettore è stato impostato in fabbrica e si proietta un'immagine dalla parte posteriore, l'immagine risulterà capovolta. Se si utilizza uno specchio, l'immagine potrebbe risultare invertita. In questi casi, modificare INSTALLAZIONE nel menu IMPOST.INST.
Per informazioni dettagliate, fare riferimento a al menu "IMPOST.INST" nelle istruzioni per l'uso de vostro proiettore di dati con schermo a cristalli liquidi.

English

Floor Installation (Rear Projection: Optical Axis Angle 0 Degree)

Français

Installation au sol (Rétroprojection: angle d'axe optique de 0 degré)

■ Standard lens / Objectif standard / Objetivo estándar / Standardobjektiv / Uso Obiettivo standard

Unit: mm (inches) / Unité: mm (pouces) / Unidad: mm (pulgadas) / Einheit: mm (Zoll) / Unità: mm (pollici)

SS		40	60	80	100	120	150	180	200	250	300
a	N	1490 (58 3/4)	2280 (89 7/8)	3060 (120 1/2)	3850 (151 5/8)	4630 (182 3/8)	5810 (228 7/8)	6990 (275 1/4)	7770 (306)	9740 (383 5/8)	11700 (460 3/4)
	M	1820 (71 3/4)	2780 (109 1/2)	3740 (147 3/8)	4700 (185 1/8)	5660 (222 7/8)	7100 (279 5/8)	8540 (336 3/8)	9500 (374 1/8)	11900 (468 5/8)	14300 (563 1/8)
b		x (x)									
c		x–79 (x–3 1/8)									

a (N) = {(SS × 50.18/1.3102) – 75.10104} × 1.025
a (M) = {(SS × 64.518746/1.3102) – 107.8977} × 0.975
b = x
c = x – 79

■ VPLL-ZM101

Unit: mm (inches) / Unité: mm (pouces) / Unidad: mm (pulgadas) / Einheit: mm (Zoll) / Unità: mm (pollici)

SS		40	60	80	100	120	150	180	200	250	300
a	N	2600 (102 3/8)	4000 (157 1/2)	5410 (213 1/8)	6810 (268 1/4)	8220 (323 3/4)	10330 (408 3/4)	12430 (489 1/2)	13840 (545)	17350 (683 1/4)	20870 (821 7/8)
	M	3890 (153 1/4)	5940 (234)	7980 (314 1/4)	10030 (394 15/16)	12080 (475 3/4)	15150 (596 5/8)	18220 (717 1/2)	20270 (798 1/4)	25380 (999 3/8)	30500 (1201)
b		x (x)									
c		x–79 (x–3 1/8)									

a (N) = {(SS × 89.82/1.3102) – 209.2626} × 1.025
a (M) = {(SS × 137.56012/1.3102) – 211.5915} × 0.975
b = x
c = x – 79

The installation measurements and their calculation method for each lens are shown above.

The alphabetical letters in the charts and calculation methods indicate the following.
SS : screen size measured diagonally (inches)
a : distance between the screen and the center of the lens
b : distance between the floor and the center of the lens
c : distance between the floor and the bottom of the adjusters of the projector
x : free
N : minimum
M : maximum

Les mesures d'installation et leur méthode de calcul pour chaque objectif sont indiquées ci-dessus.

Les caractères alphabétiques dans l'illustration indiquent ce qui suit.
SS : dimension de l'écran en diagonale (pouces)
a : distance entre l'écran et le centre de l'objectif
b : distance entre le sol et le centre de l'objectif
c : distance entre le sol et la base des pieds réglables du projecteur
x : libre
N : minimum
M : maximum

Español

Instalación en el suelo (proyección posterior: ángulo de eje óptico de 0 grados)

Deutsch

Installation am Boden (Rückprojektion: Winkel der optischen Achse = 0 Grad)

Italiano

Installazione sul pavimento (proiezione posteriore: grado zero dell'angolo di asse ottico)

■ VPLL-ZM31

Unit: mm (inches) / Unité: mm (pouces) / Unidad: mm (pulgadas) / Einheit: mm (Zoll) / Unità: mm (pollici)

SS		40	60	80	100	120	150	180	200	250	300
a	N	1190 (46 7/8)	1840 (72 1/2)	2490 (98 1/8)	3150 (124 1/8)	3800 (149 5/8)	4780 (188 1/4)	5760 (226 7/8)	6410 (252 1/2)	8050 (317)	9680 (381 1/4)
	M	1250 (49 1/4)	1940 (76 1/2)	2620 (103 1/4)	3300 (130)	3980 (156 3/4)	5000 (196 7/8)	6030 (237 7/16)	6710 (264 1/4)	8410 (331 1/4)	10120 (398 1/2)
b		x (x)									
c		x–79 (x–3 1/8)									

a (N) = {(SS × 41.75/1.3102) – 116.2604} × 1.025
a (M) = {(SS × 45.821033/1.3102) – 112.9154} × 0.975
b = x
c = x – 79

■ VPLL-FM21

Unit: mm (inches) / Unité: mm (pouces) / Unidad: mm (pulgadas) / Einheit: mm (Zoll) / Unità: mm (pollici)

SS	40	60	80	100	120	150	180	200	250	300
a	670 (26 1/2)	1050 (41 3/8)	1430 (56 3/8)	1800 (70 7/8)	2180 (85 7/8)	2750 (108 3/8)	3310 (130 3/8)	3690 (145 3/8)	4630 (182 3/8)	5580 (219 3/4)
b	x (x)									
c	x–79 (x–3 1/8)									

a = {(SS × 24.71/1.3102) – 81.86279} × 1.0
b = x
c = x – 79

Las medidas de instalación y sus métodos de cálculo para cada objetivo se muestran anteriormente.

Las letras alfabéticas de las tablas y los métodos de cálculo indican lo siguiente.
SS : tamaño de pantalla medida diagonalmente (pulgadas)
a : distancia entre la pantalla y el centro del objetivo
b : distancia entre el suelo y el centro del objetivo
c : distancia entre el suelo y la base de los ajustadores del proyector
x : libre
N : mínimo
M : máximo

Die Installationsabmessungen und das jeweilige Berechnungsverfahren für die einzelnen Objektive sind oben angegeben.

Die Buchstaben in den Tabellen und den Berechnungsverfahren haben folgende Bedeutung:
SS : Projektionsschirmgröße in Zoll, diagonal gemessen
a : Abstand zwischen dem Projektionsschirm und der Mitte des Objektivs
b : Abstand zwischen dem Boden und der Mitte des Objektivs
c : Abstand zwischen dem Boden und der Unterseite der Ausgleichsfüße des Projektors
x : frei
N : Mindestens
M : Höchstenss

Le misure di installazione e il loro metodo di calcolo per ogni obiettivo sono mostrati qui sopra.

Le lettere nei diagrammi e i metodi di calcolo indicano quanto segue.
SS : dimensione schermo misurata diagonalmente (pollici)
a : distanza fra lo schermo e il centro dell'obiettivo
b : distanza tra il pavimento e il centro dell'obiettivo
c : distanza fra il pavimento e la base dei dispositivi di regolazione del proiettore
x : libero
N : Minima
M : Massima

SONY

4-073-992-**01** (1)

Quick Reference Card / Carte de référence rapide /Tarjeta de referencia rápida / Kurzreferenz / Scheda di riferimento rapido

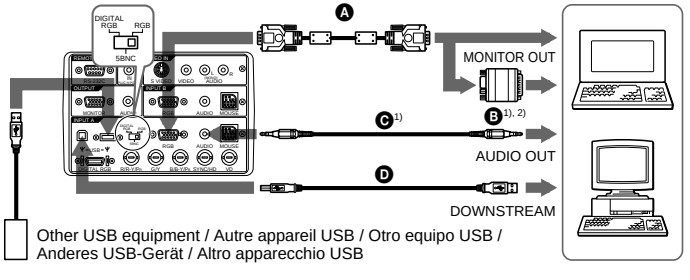
VPL-PX20/VPL-PX30

Connections / Connexions / Conexiones / Anschlüsse / Collegamenti

- Ⓐ HD D-sub 15-pin cable / Câble HD D-sub à 15 broches / Cable HD D-sub 15 pines / 15poliges D-Sub-HD-Kabel / Cavo HD D-sub a 15 piedini
- Ⓑ Signal adapter / Adaptateur de signal / Adaptador de señales / Signaladapter / Adattatore del segnale
- Ⓒ Stereo audio connecting cable / Câble de connexion audio stéréo / Cable de conexión de audio estéreo / Stereo-Audioverbindungskabel / Cavo audio stereo
- Ⓓ USB cable / Câble USB / Cable USB / USB-Kabel / Cavo USB
- Ⓔ S-video cable / Câble S-vidéo / Cable de vídeo S / S-Videokabel / Cavo S-Video
- Ⓕ Audio/video cable / Câble audio/vidéo / Cable de audio/vídeo / Audio-/Videokabel / Cavo audio/video

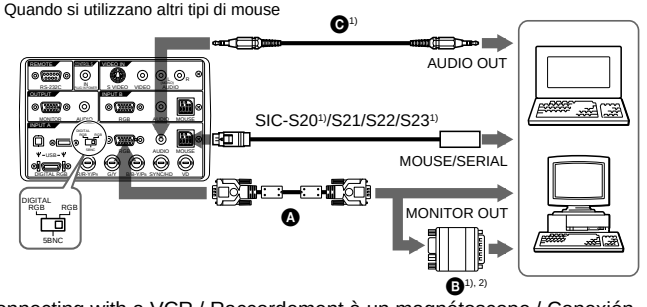
Connecting with a computer / Raccordement à un ordinateur / Conexión con ordenador / Anschließen an einen Computer / Collegamento a un computer

● Using a USB equipment (e.g., USB mouse) / Utilisation d'un appareil USB (p.ex., souris USB) / Empleo de un equipo USB (p. ej., un ratón USB) / Verwenden eines USB-Geräts (z. B. einer USB-Maus) / Uso di un dispositivo USB (ad esempio un mouse USB)

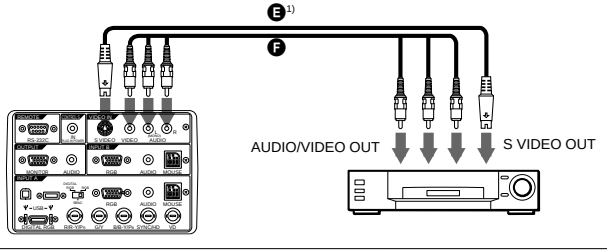


System Requirement / Configuration requise / Requisito de sistema / Systemvoraussetzung / Requisiti di sistema

● When using other type of mouse / Si vous utilisez un autre type de souris / Si utiliza otro tipo de ratón / Wenn Sie einen anderen Maustyp verwenden / Quando si utilizzano altri tipi di mouse



Connecting with a VCR / Raccordement à un magnétoscope / Conexión con una vídeograbadora / Anschließen an einen Videorecorder / Collegamento a un videoregistratore

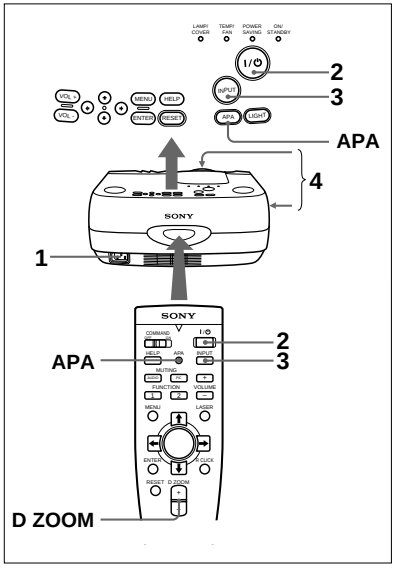


1) not supplied / non fourni / no suministrado / nicht mitgeliefert / non in dotazione
2) Only connecting to the Macintosh / Raccordement au Macintosh uniquement / Conexión únicamente al sistema Macintosh / Nur zum Anschließen an den Macintosh / Collegamento solo al Macintosh

Projection Distances / Distances de projection / Distancias de proyección / Projektionsentfernungen / Distanze di proiezione

Screen size(inchies) / Taille de l'écran (pouces) / Tamaño de la pantalla (pulgadas) / Projektionsschirmgröße (Zoll) / Dimensione schermo (pollici)	Distance (m (feet)) / Distance (m (pieds)) / Distancia (m (pies)) / Abstand (m) /Distanza (m)
40	1490–1820 (58 3/4–71 3/4)
60	2280–2780 (89 7/8–109 1/2)
80	3060–3740 (120 1/2–147 3/8)
100	3850–4700 (151 5/8–185 1/8)
120	4630–5660 (182 3/8–222 7/8)
150	5810–7100 (228 7/8–279 5/8)
180	6990–8540 (275 1/4–336 3/8)
200	7770–9500 (306–374 1/8)
250	9740–11900 (383 5/8–468 5/8)
300	11700–14300 (460 3/4–563 1/8)

Basic Operation / Opération de base / Operación básica / Grundfunktion / Operazione di base



English

1 After all equipment is connected completely, plug the AC power cord into the wall outlet.

2 Press the I / ⏻ key to turn on the projector.

3 Turn on equipment connected to the projector. Press the INPUT key to select “INPUT-A”, “INPUT-B”, “S-VIDEO” or “VIDEO”.

4 Turn the zoom ring to adjust the size of the picture, and turn the focus ring to adjust the focus.

To adjust the picture of computer automatically

Press the APA (Auto Pixel Alignment) key.

To correct the trapezoid

Correct the trapezoid of the picture by changing the DIGIT KEYSTONE value in the INSTALL SETTING menu.

To enlarge the image

Press the D ZOOM + key. Using an arrow key (↑/↓/←/→), move the icon to the point you want to enlarge. Press the D ZOOM + key again.

Français

1 Après que tous les appareils ont été complètement raccordés, branchez le câble d’alimentation sur une prise murale.

2 Appuyez sur la touche I / ⏻ pour mettre le projecteur sous tension.

3 Mettez sous tension l’appareil raccordé au projecteur. Appuyez sur la touche INPUT pour sélectionner “ENT.A”, “ENT.B”, “S-VIDEO” ou “VIDEO”.

4 Tournez la bague de zoom pour ajuster la taille de l’image et tournez la bague de mise au point pour ajuster la mise au point.

Pour régler automatiquement l’image de l’ordinateur

Appuyez sur la touche APA (alignement automatique des pixels).

Pour corriger la distorsion trapézoïdale

Corrigez la distorsion trapézoïdale en changeant la valeur TRAPEZE NUMER dans le menu REGL. INSTAL.

Pour agrandir l’image

Appuyez sur la touche D ZOOM +. A l’aide d'une touche fléchée (↑/↓/←/→), déplacez l’icône à l’endroit que vous voulez agrandir. Appuyez de nouveau sur la touche D ZOOM +.

Español

1 Una vez conectados todos los equipos por completo, enchufe el cable de alimentación de CA en la toma mural.

2 Pulse la tecla I / ⏻ para encender el proyector.

3 Encienda el equipo conectado al proyector. Pulse la tecla INPUT para seleccionar “ENTRAD A”, “ENTRAD B”, “S-VIDEO” o “VIDEO”.

4 Gire el anillo de zoom para ajustar el tamaño de la imagen, y gire el anillo de enfoque para ajustar el enfoque.

Para ajustar la imagen del ordenador automáticamente

Pulse la tecla APA (Alineación automática de píxeles).

Para corregir la distorsión trapezoidal

Corrija la distorsión trapezoidal de la imagen cambiando el valor de DIST TRAP DIG del menú AJUSTE INST.

Para ampliar la imagen

Pulse la tecla D ZOOM +. Mediante una tecla de flecha (↑/↓/←/→), desplace el icono hasta el punto que desee aumentar. Vuelva a pulsar la tecla D ZOOM +.

Deutsch

1 Wenn alle Geräte vollständig angeschlossen sind, stecken Sie den Stecker des Netzkabels in die Netzsteckdose.

2 Schalten Sie den Projektor mit der Taste I / ⏻ ein.

3 Schalten Sie die an den Projektor angeschlossenen Geräte ein. Wählen Sie mit der Taste INPUT “EING.A”, “EING.B”, “S-VIDEO” oder “VIDEO” aus.

4 Stellen Sie durch Drehen des Zoom-Rings die Größe des Bildes und durch Drehen des Fokussierrings den Fokus ein.

So lassen Sie das Bild des Computers automatisch einstellen

Drücken Sie die Taste APA (automatische Pixelausrichtung).

So korrigieren Sie die Trapezverzerrung

Korrigieren Sie die Trapezverzerrung des Bildes, indem Sie den Wert für TRAPEZ DIGITAL im Menü ANFANGSWERTE ändern.

So vergrößern Sie das Bild

Drücken Sie die Taste D ZOOM +. Stellen Sie das Symbol mit einer der Pfeiltasten (↑/↓/←/→) auf die zu vergrößernde Stelle. Drücken Sie die Taste D ZOOM + erneut.

Italiano

1 Dopo avere collegato saldamente tutti gli apparecchi, inserire l’alimentatore CA nella presa di rete.

2 Per accendere il proiettore, premere il tasto I / ⏻.

3 Accendere l’apparecchiatura collegata al proiettore. Premere il tasto INPUT per selezionare “INGRE A”, “INGRE B”, “S-VIDEO” o “VIDEO”.

4 Per regolare le dimensioni dell’immagine, ruotare il regolatore dello zoom, per regolare la messa a fuoco, ruotare il regolatore della focalizzazione.

Per regolare automaticamente l’immagine del computer

Premere il tasto APA (Allineamento automatico dei pixel).

Per correggere la distorsione dell’immagine

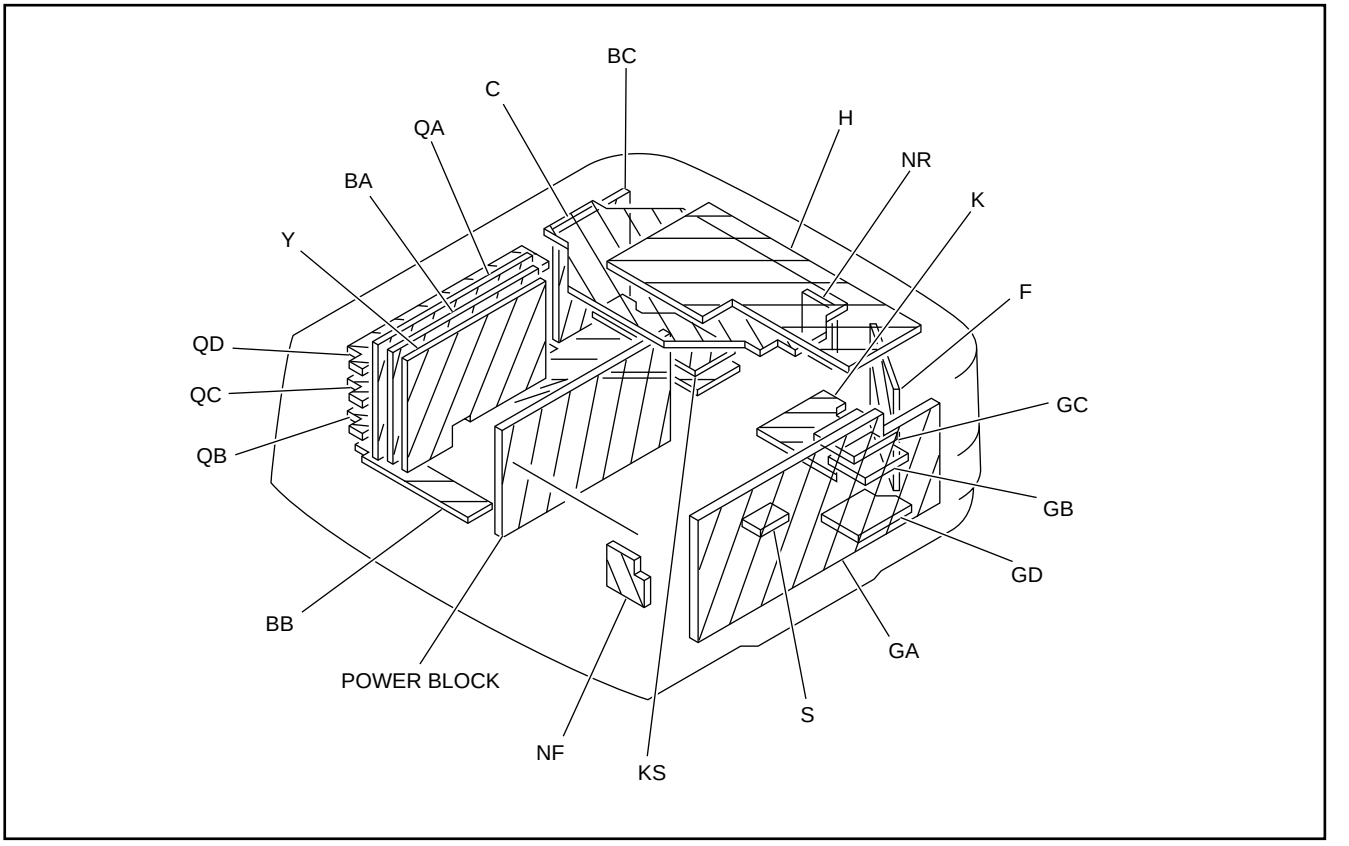
Correggere l’immagine distorta modificando il valore di KEYST. DIGIT. nel menu IMPOST. INST.

Per ingrandire l’immagine

Premere il tasto D ZOOM +. Utilizzando uno dei tasti direzionali, (↑/↓/←/→), spostare l’icona sul punto che si desidera ingrandire, quindi premere di nuovo il tasto D ZOOM +.

Section 2
Service Informations

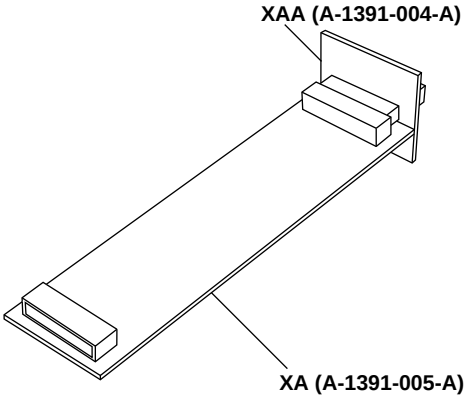
2-1. Circuit Boards Location



2-2. Servicing Tools

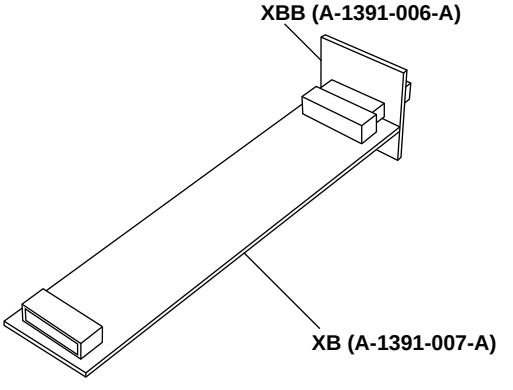
2-2-1. XA, XAA Extension Boards (70P)

- For Y board and QA board
  (QA board use 2 pieces of XA and XAA board.)

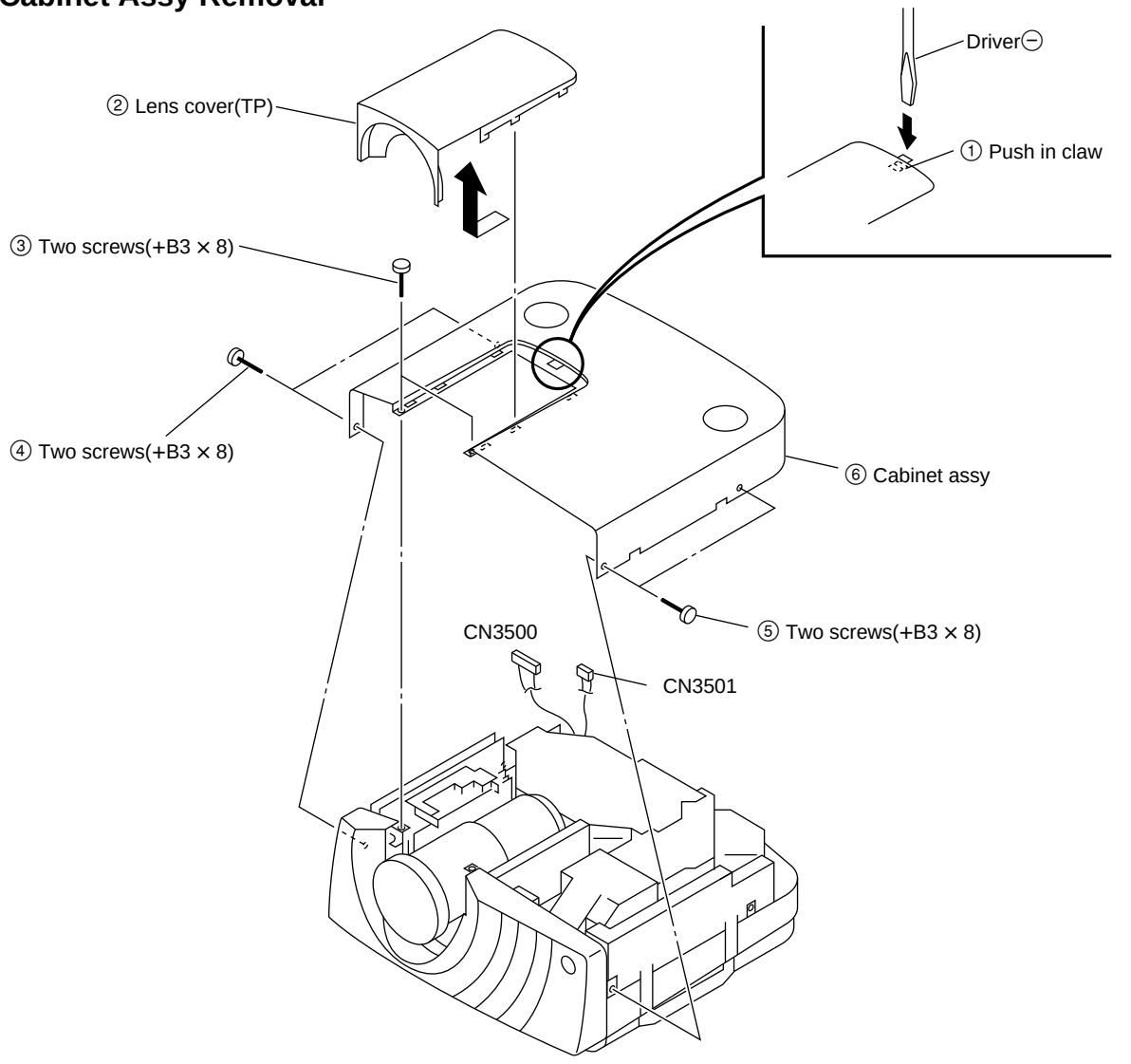


2-2-2. XB, XBB Extension Boards (50P)

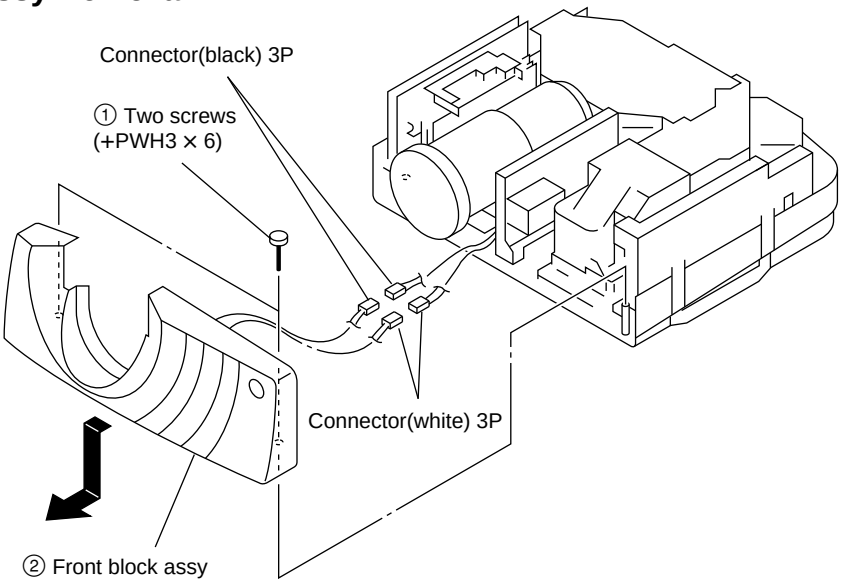
- For BA board.



2-3. Cabinet Assy Removal

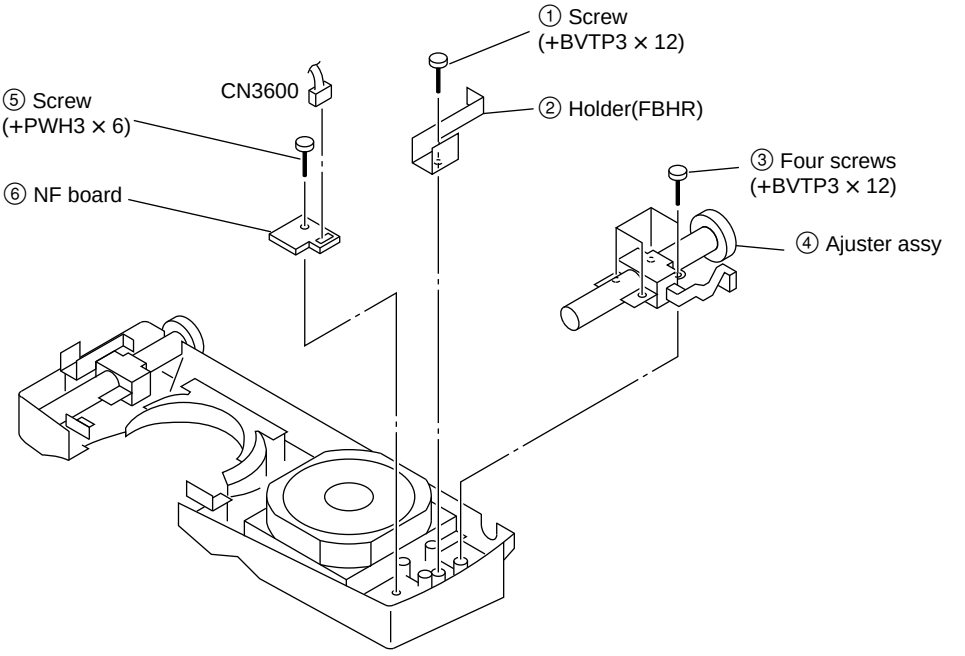


2-4. Front Block Assy Removal

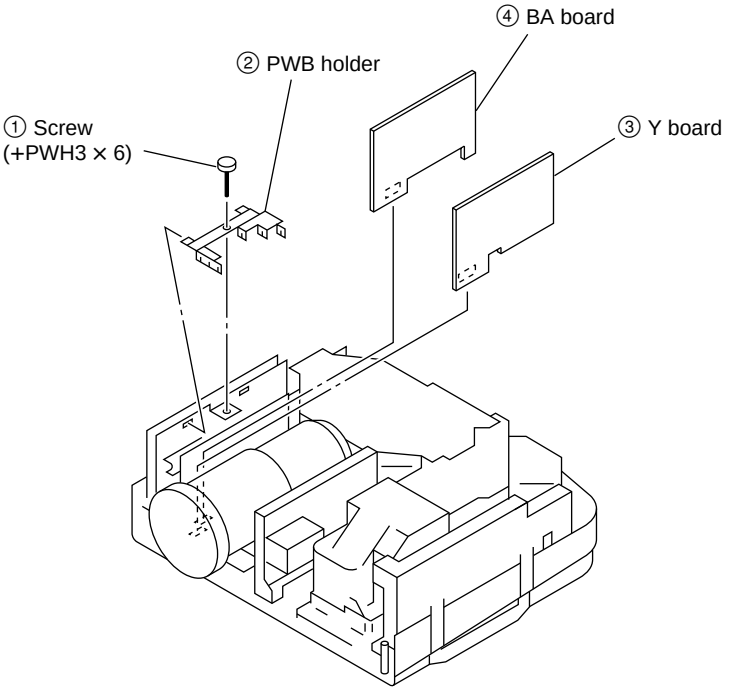


2-5. NF Board Removal

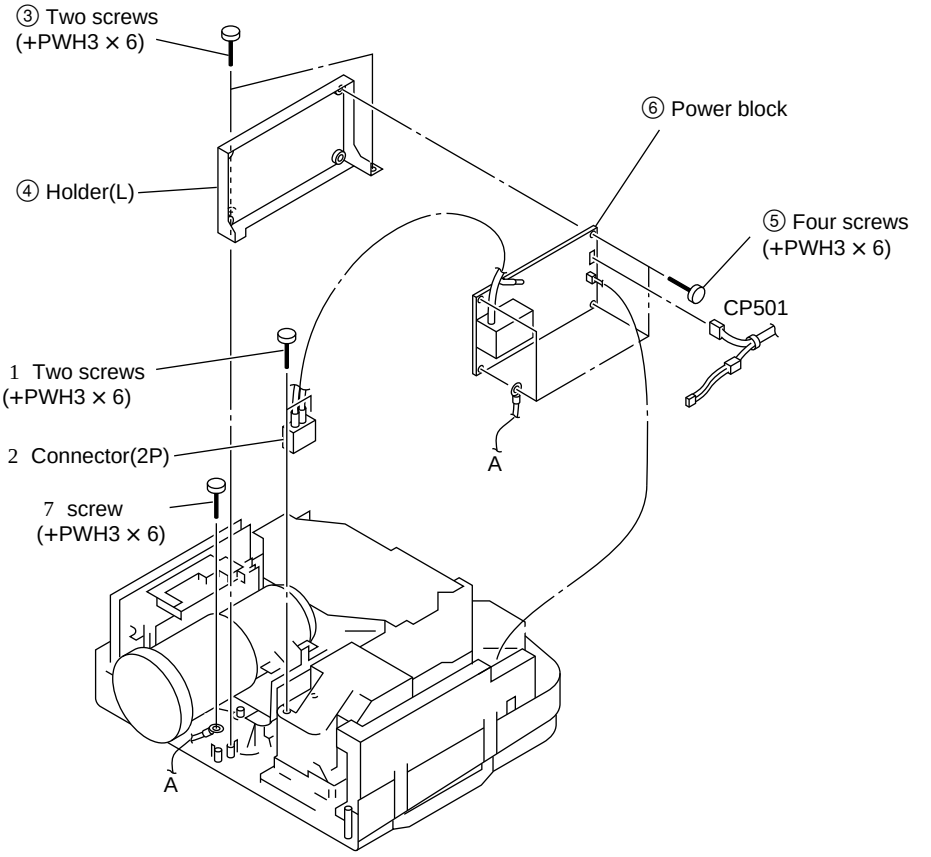
• Remove the Front Block Assy (Refer to 2-4.)..



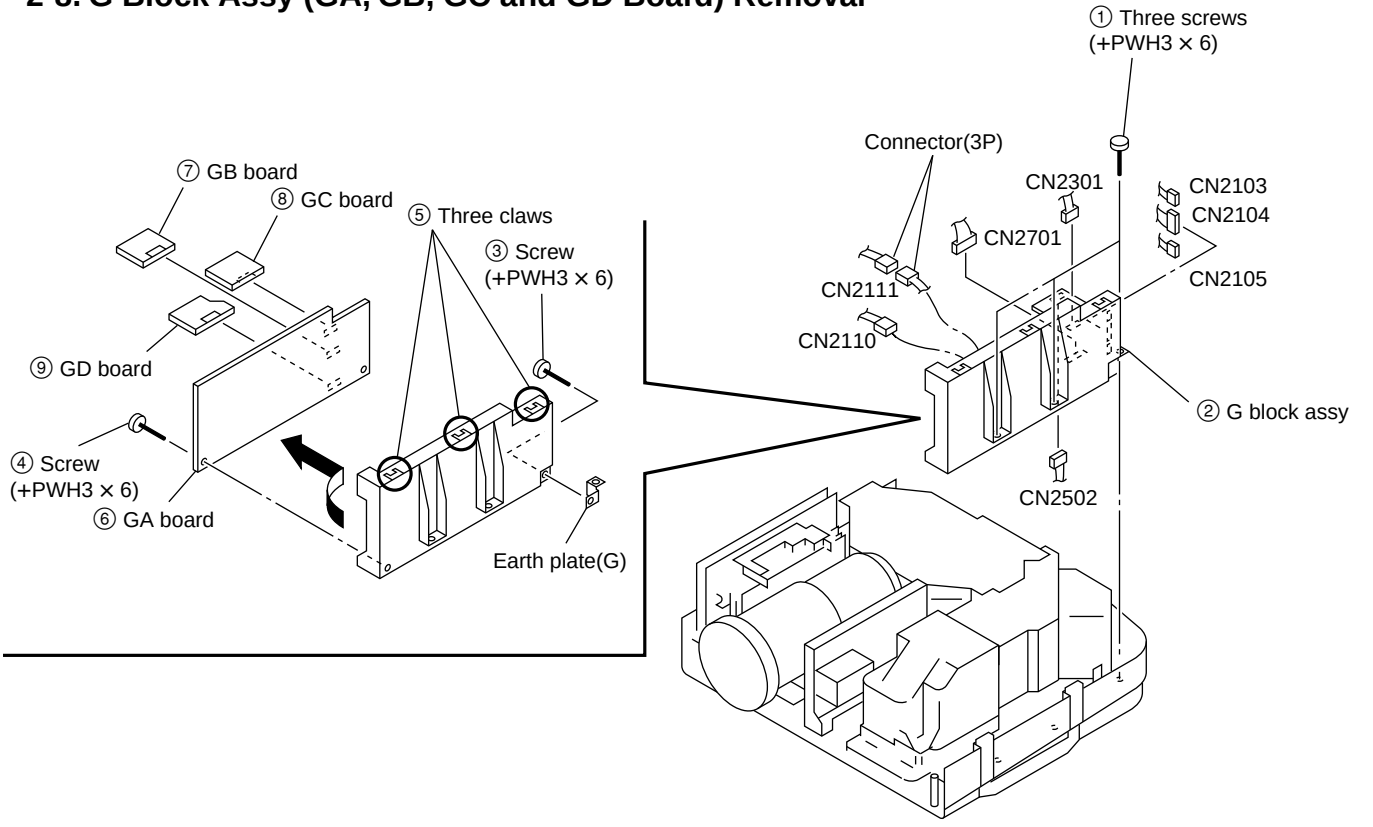
2-6. BA and Y Boards Removal



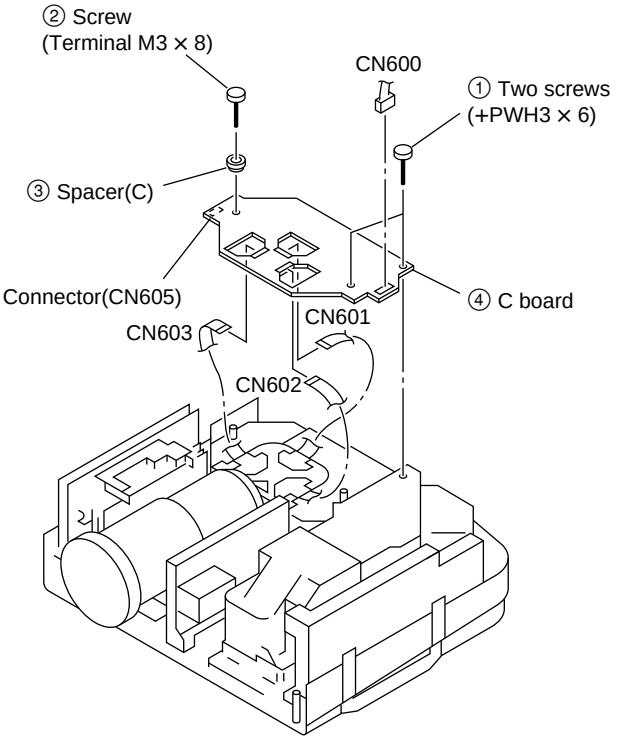
2-7. Power Block Removal



2-8. G Block Assy (GA, GB, GC and GD Board) Removal

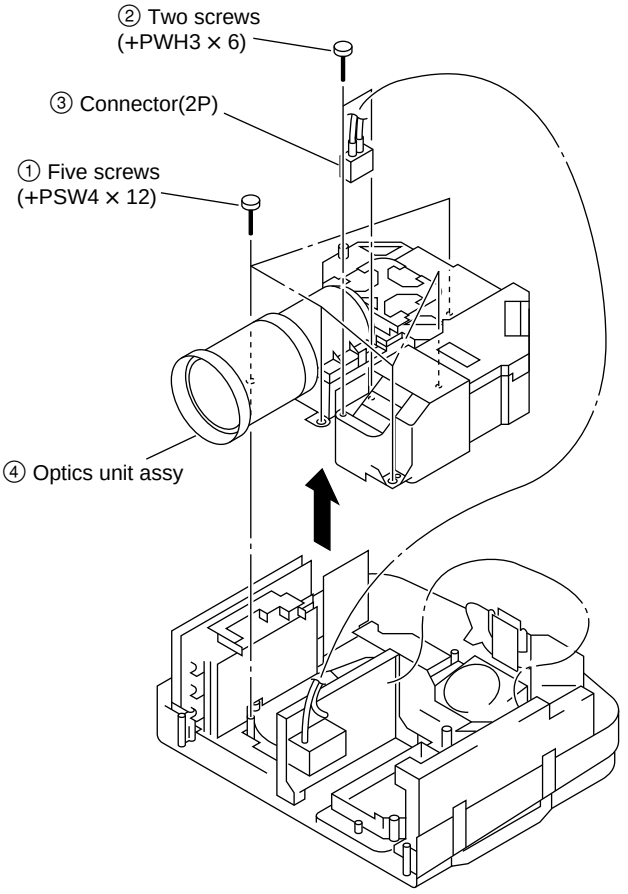


2-9. C Board Removal



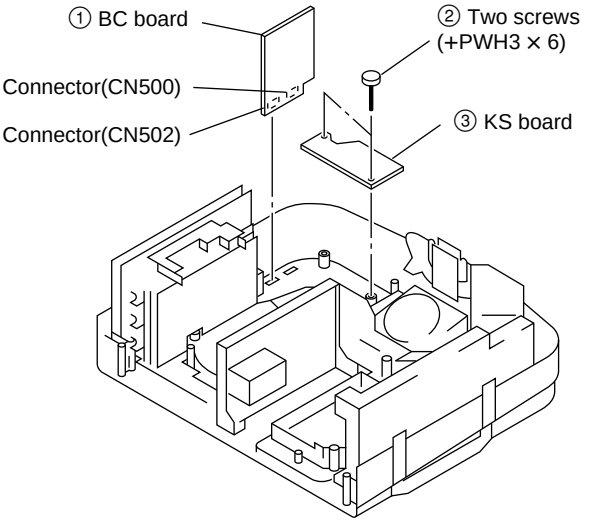
2-10. Optics Unit Assy Removal

• Remove the C Board (Refer to 2-9.).



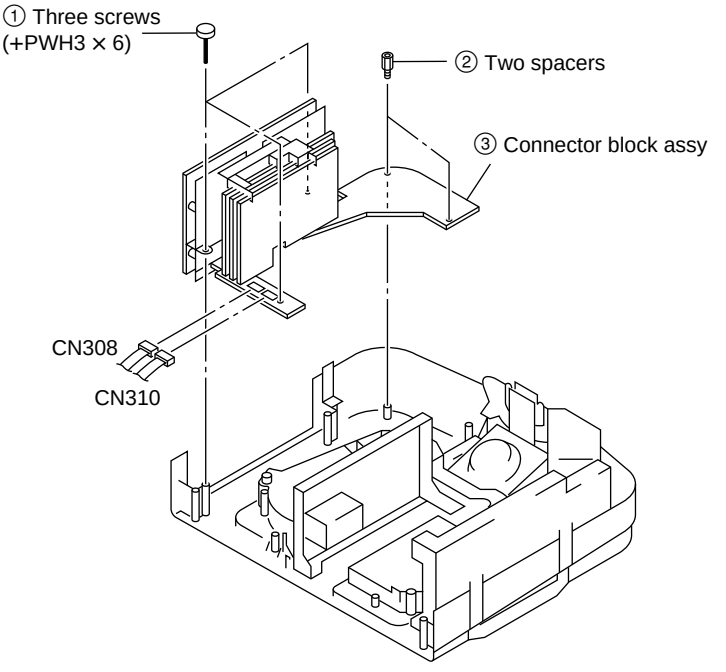
2-11. BC and KS Boards Removal

• Remove the Optics Unit (Refer to 2-10.).

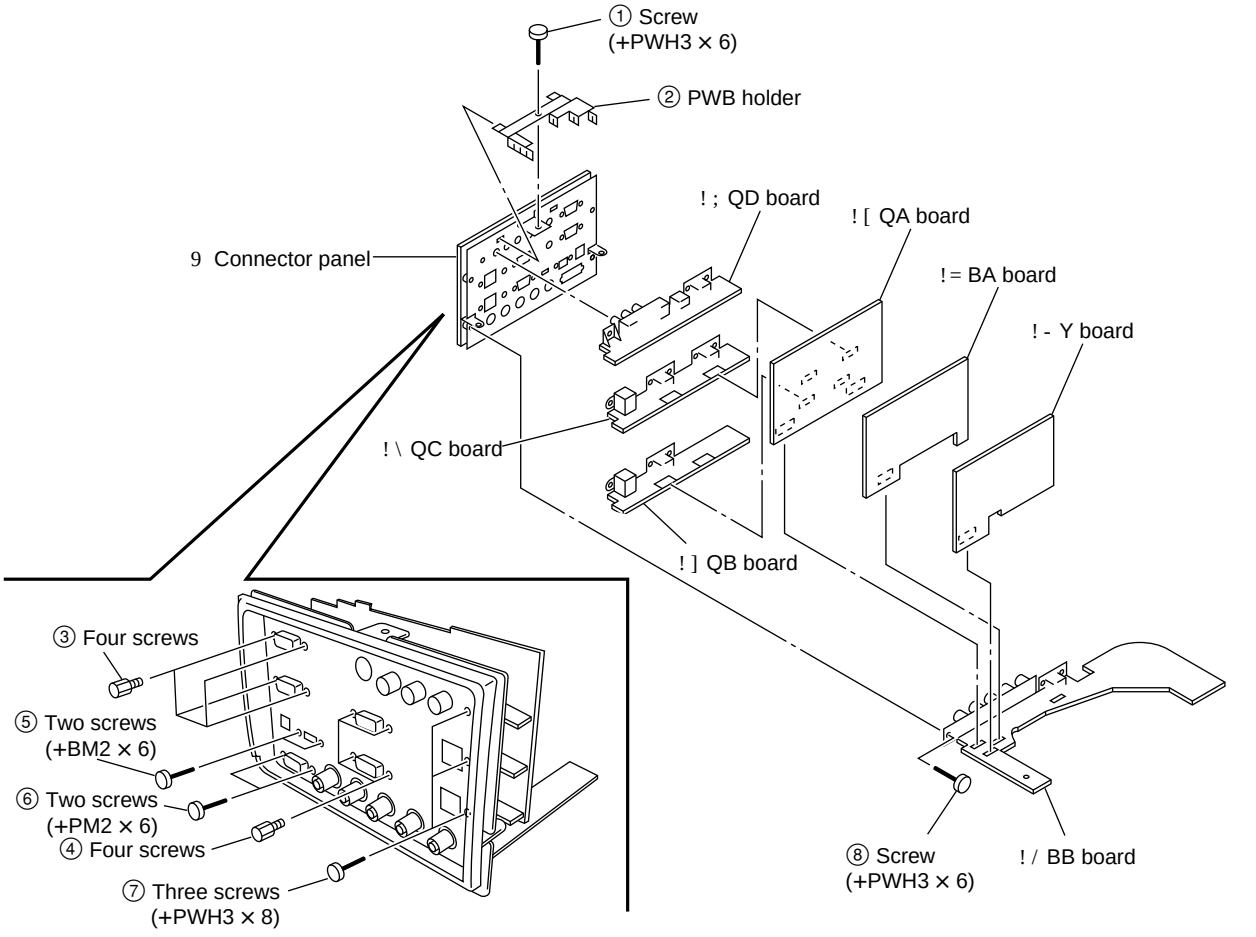


2-12. Connector Block Assy Removal

• Remove the KS Board (Refer to 2-11.).

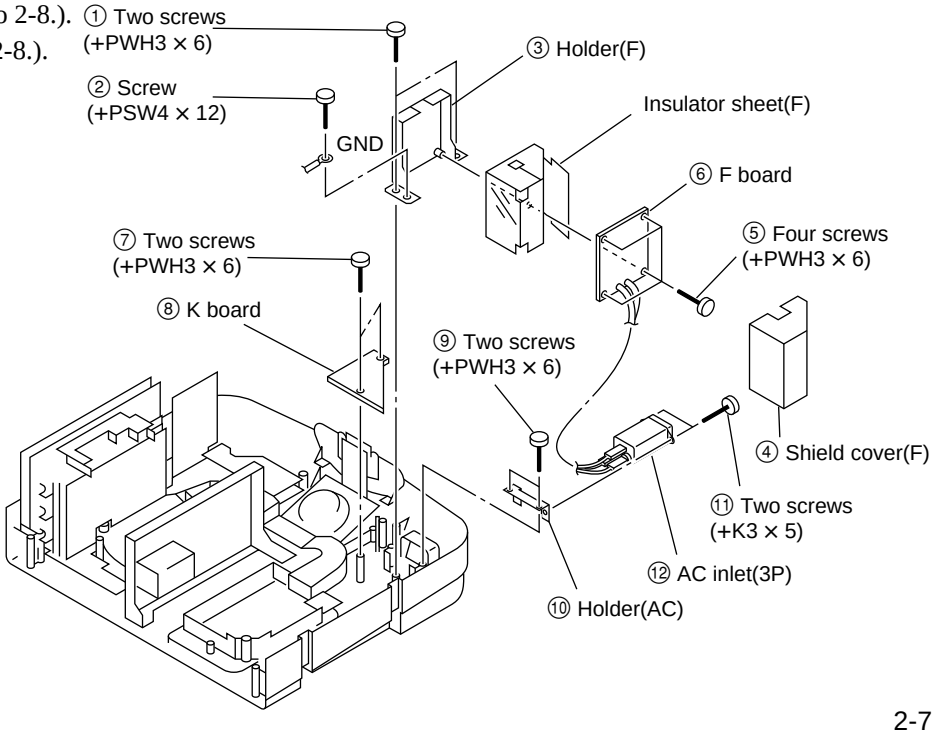


2-13. BB, QA, QB, QC and QD Boards Removal

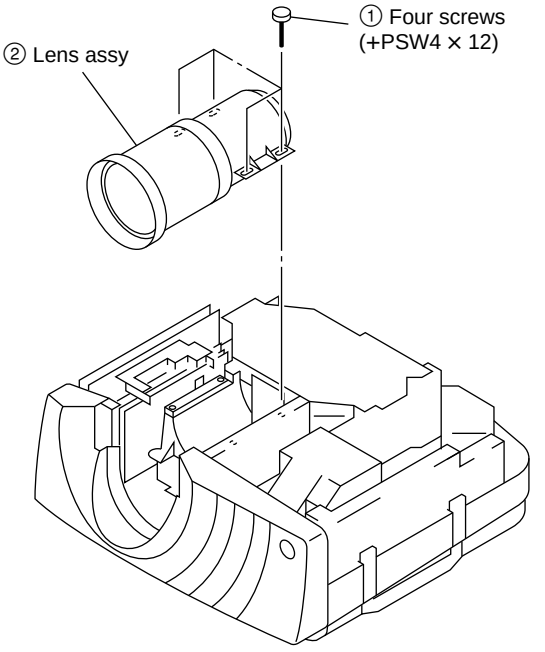


2-14. F, K Board and AC Inlet Removal

- Remove the G Block Assy (Refer to 2-8.).
- Remove the Optics Unit (Refer to 2-8.).

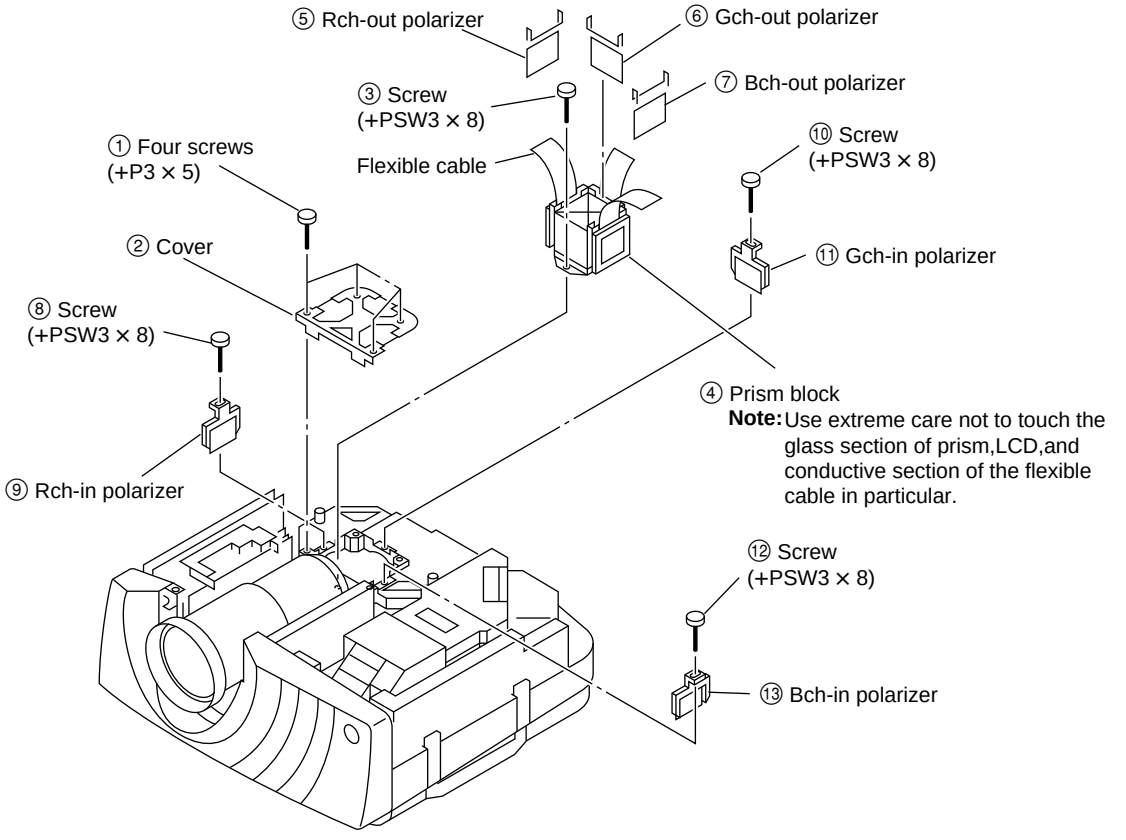


2-15. Lens Assy Removal



2-16. Prism Block and Polarizer Removal

• Remove the C Board (Refer to 2-9.).



2-17. Note on Lamp Breakage

Note 1

Ehen the lamp broken, its broken pieces may remain inside the unit.
Take off all the pices with gloves using care about a hand cut, before replacing.
Then, the fly-eye lens may be cloudy at the lamp breakage, at that time wipe the suface of the lens with an authorized lens cleaner kit.

- Cleaner (4-075-337-01)
- Wiper (4-075-338-01)

Note 2

Under the consideration of lamp's reliability, set the lamp mode to "LOW" during repairing the unit with the cabinet opening and the lamp on.

Section 3
Theory of Operation

3-1. BA Board

This circuit mainly performs the following processes.

a. VIDEO (C-VIDEO, Y/C, component), HDTV (Y PB PR) image processing
b. Sync separation processing

3-1-1. Main IC Functions

1. CXD2064 (IC221), digital comb filter

Performs NTSC3.58, PAL443 3-line applicable digital Y/C separation.
The operating clock (fsc) output from Pin 46 of CXA2123 (IC101) is input to Pin 37. The VIDEO signal input from Pin 2 is digitally processed by this clock. The Y signal is then output from Pin 9 and the C signal from Pin 7.

2. CXA2123 (IC101), chroma decoder and sync processing

Chroma decoder/sync processing IC controlled by the I2C bus. It can process C-VIDEO signals and Y/C signals. The C-VIDEO signal is input to Pin 1, the Y signal to Pin 44, and the C signal to Pin 43 to automatically differentiate between NTSC3.58, NTSC4.43, PAL, PAL-M, PAL-N, SECAM, and B/W. When identified as NTSC3.58 or PAL, it supplies a clock to IC221 (CXD2084) to perform Y/C separation. Y/C separation is performed in this IC when other systems are identified. The signals are then converted to the Y/U/V signals, and the Y signal is output from Pin 21, the Cb signal from Pin 22, and the Cr signal from Pin 23.
In sync processing, the C-VIDEO/Y signal input is separated into H and V, and the H-sync signal is output from Pin 9 while the V-sync signal is output from Pin 4. (For the 15 kHz COMPONENT and RGB signals, only C.SYNC is input from Pin 19.)

3. CXA2101 (IC1601), HD interface

The HD interface is controlled by the I2C bus. It turns ON/OFF user-controlled COLOR, HUE, SHARPNESS, and DYNAMIC PICTURE functions for signals input, performs detection axis settings, and improves chroma transient, and converts signals to R, G, and B signals then outputs them.
When the DTV (YpbPr, GBR) is input, the Y/Pb/Pr signal G/B/R are input to Pins 11, 10, and 9 respectively. COMPONENT is input to Pin 5 (Y), 4 (Cb), and 3 (Cr). The Video signal is decoded by IC101, and then input to Pins 69 (Y), 68 (Cb), and 67 (Cr).
They are then subject to various controls, converted to R, G, and B signals, and output from Pins 35 (R), 37 (G), and 39 (B).

3-1-2. Signal Path

1. Path of VIDEO signal

The VIDEO and Y/C signals input from CN102 are input to Pins 1, 44, and 43 of IC101 via buffers Q107 (composite video), Q109 (Y), and Q101 (C).
For PAL and NTSC3.58, the signal amplified by two times by IC101 is output from Pin 3, passed through the low pass filter composed of Q120, L111, L110, C211, C210, and C143, input to Pin 2 of IC221 (comb filter), Y/C separated, output from Pins 9, Y, 7, and C, passed through the low pass filter composed of L112, C215, L113, and C219, after which the Y signal is input to Pin 5 of IC101 and the C signal is input to Pin 7. All other signals are processed in IC101, converted to the Y, U, and V signals, and output from Pins 21 (Y), 22 (B-Y), and 23 (R-Y). They are then input to Pins 69, 68, and 67 of IC102 for the above processing by CXA2101, and output.

2. Path of component (Y/R-Y/B-Y) signal, 15kRGB signal

The component video signal input from CN101 is passed through the buffer Q116/ Q115/Q117, and input to Pins 5 (Y), 4 (Cb), and 3 (Cr). The 15kRGB signal is passed through the same path as the component signal, input to Pins 5 (G), 4 (B), and 3 (R) of IC102 for the above processing by CXA2101, and output.

3. Path of HDTV (Y, PB, PR) signal

The Y/Pb/Pr video signal input from CN101 is input to Pins 11 (Y), 10 (Pb), and 9 (Pr) of IC102 via the buffer Q116/115/117 for the above processing by CXA2101, and output.

3-1-3. Path of SYNC Processing

1. When the VIDEO signal is selected

The signal input to IC101 is sync separated internally, and the H and V SYNC from Pins 9 and 4 are output.

The equivalent pulse of the signal output from Pin 9 is eliminated as it is imposed with PLL. After this, it is input to Pins 65 and 66 of IC102, selected, and output from Pins 29 and 28. The H sync output is reversed by IC259, input to IC256, noise-eliminated, output from Pin 7, waveform-rectified by IC257, and output from CN101.

2. For component signal (15K) and 15kRGB signals

The C SYNC signal rectified by the QA board is input to Pin 19 of IC101. The signal output from Pins 9 and 4 are input to Pin 2 of IC1021. The rest is the same process as for Video signals.

3. When HDTV (YPbPr, GBR), components signals other than 15K are input

The signal input from CN101 is input to Pins 11, 7, and 8 of IC102 in the order of Y/G, H, and V. IC102 automatically determines if the signal is SonG, C.SYNC, or HV separate, and outputs the signal from Pins 29 and 28. The rest is the same process as for Video signals.

3-1-4. Clamp Pulse Generation Circuit

1. Path of VIDEO, component (Y/R-Y/B-Y) signal, and 15 kRGB signal

The SGP output from Pin 10 of IC101 is waveform-rectified by IC263, input to IC251, subject to selection with the HDTV signal input, output from Pin 1, reversed by IC252, and output from CN101.

2. When HDTV (YPbPr, GBR), component signals other than 15K are input

The H.sync output from Pin 29 of IC102 is reversed by IC259, and then input to IC256.

Clamp pulses are generated by this IC, output from Pin 5, waveform-rectified by IC259 and IC257, input to IC251, selected, and output from CN101.

3-2. BB Board

The BB board inputs the analog RGB signal from the QA board or digital RGB signal (TMSD:Panel Link) from CN300, converts to the VESA60 equivalent XGA signals, superimposes the OSD signal, and outputs to the BC board.

1. Scan Converter

PW*64 (IC303) is used as the scan converter.
This IC incorporates the X86 base CPU core and frame memory SDRAM.
The 4 Mbits (512 KBytes) flash ROM (IC314) is equipped externally as the PROM and 1 Mbit (128 KBytes) SRAM (IC315) as the CPU RAM.

2. The External Data Bus

The external data bus is 16 bits. The CPU operates on 43.333 MHz which is obtained by dividing the 130 MHz memory clock by 3.

3. The External Flash RCM

The program of the external flash ROM can be rewritten by connecting a board for converting the RS232C level to CN312. In this case, the EXTSW must be connected to GND to switch the communication line, and the WDEN must be connected to GND to stop the operations of the watch dog timer.

4. PW*64

PW*64 normally operates as a sub CPU according to the commands from the main CPU on the Y board. The commands are sent by asynchronous serial communication using TXD/RXD.
The OSD data itself is stored in IC314 which is the PW*64 memory. Based on the commands from the main CPU, the PW*64 selects the contents displayed and superimposes.
To realize high-speed signal switching operations, the MUTE signal is directly sent to PW264.
The INTERLACE detection signal is directly sent from PW264 to Y.

5. PW264

Since PW264 is a X86 based CPU, the RESET signal must be input at a HIGH level.
For this reason, the open drain RESET signal of IC306 is reversed by the Schmidt inverter (IC317).

6. Memory Clock

The 130 MHz memory clock is obtained by multiplying the X300 21.667 MHz by six times.
The internal SDRAM operates on this frequency.

7. Internal Core

As the internal core operates on 2.5V, D3.3V is stepped down to 2.5V and supplied by IC312.

3-3. BC Board

The BC board controls the contrast, bias, W/B, etc. of the linear digital signals from the BBC board, then performs gamma correction by LUT (Look Up Table) and 3D gamma correction which corrects in planes according to the gradation, converts the signals from digital to analog before outputting them.

1. IC502 (CXD9512Q)

IC502 (CXD9512Q) has a 48 bit 2-pixel series input and 30 bit (10bit/pixel) straight output.
Therefore a 2 clock whose phase matches the input clock is required.

2. IC501

IC501 is an IC generating 2 clock corresponding to the frequency diffusion. It outputs the same clock as the input to CLKB and the 2 clock to CLKA according to the phase of the input clock.
IC 500 (Pin 1 of IC501) is incorporated to match the timings of the data and clock.

3. IC503

IC503 is a 64 Kbits (8 Kbytes) EEPROM memorizing LUT (Look Up Table) and the 3D gamma data. It exchanges data with IC502 using I^2C signals (slave address is A2).

4. IC511

IC511 generates RESET signals for IC503.

5. IC505

IC505 is a switching buffer for OSD display of PW264 when outputting the internal signals of IC502 in gamma adjustments, etc.
When PW OSD ENA is LOW, DG07 and DGE7 are sent to ODD_YS and EVEN_ YS respectively to control the ON/OFF of the OSD. DR07 and DRE7 are also sent to ODD_YM and EVEN_YM respectively to control the OSD half tone.
When PW OSD ENA is HIGH, both YM and YS are pulled-down to the LOW level by the resistance, and the OSD of this route goes off.

6. IC506

IC506 is a 10-bit D/A converter. It converts gamma corrected digital data to analog signals.
The output when the full-scale (3FFHEX) is input becomes approximately 0.75 Vp-p after termination at 75 Ω of the C board.

7. D500

D500 is an external reference voltage source to improve accuracy. It generates 1.25±2% voltage.
To avoid the effects of the digital circuit and input signal, IC506, D500 receives the supply of analog 5V from the C board.
Other circuits operate on digital 3.3V from the BB board.

8. S500

S500 switches the I^2C signal, writes the LUT data using the I^2C signal from the external tool connected to CN503 so that the operations of IC502 (CXD9512) can be controlled directly.
During normal operations, IC502 is connected to the I^2C line from the Y board and is controlled from the main microprocessor.
The slave address of I^2C of IC502 is 76 Hex.

3-4. C Board

3-4-1. Timing Generator

The following timing pulses are generated from the HSO, VSO, and CLOCK by the CXD9512Q of the BC board and supplied to the C board.
In the C board, all signals are level shifted to 5V and sent via the buffer as well.

HCK1, HCK2: Clock for the H shift register drive of the panel
HST: Start pulse for the H shift register drive of the panel
VCK: Clock for the V shift register drive of the panel
VST: Start pulse for the V shift register drive of the panel
ENB: Enable signal of the gate selection pulse
FRP: Reverses the top and bottom of video signals centering around the reversal pulse and SIG CENT voltage
PRG: Pulse which regulates the width of the first SID level
PCG: Pulse which improves uniformity

RGT: Reverses the left and right of the screen, controls the drive direction of the H shift register
DWN: Reverses the left and right of the screen, controls the drive direction of the V shift register

3-4-2. LCD Driver Control Pulse

INV CONT: Reverses the polarity of the CLK for MCLK
DLY CONT: Adjusts the phase of the CLK for the MCLK in the 180˚ range
These pulses optimize the sampling phase of the video signal.

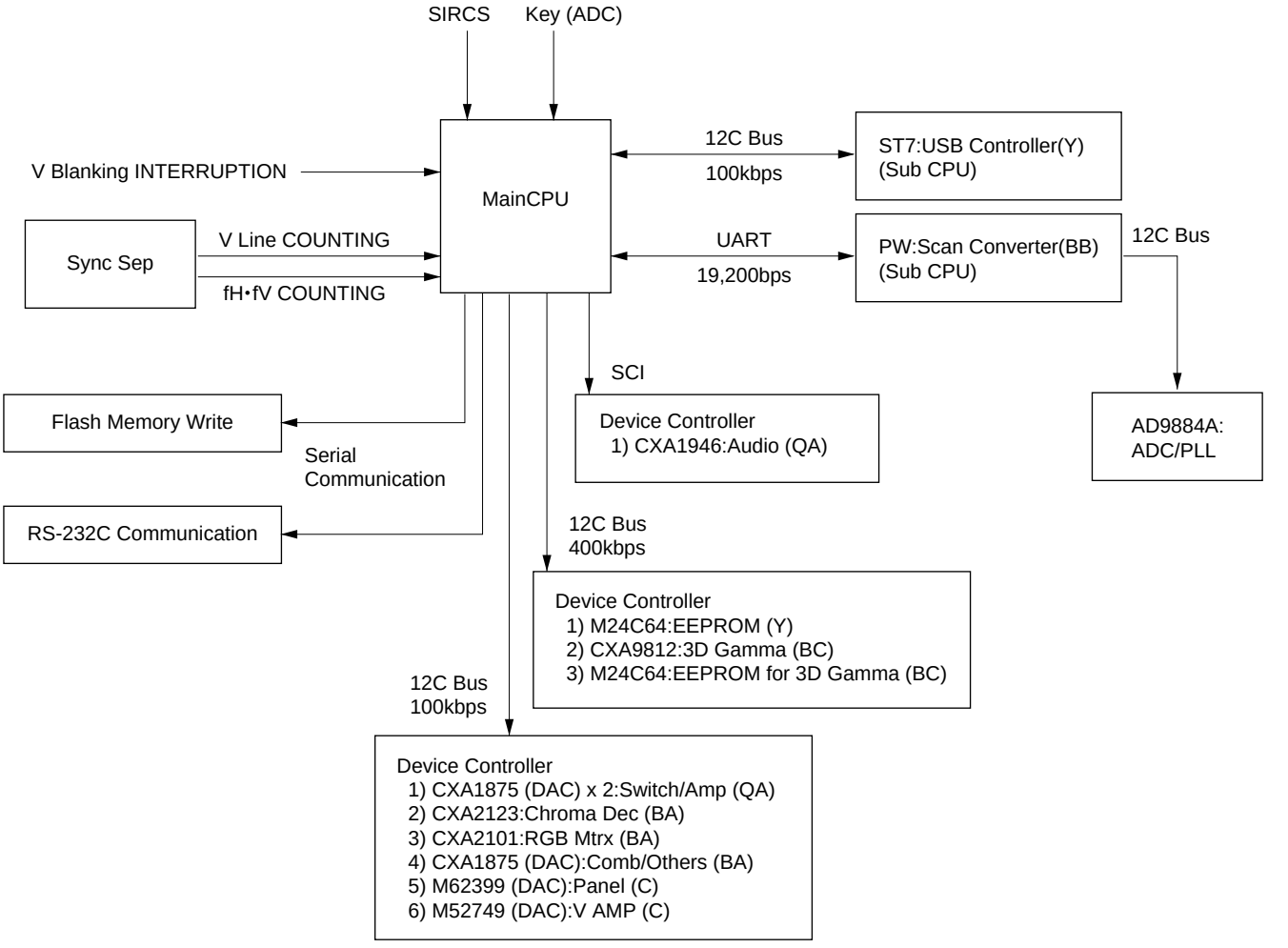
POSCONT1, 2: Adjusts the position of the 12 outputs for the video input signal.
Sets the optimum timing for inputting signals to the LCD panel through 16 different combinations of the output.

3-5. Y Board

The main circuits of the Y board include the microprocessor peripheral circuit, USB circuit, and IrDA circuit.

3-5-1. Microprocessor peripheral circuit

The controller of the projector is mainly composed of the Main MPU, EEPROM, and power supply monitoring IC.



1. Main MPU: IC3204 (HD64F2633TE)

16-bit, 1-chip microcomputer.
The operating frequency is ¯ =24.576 MHz which is the 12.288 MHz frequency supplied from the external crystal oscillator (X3200) multiplied by two times in the internal PLL.
The memories incorporated are the 256 Kbytes FLASH-ROM and 16 Kbytes RAM.
The Table Main MPU Terminal Functions list the terminal functions of the main MPU and details of the external device control.

2. EEPROM: IC3203 (M24C64-WMN)

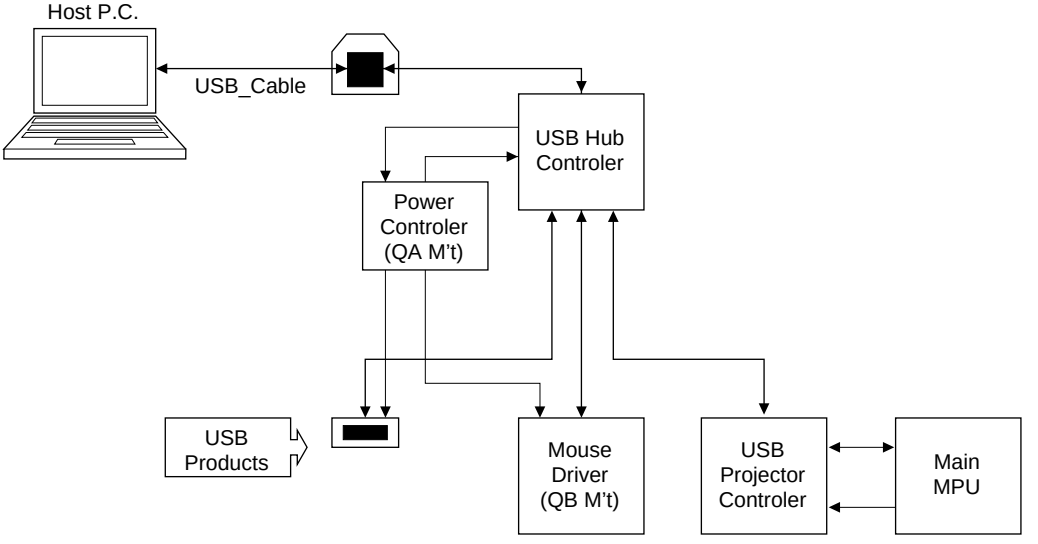
64 Kbits EEPROM controlled by the 400 kHz IC.
Stores the adjustment values of the projector.

3. Power supply monitoring ICs: IC3201, IC3202 (S-80842, S-80828)

The main CPU operates on the Sub+5V and Sub+3.3V power supply.
IC3201#1 monitors the Sub+5V while IC3202#1 monitors sub+3.3V using their respective threshold values of 4.2V and 2.8V.
When below these threshold values, the reset signal (active = low) is output from #2 of the monitoring IC, and input to the main MPU reset input terminal (IC3204 #71).
The CPU is reset by this external reset signal, or the internal reset signal by the WDT (watch dog timer) in the MPU.

3-5-2. USB Circuit

VPL-PX30 corresponds to the USB communication as an interface of the personal computer.
The USB circuit mounts the USB hub controller IC and USB projector controller IC in the Y board.
The USB has a tree structure as shown in the figure below.



USB Block

1. USB Hub Controller IC:IC3303 (uPD72012)

The USB communication (US+, US−) from the personal computer is an IC relaying to the USB device connected to the lower level.
When connected to the personal computer with a USB cable, +5V (VBUS) is supplied from the personal computer, the Q3307 base becomes high, Q3307 turns ON, the Q3306 base becomes low, Q3306 turns ON, and the Q3306 collector voltage≒3.3V is supplied as the Vcc of IC3303.
When this IC operates normally, the enable signal (active; low) is output to the device in the lower level connected by the down stream (DS) 1, 2, and 3 from #40, #41, and #42.

2. USB Projector Controller IC: IC3304 ST72T36

In the USB communication between the personal computer and main MPU of the projector, the enable signal: Low (IC3303;#42) of the microprocessor cable hub for performing protocol conversion (USB-IC) is input to the Q3310 base, Q3310 goes OFF, this IC#8 becomes high, and reset is canceled.

The projector control signal executed by the application projector station for the projector on the personal computer is input to IC31 and IC32 via the HUB (IV3303). This signal is analyzed and sent to the main MPU by IIC (#24, #28).

Basically, this IC is the master while the main MPU is the salve.

To send the projector information (input signals, etc.) to the personal computer, the main MPU converts the signal line USB REQ to Low. When this signal is input to #7, this IC requests for projector information using IIC to the main MPU.

3. IrDA Circuit

The remote control signal (IrDA) received by the infrared photo-sending unit (NF/NR M't) in front and at the back of the projector is input to the IrDA filter IC (IC3301) (NF;#2, NR;#3). In IC3301, the photo-sensing unit effective signal (NF;#7, NR;#6) by the main MPU is enabled = low, and the signal determined as a useful IrDA signal is output from #5. While it is input as the SIRCS signal to the main MPU via the SIRCS circuit (QD), it is input to #1 of IC3302 (#2 is fixed at low), the reverse signal is output from #7, input to #2 and 6 of IC3002, and #7:IrDA, #3:IrDB are output to the QB board and QC board,

If INPUT-A is selected, the control signal mouse A/B becomes high by the main MPU, and consequently, #1 of IC3002 becomes high (#5:Low), the IrDA signal is output only from #7, and #3 is prohibited.

3-5-3. Memory

Memory structure of VPL-PX20/30 series is based on the 600 series, and it is composed of the following five memory blocks.

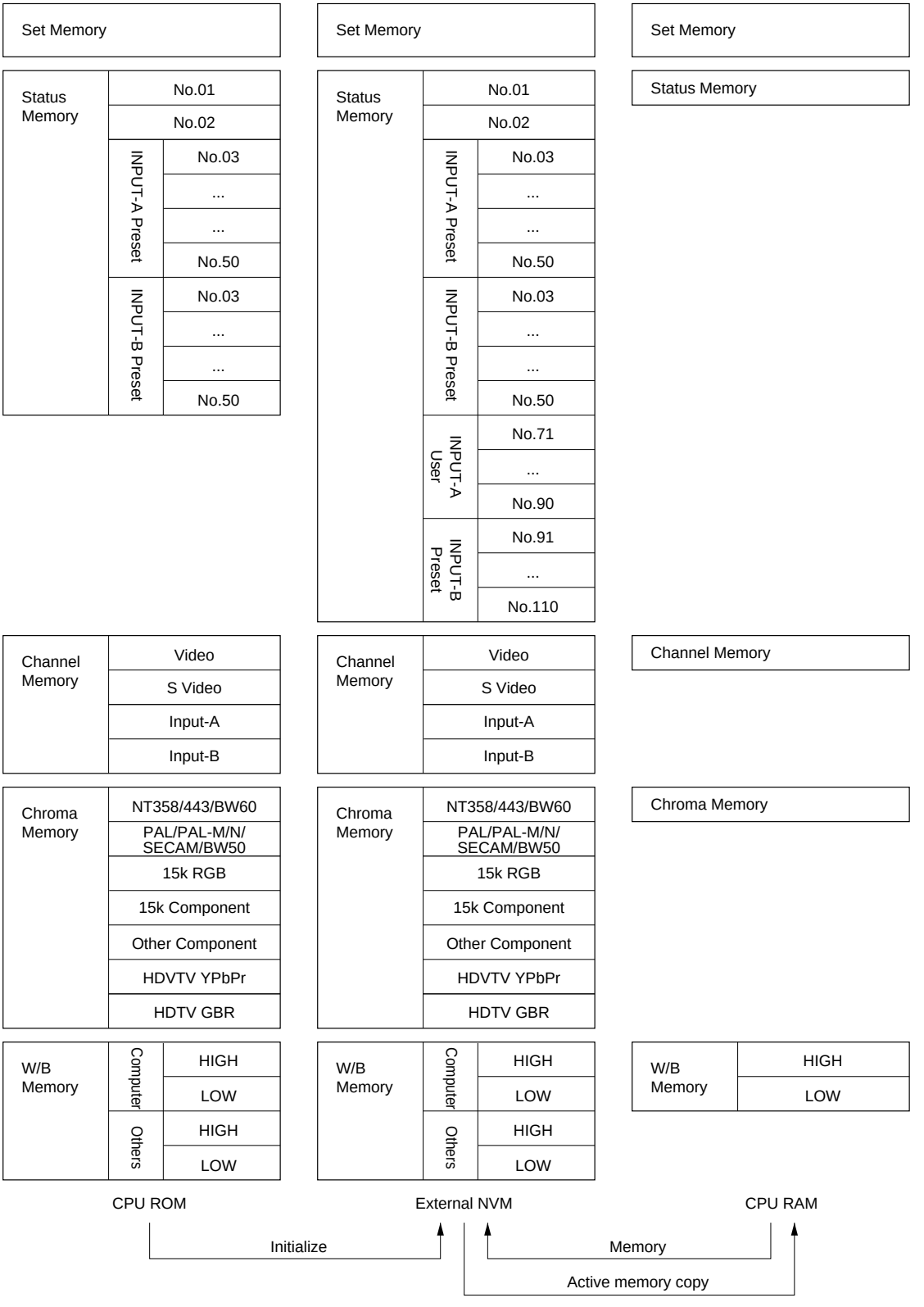
1. Set memory
2. Status memory
3. Channel memory
4. Chroma memory
5. W/B memory

The 600 series is equipped with the gamma memory, but the current VPL-PX20/30 series is no gamma memory. The gamma mode function is realized by applying the offset to the output value of the contrast and the brightness of the devices as X2000 series.

When the power plug is connected to the power line (Standby status), all data inside the internal ROM are written into the NVM (Nonvolatile Memory). When the power is turned on, required data for the current picture, such as status memory data, etc., are selected, and they are written into the internal RAM. When adjustment is carried out, adjustment data are written into the NVM automatically (items on the user mode) or by the trigger of memory operation (items on the service mode and special service mode).

Adjustable items (W/B and Device Adjust) of the service mode and special service mode are memorized into the NVM by the memory operation. At the same time, the factory preset (adjusted) data are all eliminated from the memory.

CPU Internal ROM : 256 kbyte Flash Memory
CPU Internal RAM : 16 kbyte
External NVM Memory: 256 kbyte Flash Memory



3-6. Description of QA Board Operations

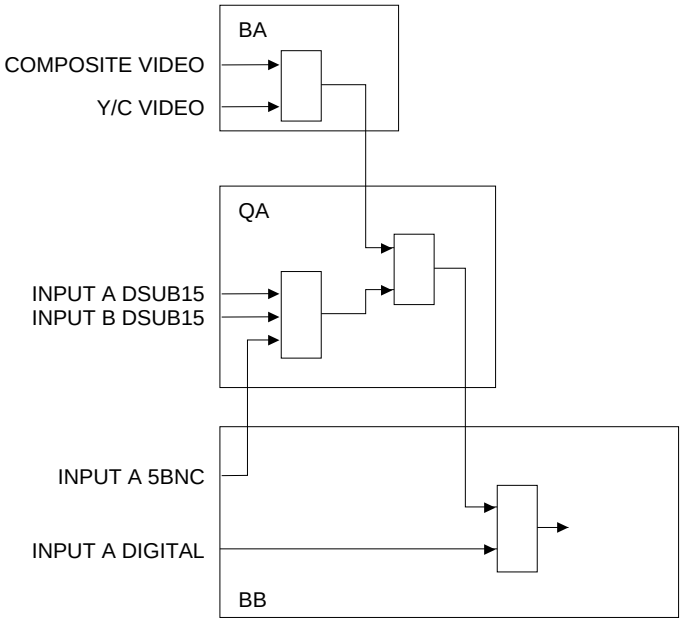
The QA board mainly switches between video signals and audio signals, and performs sync separation.

3-6-1. Switching of Video Signals

This model has the following signal input.

INPUT A	DSUB15 pin analog signal 5BNC analog signal
	Digital signal
INPUT B	DSUB15-pin analog signal
VIDEO	COMPOSITE
	Y/C

These signals are switched as shown in the following figure.



As shown in the figure, the QA board first switches between INPUT A (DSUB15), INPUT A (5BNC), and INPUT B. The switching is performed by IC823 (RED), 824 (GREEN), and 825 (BLUE). SYNC is performed by IC811. These ICs are controlled by the output of IC806 and IC807 (both DAC) controlled by the CPU using the IIC bus.

Next the video signals input from the BA board and the RGB signals described above are switched by IC801. This IC amplifies the signal switched by two times, terminates the signal at 75 Ω in the later stage board, and outputs it. This IC is also controlled by IC806.

As described earlier, SYNC is switched by IC811, but the H SYNC input from 5BNC has additional conditions. When the signal input from 5BNC is 15 kHz, it is sync separated by IC805, and input to IC811 in the later stage. If it is not 15 kHz, it is input directly to IC811.

The SYNC selected by IC811 is waveform-rectified by Q821 to Q826, IC812, and IC813.
It is then branched in three ways, output to the BA board, input to IC814 for monitor-out, and input to IC802 for sync separation. After sync separation in IC802, it is switched with the SYNC from the video block by IC803, converted to 3.3V, and output to the BB board. IC804 fixes the video clamp pulse to a fixed pulse width.

The monitor-out outputs only signals projected to the screen from INPUT A (DSUB, 5BNC) and INPUT B. IC808 to IC810 are amplifiers for monitor-out. IC814 functions as an output buffer for SYNC.

3-6-2. Switching of Audio Signals

Audio signals input are switched by IC819, and volume-controlled. The output of IC819 is separated into that for the monitor-out and that for the speaker-out. The one for monitor-out is input to IC821, and output from CN806 to the QC board. That for the speaker-out is converted to 3 channels by Q836 to Q838. The L and R channel signals are then output to the KS board from CN810 while the mixed L and R signals are output from CN809 to the K board. Q831 to Q835 compose the mute circuit.

3-6-3. Monitoring of the USB Power Supply

The USB download side must be supplied up to 500 mA at 5V. IC822 monitors this current amount. 5V power is supplied to the download side from Pin 8 of IC822. When this exceeds 900 mA, the power is stopped, and at the same time, the High signal is supplied from Pin 2 to the USB control IC (IC3303) in the Y board.

IC822 also supplies power to the mouse driver (IC1201) for INPUT A on the QB board.
When a connector is connected to the upload side of the USB, a Low signal is input from the USB control IC (IC3303) on the Y board to Pin 4 of IC822, and a 5V power is supplied from Pin 5.

3-7. Description of QB Board Circuit Operations

The QB board is composed of the INPUT A input terminal, DDC memory, INPUT A mouse driver, and USB terminal.

3-7-1. INPUT A Input

Three signals are input to INPUT A; analog signal of DSUB15 pin, analog signal of 5 BNC, and digital signal. These signals are switched by SW1201. The analog signal of DSUB15 pin is input from CN1202 and output from CN1203 to the QA board. (An input terminal is provided for the 5BNC analog signal and digital signal in the BB board. These signals are output from this input terminal to the QA board.)

3-7-2. DDC Memory

IC1202 is a DDC memory for INPUT A. This IC is written with EDID data for DDC. When a computer is connected to CN1202, power is supplied to the IC. If the computer connected is DDC compatible, DDC communication is performed.

3-7-3. INPUT A Mouse Driver

IC1201 is a mouse driver for INPUT A. This IC functions when connected to PS/2 and the serial port of the computer, or connected to a Macintosh or NEC 98 series computer by USB. Identification of the mouse of these computers is performed when power is supplied to IC1201. As power is supplied from the computer except when connected by USB, connections can be identified even if AC is not supplied to the unit. When connected by USB, the mouse cannot be identified if no power is supplied to the unit.
The mouse code input from CN1203"A1" is decided by IC1201, and output from CN1201 or I1202 to the computer.

3-8. Description of QC Board Circuit Operations

The QC board is composed of the INPUT B input terminal, DCC memory, INPUT B mouse driver, and monitor-out terminal.

3-8-1. INPUT B Inputs

Unlike INPUT A , only analog signals of DSUB15 pin are accepted. The signal is input from CN1802, and output from CN1804 to the QA board.

3-8-2. DDC Memory

IC1802 is the DDC memory of INPUT B. This IC is written with EDID data for DDC.
When a computer is connected to CN1802, power is supplied to the IC. If the computer connected is DDC compatible, DDC communication will be performed.

3-8-3. INPUT A Mouse Driver

IC1201 is the mouse driver for INPUT A. The operations are basically the same as INPUT A. The only difference is that INPUT B has no USB connection.
The mouse code input from CN1804"A1 and B2" is decoded by IC1801, and output from CN1801 to the computer.

3-9. Description of QD Board Circuit Operations

The functions of this board include buffer of RS232C communication, reception of remote control signals (CIRCS signal), and video input.

3-9-1. RS232C Communication

In RS232C communication, IC1901 is used as the buffer. Signals are connected to the computer by CN1904, and passed through IC1901, CN1903, BB board, and then the Y board for communication with the CPU on the Y board.

3-9-2. Reception of Remote Control Signals

Signals from the remote controller connected by cable are input from I1902.
They are then inverted by Q1904, and output from Pin 5 of CN1903 to the Y board.
If not connected by remote control cable, signals received by the NF and NR boards are input from Pin 6 of CN1903, passed through J1902, and output from Pin 5 of CN1903 to the Y board again.

3-9-3. Video Input

Video signals are input from J1901, and output from CN1901 to the BA board.
The video audio signals are output from CN1902 to the QA board.

3-10. Description of K Board Circuit Operations

This board amplifies audio signals and outputs them to the main speaker.

Signals input from Pin 1 of CN2900 are amplified by IC2900 and output to the main speaker from CN2903.
Pin 3 of CN2900 inputs mute signals. When this line is High (about 4.5V), no more signals are output to the speaker.

3-11. Description of KS Board Circuit Operations

This board amplifies audio signals and outputs them to the sub speaker.

Signals input from Pins 3 and 5 of CN2951 are amplified in IC2950, passed through the H board from CN2952, and output to the sub speakers.

Pin 7 of CN2951 inputs mute signals. When this line is High (about 4.5V), no more signals are output to the speaker.

3-12. Voltage Map of F, GA, GB, GC, GD Board

3-12-1. Voltages Map of F, GA, GB, GC and GD Board

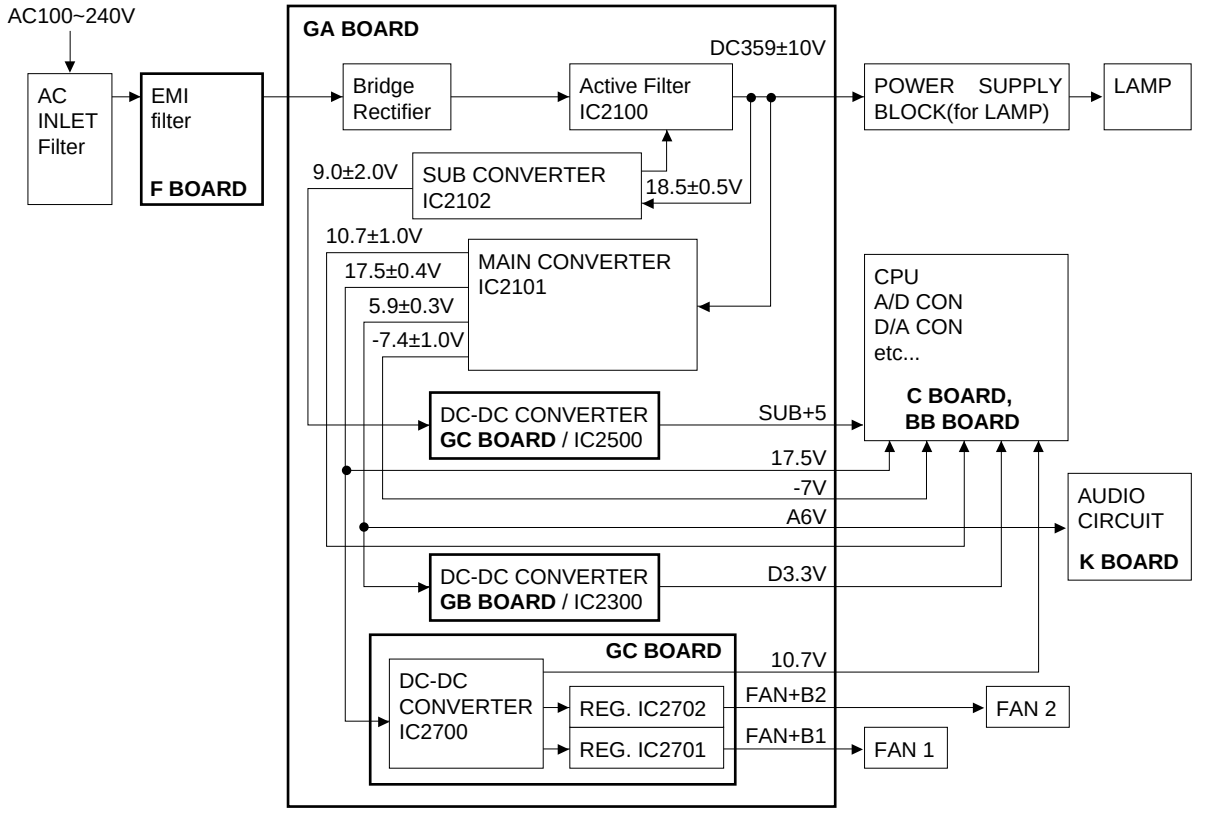


Fig. 1 Voltages Map

3-12-2. F Board

The EMI filter is composed of the one level of LFT.
The F2000 is the same regardless of whether it is 100V or 200V (6.3A/250V).

3-12-3. GA Board

1. Structure

- **Active Filter**
  The active filter improves the power factor of the AC voltage after bridge rectification, and at the same time, serves as a step-up converter and supplies DC358V±10V to the lamp power supply in the later stage, sub converter, and main converter. However, when the maximum AC voltage exceeds the output voltage of the active filter, the power factor will not be improved correctly.

- **Inrush Current Limit Circuit**
  When the AC voltage is supplied with the electric load of the smoothing capacitors C2112 and C2113 fully discharged, the inrush current flows to the capacitor, and as a result, damage the fuse in the input stage. To prevent this, immediately after inputting the AC voltage, the inrush current is limited by R2101. After the operations of the standby converter start, the thyristor D2102 turns ON and short-circuits the two edges of R2101. (The VPL-X600 series and VPL-SC50 series turn ON the thyristor after the operations of the main converter start.)

- **Sub converter**
  The DC voltage obtained by completely rectifying the AC voltage or the output voltage of the active filter is stepped-down to the GC board input voltage and the VCC for the active filter control IC. These operations are controlled by IC2102.
  ・ VCC (18.5V±0.5V)
  ・ GC board input voltage (9.0V±2.0V)
  ( ) shows the potential of the connector.

- **Main converter**
  The output voltage of the active filter is stepped-down to the following signal circuits and AUDIO circuit. These operations are controlled by IC2101.
  However, when no load, the voltage is clamped to about 17.8V by the diode.

- **Power protector**
  Normally, when the main converter is operating, GA/Q2107 turn ON, and the microprocessor port of the Y board is kept “Low”. When the output voltage lines and GND line of the main converter are short-circuited, GA/Q2107 goes OFF, and the microprocessor port of the Y board is set to “High”. Furthermore, the microprocessor sets the POWER ON signal to “Low”, and stops the operations of the main converter. (At this time, both the TEMP and LAMP LEDs of the control panel light up.)

2. Operations of the Active Filter

- **ON/OFF operations**
  The active filter starts operations at the same time as the main converter in the later stage. At standby, Q2106 maintains Pin 8 of IC2100 at “Low”, and the active filter does not operate. When the “High” signal is received from the microprocessor of the Y board, Pin 7 of CN2106 becomes “High”, Q2106 goes OFF, Q2104 turns ON, and Q2105 also turns ON. As a result, VCC is supplied to IC2100 and IC2100 starts operating.

3. Basic Operations

In conventional rectification circuits which do not use the active filter, peak recharge current is generated in a part of the AC voltage waveform due to the capacity components of the smoothing capacitor. This causes such problems of the effective power such as later phase power consumption, high frequency, etc., and may cause subsequent problems in other equipment. To prevent this, this power supply circuit is equipped with a step-up DC-DC converter in the smoothing circuit and adopts an active filter which compares the input current waveform with the input voltage waveform by appropriate control.

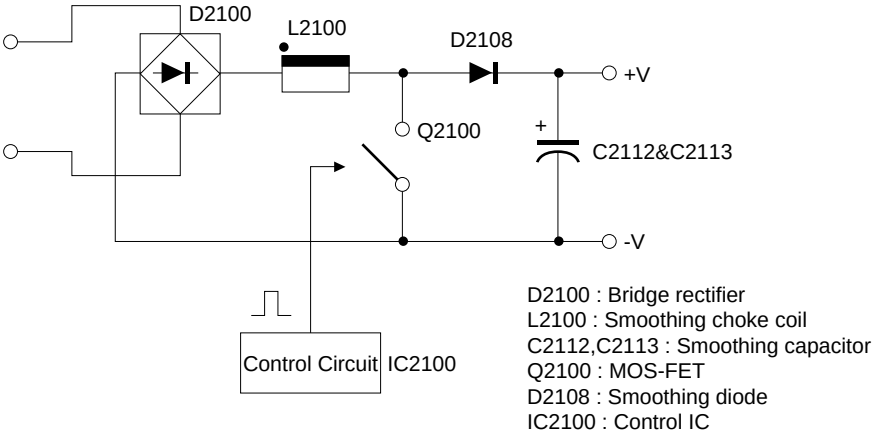


Fig. 2 Princple of Active Filter

Fig. 2 shows the principle of the active filter circuit. When MOS-FET Q2100 turns ON, energy is accumulated in the choke coil L2100. When it goes OFF, energy is discharged, and current flows to the load side.
Fig. 3 shows the relation between the voltage and current. The average input current for each switching period of the MOS-FET Q2100 is half of the peak current flowing to the choke coil L2100. Since these peak values can be placed on the curve proportionate to half the AC voltage input, they appear like resistance load on the AC voltage from the input side of the active filter.

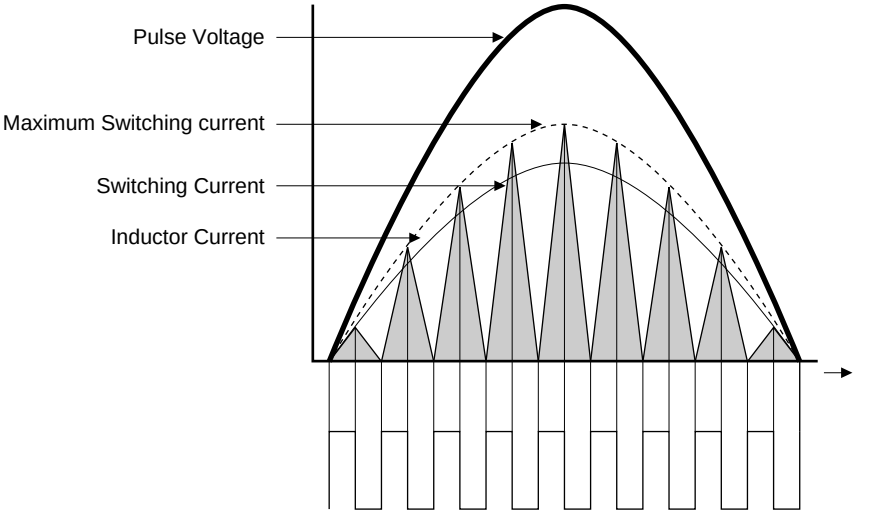


Fig. 3 Puls Voltage and current

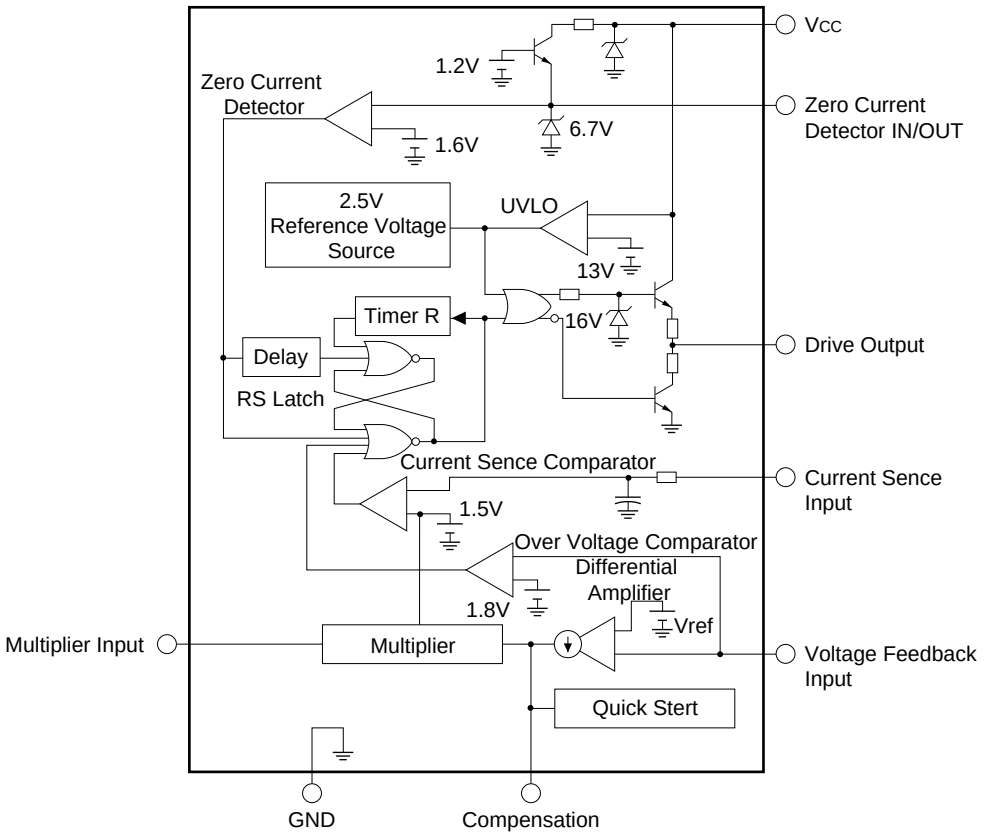


Fig. 4 Simple Block Diagram of IC2100

Fig. 4 show a simple block diagram of the active filter control IC2100. The current flowing to MOS-FET Q2100 is detected by the sense resistor R2106. When this current reaches the threshold value corresponding to the peak current flowing to the choke coil L2100, the comparator turns OFF the MOS-FET Q2100. The threshold value is sent to the comparator as the product of the AC voltage waveform and control amplifier output voltage V0. The MOS-FET Q2100 maintains the OFF state until the choke coil L2100 and diode S2108 current becomes zero. The output is maintained at 358±10V by the PWM control of the switching. This output setting is performed by the R2127 to R2133 voltage-dividing resistor.

4. Timer function

As a watchdog timer function is equipped inside the IC2100, no external oscillator is required. When the current flowing to the choke coil L2100 reaches zero and the drive output becomes OFF for more than 620 us, the timer automatically starts or restarts the pre-converter.

5. Internal over-voltage comparator

To prevent abnormal output voltages, the control ICIC2100 is equipped with an over-voltage comparator. This comparator turns ON at initial startup, when the load changes suddenly, and when the output ripple increases. The over-voltage comparator monitors the peak output voltage of the converter, and turns OFF the MOS-FET Q2100 immediately when the reference value is exceeded. The threshold value of the comparator is set to 1.08V in the control IC IC2100.

6. External over-voltage protection circuit

In case the internal over-voltage comparator does not function when the control IC2100 performs abnormal operations, an over-voltage protection circuit composed of the shunt regulator IC2105 has been equipped externally. The output voltage is monitored by the voltages of the two ends of R2177. When this potential reaches 2.495 (428V output voltage), IC2105 turns ON, to turn OFF the control IC IC2100 operating the latch circuit composed of Q2106 and Q2102.

7. External pre-drive circuit

The control ICIC2100 is equipped with a totem pole output stage, but due to the selection of a surface mounted device, strong heat is generated when a large input MOS-FET is driven. To suppress this heat, the pre-drive circuit composed of Q2109 and Q2110 has been added in front of the MOS-FET Q2100.

8. Details of parts

L2000	Choke coil for eliminating the noise components of the common mode.
D2100	Bridge rectification diode rectifying the AC voltage to both waveforms. Taking into account the voltage changes in the market, the 800V voltage resistor was used.
R2101	Resistor limiting the bridge current when AC voltage is input.
D2101	Thyristor short-circuiting R2101 when the main converter is operating.
Q2100	MOS-FET for switching the active filter. Performs switching by the PWM control of IC2100. Taking into account the heat generated by power loss, the current capacity of 16A is driven in series.
L2100	Choke coil for the active filter. Accumulates energy when Q2100 is ON and supplies current to the later stage when OFF.
D2108	Rectification diode for the active filter. A fast recovery diode is used for high voltage tolerance and high speed ON/OFF.
C2112, C2113	Smoothing capacitor for the active filter. Rectifies the half waveform after bridge rectification during standby. DC voltage is supplied to the sub-converter in the later stage. Recharges and discharges the step-up converter when the active filter is operating.
IC2100	Controls the operations of the active filter.
R2101	Current detection resistor. The current flowing to the active filter is input to IC2106 by the voltage of the two ends of this resistor.

3-12-4. Main Converter

1. ON/OFF Operations of the Main Converter

The main converter control IC is IC2101. During standby, Q2103 maintains the ON state. As the IC2101/CONTROL pin is Low, the main converter does not operate. When the “High” signal is received from the microprocessor at power ON of Pin 7 of CN2106, Q2103 goes OFF, and the main converter starts operating.

2. Basic operations of the main converter

The main converter is composed of the self-excited forward converter operating on the DC voltage received from the active filter.
The switching and control are performed by IC2101. The oscillating frequency is fixed to about 100 kHz by the internal oscillator for PWM control.

- Transformer secondary operations

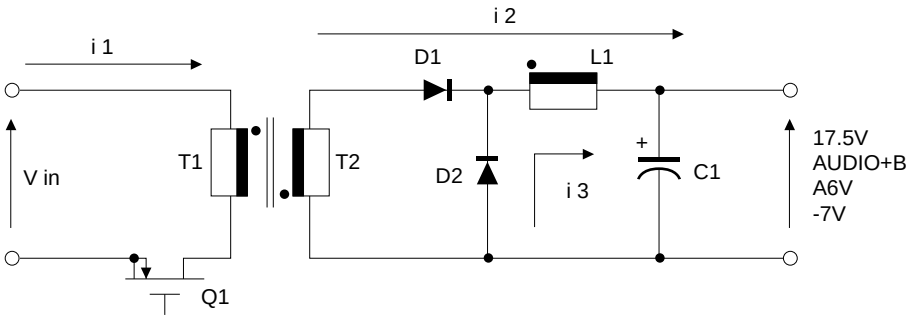


Fig. 5 Principle of Operations of Main Converter

When Q1 (built-in FET of IC2101 in this case) turns ON, the output voltage of the active filter is supplied to the primary line T1 of the transformer. At the same time, voltage is induced according to the number of coils in the secondary coiled line T2.
As the secondary side rectification diode D1 is biased in the normal direction, the current i2 is supplied. This current flows along the path for recharging the smoothing capacitor C1 in the order of D1, L1, and C1. The inductance L1 at this time is accumulated with PL energy.
Next, when Q1 goes OFF, no voltage Vin is transmitted from the primary side. Based on the PL energy accumulated when Q1 is ON, reverse power is generated in the L1 inductor. The current i3 from the L1 inductor flows from L1 to C1, and then to D2, and while Q1 is OFF according to the PL energy above.

3-12-5. Basic Operations of Sub-Converter

Composed of the RCC (Ringing Choke Converter) which can operate by the DC voltage obtained by completely rectifying the AC voltage or the output voltage of the active filter. This switching and control are performed by IC2102. The oscillating frequency is fixed at about 100 kHz by the internal oscillator for PWM control. During standby, voltage is supplied to the GC board generating the SUB5V for the microprocessor, and the VCC of the control ICs are also supplied when the main converter and active filter are operating (POWER ON).
When DC voltage is supplied between Pins 5 and 7 of the transformer T2101, a voltage corresponding to the number of coils is induced between Pins 8 and 9 of the transformer. IC2102 controls PWM so that the CONTROL terminal is always 5.7 V (TYP).

3-12-6. Details of Parts

R2139, R2140	Resistors for protecting the main and standby converters. When a problem occurs in the later stage circuit, the line is opened to protect other parts.
IC2102	Control IC of the sub converter. Comes in the same package as the PWM control IC and 700V MOS-FET.
T2102	Switching regulator transformer for the sub-converter. As it is of the flyback type, the secondary side goes OFF when the primary side is ON, and vice versa.
D2118, D2121	Snubber circuit of the sub converter. The noise is suppressed by the switching pulse of the sub converter.
IC2101	PWM control IC of the main converter.
T2100	Switching regulator transformer for the main converter. As it is of the forward type, when the primary side is ON, the secondary side also turns ON, and when the primary side is OFF, the secondary side also goes OFF.
R2145, R2146, R2147, C2121, D2119	Reset circuit of the main converter. Snubber circuit which consumes the exciting current accumulated in the primary coil of T2100 for every switching pulse.
D2124, D2134, S2135, D2136, D2137, D2138, D2139, D2127, D2129, D2132, D2128, D2130, D2131	Diode for the secondary rectification of the main converter.
L2105, L2106, L2107, L2108, L2101, L2109, L2102, L2103	Choke coil for the main converter.

3-12-7. GB, GC, and GD Boards

1. Structure

The GB, GC, and GD boards are each composed of the DC-DC converter for step-down voltage as shown below.

GB board : 5.9V±0.3V→3.3V±0.3V
GC board : 9.0V±2.0V→5.0V±0.3V
GD board : 17.5V±0.4V→10.6V±0.3V

2. Operations of the DC-DC Converter

As the structure of each DC-DC converter is more or less the same, the basic circuit operations are described here.

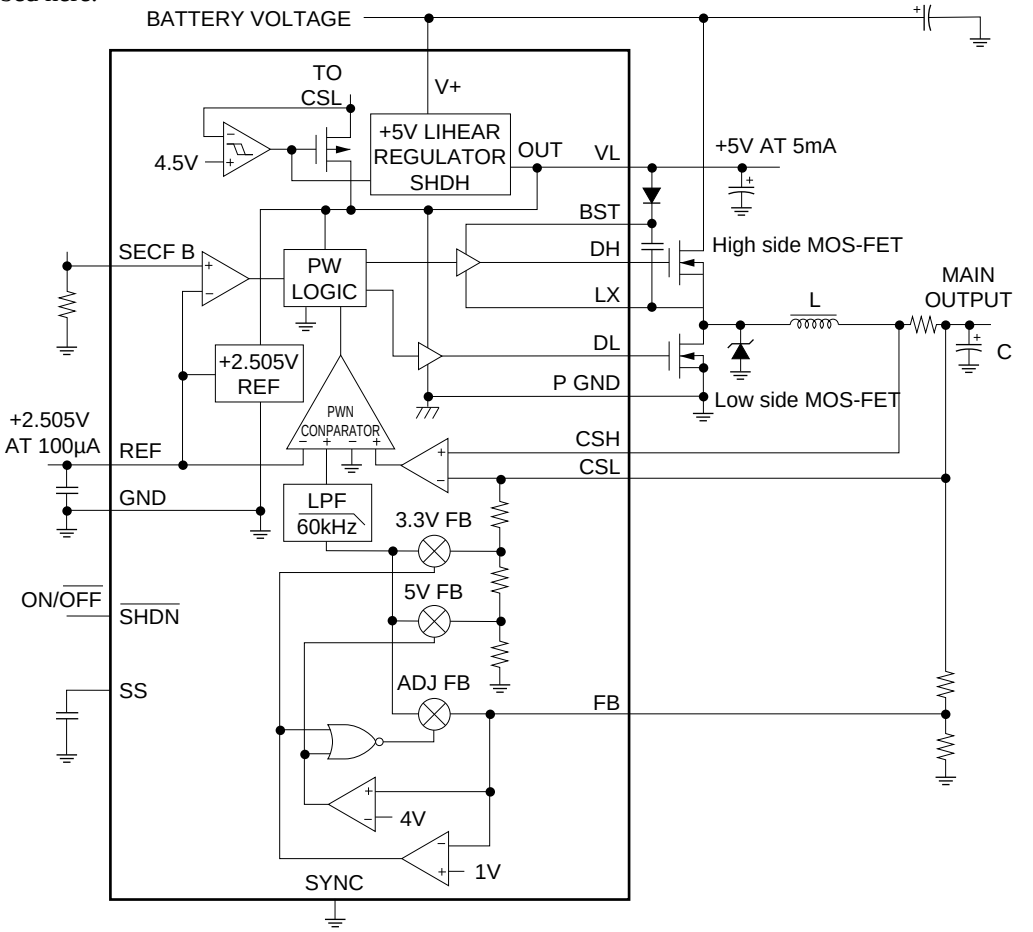


Fig. 6 DC-DC Converter Control Circuit

Fig. 6 shows the DC-DC converter control circuit structure. This converter adopts the step-down chopper method in which the input voltage is directly switched by two MOS-FETs.
In moderate loads, the DC-DC converter sets into the idling mode and skips most of the internal oscillator pulses to decrease the switching frequency and reduce MOS-FET switching losses.
In heavy loads, the converter controls the MOS-FET pulse width used for switching, and turns ON the High side MOS-FET only for the time determined by the duty ratio.
When the MOS-FET at the High side goes OFF, the Low side MOS-FET turns ON after 60 ns. The Low side MOS-FET maintains the ON state until the current flowing to the L inductor zero-crosses.
The aim of these operations is to attain high efficiency in both moderate and heavy loads.

When the potential difference between Pin 8 (CSH) and Pin 9 (CSL) of the control IC exceeds 100 mV due to shorting of the load, etc., the control IC internal current restriction circuit stops PWM LOGIC and turns OFF the High side MOD-FET.

3. GC Board (SUB5V DC-DC converter)

The GC board is input with the secondary side output voltage (9.0V±2.0V) of T2101 from when the power supply voltage is input. It steps down the standby voltage 5.0V±0.3V supplied to the micro-processor by the DC-DC converter IC2500 and outputs it.
The GB board receives and transmits the POWER ON signal, and POWER PROT signal.

4. GB Board (D3.3V DC-DC Converter)

The GB board is input with the secondary side output voltage A6V (5.9V±0.3V) of T2100 when the power is turned ON. It steps-down the D3.3V (3.3V±0.3V) supplied to the signal circuit using the DC-DC converter IC2300, and outputs it.

5. GC Board 10.7V DC-DC Converter and FAN+B1, 2 Regulator

The GD board is input with the secondary side output voltage 17.5V (17.5V±0.4V) of T2100 when the power is turned ON. It steps-down the 10.7V (10.6V±0.3V) supplied to the signal circuit using the DC-DC converter IC2700, and outputs it.
The GD board is mounted with a regulator (IC2701, IC2702) which inputs the above 10.7V and steps-down the voltage FAN+B1, 2 for the suction and exhaust FAN. The microprocessor of the Y board reads the resistance value of the thermistor TH2020 (resistance value changes according to the temperature) mounted on the S board and outputs the 0 to 5V voltage from the port to Pins 7 and 9 of CN2701 of the GD board.
By adding the current based on the voltage to the ADJ terminal of the regulators IC2701 and IC2702, the suction FAN controls the 10.2V to 6V (FAN+B1) while the exhaust FAN controls the 10.2V to 7V (FAN+B2) voltage. The thermistor TH2020 mainly monitors the external temperature of the unit.
When the LAMP MODE STANDARD mode is selected on the menu, both fans are set to the minimum voltage of FAN 7V for the suction FAN and 8V for the exhaust Fan. When the LAMP MODE LOW mode is set, the fans are set to the minimum voltage of FAN 6V for the suction FAN and 7V for the exhaust Fan.

Section 4
Electrical Adjustments

4-1. Equipment Required

- Oscilloscope
  Tektronix 2465 or equivalent
  (bandwidth: 350 MHz or more)
- NTSC, PAL, SECAM component signal generator
  Tektronix TG2000 + AVG1 (optional module)
  +AWVG1 (optional module) or equivalent
- VG (Programmable video signal generator)
  VG814 or equivalent
- Digital voltmeter
  Advantest TR6845 or equivalent
- Luminance meter

Note: Perform the following adjustments at least 5 minutes after turning on the power.

4-2. Preparations

4-2-1. Turning on the Power

1. Connect the power cord and supply the power to the unit.
2. Check that the STANDBY LED of the control panel lights up in red.

4-2-2. Setting the Factory Mode

1. Check that the STATUS in the menu is ON.
2. Exit the Menu.
3. Press the keys in the following order:
   "ENTER" → "ENTER" → "LEFT" → "ENTER".
   The message "Do you with to enter into the FACTORY MODE?" will be displayed.
   Select YES on the menu to set the unit into the factory mode.

4-3. C Board Adjustments

4-3-1. R VCOM Adjustments

Turn off the menu using the STATUS OFF during adjustments. (No shield is required.)

1. Enter the R DRV of the device adjust by the factory mode and check the 1 line ON/OFF signal.
2. Adjust the ← and → keys to minimize the flicker.

4-3-2. G VCOM Adjustments

1. Enter the G DRV of the device adjust by the factory mode and check the 1 line ON/OFF signal.
2. Adjust the ← and → keys to minimize the flicker.

4-3-3. B VCOM Adjustments

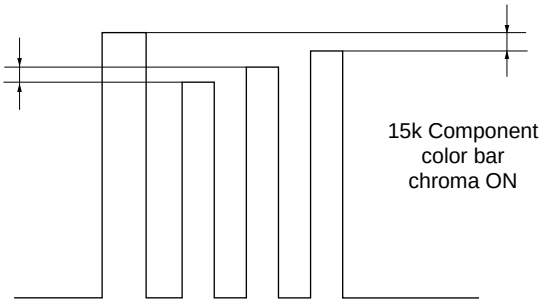
1. Enter the B DRV of the device adjust by the factory mode and check the 1 line ON/OFF signal.
2. Adjust the ← and → keys to minimize the flicker.

4-4. Signal Level Adjustments

4-4-1. Component Level Adjustments

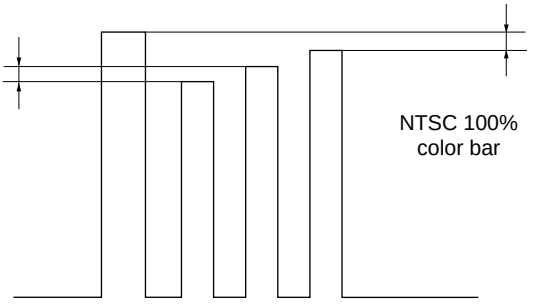
1. Connect the component signal to INPUT-A (5BNC), and select COMPONENT with SIGNAL SELECT. (15K Component color bar Chroma ON)
2. Set the COLOR to 40.
3. Connect the oscilloscope to TP612 (B OUT) on the C board.
4. Enter the OTHER of the device adjust of the menu.
5. Set 06 3D GAMMA/THROUGH: 0 to 06 3D GAMMA/THROUGH: 1.
6. Set 07 3D GAMMA/SW: 1 to 07 3D GAMMA/SW: 0
7. Adjust the cursor at the top of the oscilloscope to the bar on the left side (white section).
8. Adjust GND level to the bottom edge in the DC 0.5 V range.
9. Set the input signal to component color bar.
10. Select 12 YUV COL. Adjust the ← and → keys so that the levels of the right bar and the left bar become the same.
11. Select 05 SUB HUE. Adjust the ← and → keys so that the two bars at the center become flat.

12. Press the ENTER key to select the SAVE TO MEMORY of the menu, and press the ENTER key again to save the data.



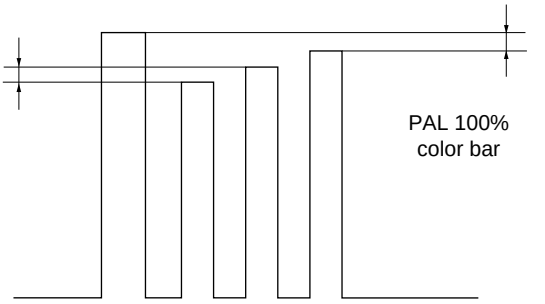
4-4-2. VIDEO NTSC Level Adjustments

1. Set the Color to 40. Input the NTSC 100% Color bar signal to the VIDEO input, and switch the input to VIDEO.
   The RGB MATRIX of device adjust of the menu is set.
2. Connect the oscilloscope to TP612 on the C board.
3. Select 12 YUV COL, and adjust the ← and → keys so that the levels of the right bar and left bar become the same.
4. Select 05 SUB HUE, and adjust the ← and → keys so that the two bars at the center become flat.
5. Press the ENTER key to select the SAVE TO MEMORY of the menu, and press the ENTER key again to save the data.



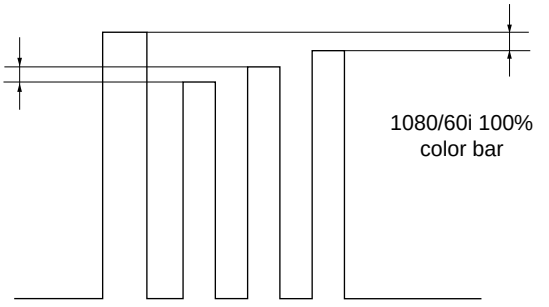
4-4-3. VIDEO PAL Level Adjustments

1. Set the Color to 40. Input the PAL 100% Color bar signal to the VIDEO input.
   BA MATRIX of device adjust on the menu is set.
2. Connect the oscilloscope to TP612 on the C board.
3. Select 12 YUV COL, and adjust the ← and → keys so that the levels of the right bar and left bar become the same.
4. Select 04 SUB HUE, and adjust the ← and → keys so that the two bars at the center become flat.
5. Press the ENTER key to select the SAVE TO MEMORY of the menu, and press the ENTER key again to save the data.



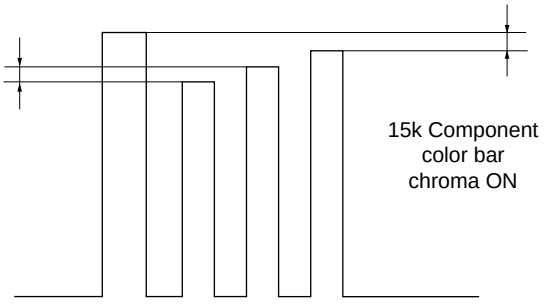
4-4-4. Y/PB/PR Level Adjustments

1. Input the HDVS (1080/60i) 100% Color bar (YPbPr) signal to INPUT-A, select INPUT-A, and select Y/PB/PR using SIGNAL SELECT.
2. Set RGB MATRIX of Device adjust on the menu.
3. Select 11 YUV COM, and adjust using the ← and → keys so that the level of the left bar becomes the same as the level of the cursor at the top.
4. Select 12 YUV COL, and adjust using the ← and → keys so that the levels of the right bar and left bar become the same.
5. Select 04 SUB HUE, and adjust using the ← and → keys so that the two bars at the center become flat.
6. Press the ENTER key to select the SAVE TO MEMORY of the menu, and press the ENTER key again to save the data.



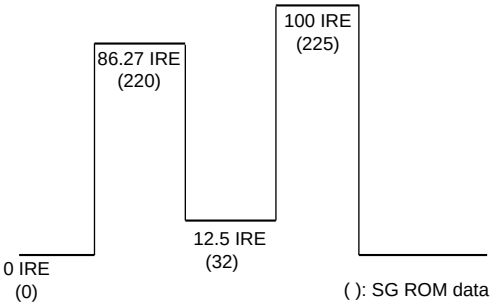
4-4-5. 15KRGB Level Adjustments

1. Input the 15K RGB 100% Color bar signal to INPUT-A, select INPUT-A, and select RGB using SIGNAL SELECT.
2. Set RGB MATRIX of Device adjust on the menu.
3. Connect the oscilloscope to TP612 on the C board.
4. Select 12 YUV COL, and adjust using the ← and → keys so that the levels of the right bar and left bar become the same.
5. Select 05 SUB HUE, and adjust using the ← and → keys so that the two bars at the center become flat.
6. Press the ENTER key to select the SAVE TO MEMORY of the menu, and press the ENTER key again to save the data.

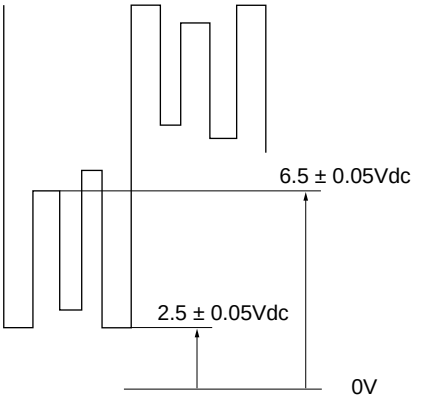


4-4-6. W/B HIGH Adjustments

1. Input the W/B HIGH adjustment signal to INPUT-A, and connect the oscilloscope to TP605 on the C board.

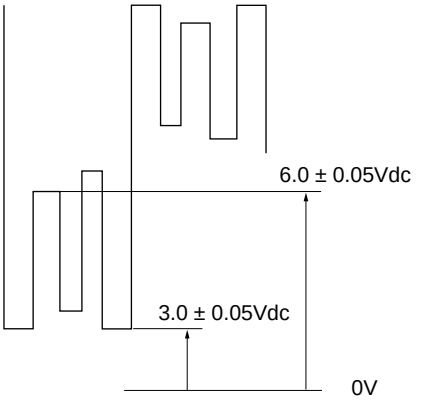


2. Set the CONTRAST control to maximum position.
3. Enter the OTHER of the device adjust of the menu.
4. Set 06 3D GAMMA/THROUGH: 0 to 06 3D GAMMA/THROUGH: 1.
5. Set 07 3D GAMMA/SW: 1
6. Set 07 3D GAMMA/SW: 0.
7. Enter the P DRV of the device adjust of the menu.
8. Adjust the lower side of the 100 IRE section of the signal for 2.5 ± 0.05 Vdc with 11.VAMP/SUB CON R.
9. Adjust the lower side of the 100 IRE section of the signal for 6.5 ± 0.05 Vdc with 13.VAMP/SUB CON B.
10. Input the W/B HIGH adjustment signal to INPUT-A, and connect the oscilloscope to TP602 on the C board.
11. Adjust the lower side of the 100 IRE section of the signal for 6.5 ± 0.05 Vdc with 12.VAMP/SUB CON G.
12. Input the W/B HIGH adjustment signal to INPUT-A, and connect the oscilloscope to TP608 on the C board.
13. Adjust the lower side of the 100 IRE section of the signal for 6.5 ± 0.05 Vdc with 11.VAMP/SUB CON R.



14. Select the SAVE TO MEMORY of the device adjust of the menu, and press the ENTER key to save the data.

15. Rest the CONTRAST to 80.
16. Connect the oscilloscope to TP605 on the C board.
17. Enter the WB ADJUST HIGH by the menu.
18. Adjust the DC level of signal's 87.5 IRE section for 6.0 ± 0.05 Vdc with GAIN B .
19. Connect the oscilloscope to TP602 on the C board.
20. Adjust the DC level of signal's 87.5 IRE section for 6.0 ± 0.05 Vdc with GAIN G.
21. Connect the oscilloscope to TP608 on the C board.
22. Adjust the DC level of signal's 87.5 IRE section for 6.0 ± 0.05 Vdc with GAIN G and adjust the lower side of the 12.5 IRE section of the signal for 3.0 ± 0.05Vdc with 13.VAMP/SUB CON B.
23. Connect the oscilloscope to TP608 on the C board.
24. Adjust the DC level of signal's 87.5 IRE section for 6.0 ± 0.05 Vdc with GAIN R and adjust the DC level of signal's 12.5 IRE section for 3.0 ± 0.05 Vdc with BIAS R.



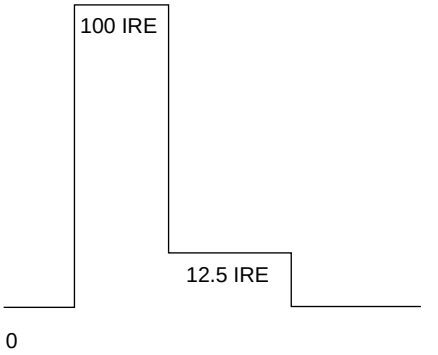
25. Select the SAVE TO MEMORY from the W/B ADJUST page of the menu, and press the ENTER key to save the data.

4-4-7. W/B LOW Adjustments

1. Enter the RGB WB LOW by the menu.
2. Copy the adjusted value of the HIGH mode to the R/G/B BIAS.
3. Enter the following value in the R/G/B GAIN.
   R GAIN: HIGH mode + 5
   G GAIN: HIGH mode − 5
   B GAIN: HIGH mode − 15
4. Select the SAVE TO MEMORY from the W/B ADJUST page of the menu, and press the ENTER key to save the data.
5. Enter the OTHER of the device adjust of the menu.
6. Reset 06 3D GAMMA/THROUGH: 1 to 06 3D GAMMA/THROUGH: 0.
7. Reset 07 3D GAMMA/SW: 0 to 07 3D GAMMA/SW: 1.
8. Select the SAVE TO MEMORY from the Device adjust page of the menu, and press the ENTER key to save the data.

4-4-8. Component Y Level Adjustment

1. Input the Component Y signal to INPUT-A (5BNC), and select the COMPONENT by INPUT-A of the SET SETTING.



2. Connect the oscilloscope to TP605 on the C board.
3. Enter the OTHER of the device adjust of the menu.
4. Set 06 3D GAMMA/THROUGH: 0 to 06 3D GAMMA/THROUGH: 1.
5. Set 07 3D GAMMA/SW: 1 to 07 3D GAMMA/SW: 0.
6. Enter the WB ADJUST HIGN from the menu.
7. Adjust the 100 IRE section of the signal for 6.1 ± 0.05 Vdc with GAIN B and adjust the 12.5 IRE section of the signal for 6.1 ± 0.05 Vdc with BIAS B.
8. Connect the oscilloscope to TP602 on the C board.
9. Adjust the 100 IRE section of the signal for 6.1 ± 0.05 Vdc with GAIN G and adjust the 100 IRE section of the signal for 3.0 ± 0.05 Vdc with BIAS G
10. Connect the oscilloscope to TP608 on the C board.

11. Adjust the 100 IRE section of the signal for 6.1 ± 0.05 Vdc with GAIN R and adjust the 100 IRE section of the signal for 3.0 ± 0.05 Vdc with BAIS R.
12. Select the SAVE TO MEMORY from the W/B ADJUST page of the menu, and press the ENTER key to save the data.
13. Enter the OTHER of the device adjust of the menu.
14. Reset 06 3D GAMMA/THROUGH: 1 to 06 3D GAMMA/THROUGH: 0.
15. Reset 07 3D GAMMA/SW: 0 to 07 3D GAMMA/SW: 1.
16. Select the SAVE TO MEMORY from the Device adjust page of the menu, and press the ENTER key to save the data.

4-5. VIDEO W/B Low Mode Adjustment

1. Input the component flat field signal to INPUT-A.
2. Select the INPUT-A, then select the COMPONENT with INPUT-A of SET SETTING.
3. Set the D.PICTURE of PICTURE CONTROL to off.
4. Set the “06 3D GAMMA/THROUGH” to “0” (LUT ON).
5. Set the “07 3D GAMMA/SW” to “1” (3D GAMMA ON).

4-5-1. High Mode

1. Enter the HIGH MODE.
2. Make sure that the R/G/B GAIN and BIAS are adjusted properly.
3. Input the 80 IRE component flat field signal to INPUT-A.
4. Adjust the y value by the G GAIN of W/B HIGH. When the x value after the y value adjustment is greater than the specification, use the Blue as reference color. If it is smaller than the specification, use the Red as reference color. Adjust the color as shown below with the GAIN other than the reference color.
5. Input the 30 IRE component flat field signal to INPUT-A.
6. Adjust the color as shown below with the BIAS other than the reference color.
7. Perform the 80 IRE and the 30 IRE adjustments above repeatedly until the specifications are met.
8. Select the SAVE TO MEMORY from the W/B ADJUST page of the menu, and press the ENTER key to save the data.

HIGH MODE color specifications:
(x, y)=(0.275, 0.312) ± 0.005 (80 IRE)
(x, y)=(0.275, 0.312) ± 0.007 (30 IRE)

4-5-2. Low Mode

1. Enter the LOW MODE.
2. Make sure that the same data as W/B HIGH are written in the R/G/B GAIN and BIAS.
3. Input the 80 IRE component flat field signal to INPUT-A.
4. Adjust the Y value by the G GAIN. When the X value after the Y value adjustment is greater than the specification, use the Blue as reference color. If it is smaller than the specification, use the Red as reference color. Adjust the color as shown below with the GAIN other than the reference color.
5. Input the 30 IRE component flat field signal to INPUT-A.
6. Adjust the color as shown below with the BIAS other than the reference color.
7. Perform the 80 IRE and the 30 IRE adjustments above repeatedly until the specifications are met.
8. Select the SAVE TO MEMORY from the W/B ADJUST page of the menu, and press the ENTER key to save the data.

LOW MODE color specifications:
(x, y)=(0.283, 0.331) ± 0.005(80 IRE)
(x, y)=(0.283, 0.331) ± 0.007 (30 IRE)

4-6. Adjustments in Replacement of Prism and Optical Unit

After replacement of the prism, set the factory mode, and perform the following adjustment.

4-6-1. VCOM Adjustment

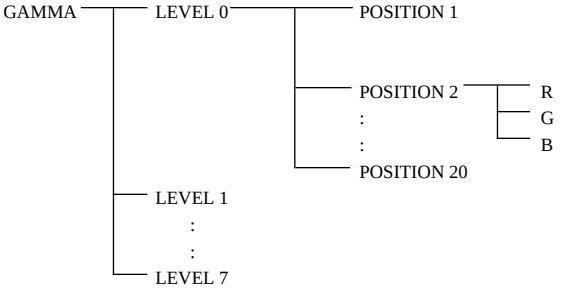
The bottom most menu item on the main menu is the Device Adjustment Menu. Set this menu and select "P. DRV." Perform V COM adjustments for each of the item "V COM/R," "V COM/G," and "V COM/B."
In the above mode, as the built-in test pattern will be output, adjust so that flicker is minimum throughout the whole screen.

4-6-2. Polarization Plate Adjustment

Select "BB-GAMMA" on the device adjustment menu. Press the "PIC MUTING" button and the whole screen will become black. In this state, adjust the respective polarization plate until the black becomes the darkest.

4-6-3. 3Dγ Adjustment (Outline)

The principle of 3Dγ is described before the adjustment of 3Dγ.
3Dγ is like a function which can individually adjust W/B at a total of 180 points brightness 8 levels, horizontal direction 6 points, vertical direction 5 points (8*6*5=160 points).
So altogether 540 adjustments (160*3 (RGB)=480) will be required, which is in practice not possible. The following describes a simpler method.
First the "GAMMA" menu consists of the following hierarchy.



When adjusting a certain LEVEL, automatically the internal signal (flat field) of that level will be displayed.

4-6-4. 3Dγ Adjustments

1. First input "GAMMA."
2. Set LEVEL to 1.
3. Study the uniformity of the whole screen, and locate the areas where uniformity is poor.
4. Changing "POSITION" to 1, 2, or 3 will display the cursor. The position of the cursor is the position which will be adjusted.
   Move the cursor to the area with poor uniformity.
5. Move "R" and "B" up and down, and adjust so that the uniformity is the same as the other areas.
6. Set LEVEL 2.
7. Like steps 3, 4, and 5, adjust the areas with poor uniformity.
8. Adjust up to LEVEL 6.
9. Study the test pattern from LEVEL 1 to LEVEL 6, and if no problems, return to the first hierarchy, adjust the device, and save the data in SAVE TO MEMORY.

Precautions:

1. Basically adjust RED and BLUE only without changing GREEN.
2. Do not adjust LEVEL 0 and LEVEL 7.
3. To set back factory settings should adjustments fail, skip "SAVE TO MEMORY," press the STANDBY key, and turn off the power. All the adjusted data will be set back to factory settings.
   Factory settings cannot be set back however if "SAVE TO MEMORY" has already been implemented. So check the picture quality carefully prior to implementing "SAVE TO MEMORY."
4. For zoom lens, the uniformity will change slightly according to the zoom position.
   As uniformity will change slightly according to the F number of the lens, perform the adjustments on the projection system under the normal using conditions.
5. Do not change other items in the Device Adjust Menu.
   The device adjust menu contains important parameters for machine operations.
   Unnecessary operations will result in "no image" and "abnormal image."
   "Factory reset" cannot be performed on device adjust menu items.
   (Implementing SAVE TO MEMORY will completely overwrite the data.)
   Do not change data unnecessarily.

4-7. Adjustment Item Intialize Data

Device Name	Item Name	Memory Name							Remark
		SET MEMORY	CHROMA MEMORY						
			NT358/NT443 /BW60	Pal/Pal-M/N /Secam/BW50	15kRGB	YCbCr (15k)	YCbCr (Exc. 15k)	YPbPr	HD -GBR	
RGB MTRX/	CONTRAST	8								Fixed value
	R DRIVE		30	30	30	30	30	30	30	Fixed value
	G DRIVE		30	30	30	30	30	30	30	Fixed value
	B DRIVE		30	30	30	30	30	30	30	Fixed value
	SUB HUE		7	7	7	7	7	7	7	
	SUB BRT	54								Fixed value
	R-Y/R		6	13	13	13	13	13	13	Fixed value
	R-Y/B		12	15	15	15	15	15	15	Fixed value
	G-Y/R		10	8	8	8	8	8	8	Fixed value
	G-Y/B		5	4	4	4	4	4	4	Fixed value
	YUV CON		7	7	11	11	11	11	11	
	YUV COL		12	12	12	12	12	12	12	
	SUB SHP		1	1	3	3	3	3	3	Fixed value
	SHPFO		1	1	1	1	1	1	1	Fixed value
	PRE OVER		0	0	0	0	0	0	0	Fixed value
	DMIC PIC	3								Fixed value
	CTI LVL		2	2	1	1	1	1	1	Fixed value
	LTI LVL		1	1	1	1	0	0	0	Fixed value
D. COM/	VENH	5								Fixed value
CHROMA/	Y-OUT LVL	13								Fixed value
	C-PUT LVL	18								Fixed value
	Y-DL	5								Fixed value
	S B-Y ADJ	7								Fixed value
	S R-Y ADJ	7								Fixed value
	S-INHBT	0								Fixed value
	S-ID	0								Fixed value
	S GP	0								Fixed value
	S V-ID	0								Fixed value
	BELL FO	0								Fixed value
	HPF	0								Fixed value
	SHP GAIN		8	8	8	8	8	8	8	Fixed value
	SHP EQ		0	0	0	0	0	0	0	Fixed value
	SHP FO		2	2	2	2	2	2	2	Fixed value
P. DRV/	VCOM G	40								
	VCOM R	37								
	VCOM B	40								
	SIG CEN	148								Fixed value

Note: There are nonadjustable items in accordance with the input signal.

Device Name	Item Name	Memory Name								Remarks
		SET MEMORY	CHROMA MEMORY							
			NT358/NT443 /BW60	Pal/Pal-M/N /Secam/BW50	15kRGB	YCbCr (15k)	YCbCr (Exc. 15)	YPbPr	HD -GBR	
P. DRV/	SID LVL	206								Fixed value
	PRG LVL	86								Fixed value
	INV CONT	0								Fixed value
SH/	SH1	10								Fixed value
	SH2	200								Fixed value
VAMP	CONT	190								Fixed value
	SUB CON R	180								
	SUB CON G	180								
	SUB CON B	180								
	BRT	212								Fixed value
3D GAMMA/	SUB CONT	0								Fixed value
	SUB BRT	0								Fixed valuel
	R OSD LVL	16								Fixed value
	G OSD LVL	16								Fixed value
	B OSD LVL	16								Fixed value
	THROUGH	0								Fixed value
	SW	1								Fixed value
	APC THRES	25								Fixed value
	APC LIMIT	32								Fixed value
OTHER/	H START	143								Fixed value
	V START	22								Fixed value
	TEMP LAMP	Nonadjustable								Fixed value
	TEMP PANEL	Nonadjustable								Fixed valuel
	LAMP FAN1	Nonadjustable								Fixed value
	PANEL FAN1	Nonadjustable								Fixed value
	LAMP FAN2	Nonadjustable								Fixed value
	PANEL FAN2	Nonadjustable								Fixed value
GAMMA		Indication only								

Note: There are nonadjustable items in accordance with the input signal.

Menu Title	Item Name	Memory Name				
		SET MEMORY	CH MEMORY			
			VIDEO	S Video	INPUT-A	INPUT-B
PICTURE CTRL	CONTRAST		80	80	80	80
	BRI GHT		50	50	50	50
	COLOR		50	50	50	–
	HUE		50	50	50	–
	SHARP		50	50	50	–
	RGB ENHANCER		–	–	30	30
	D.PICTURE		OFF	OFF	OFF	–
	GAMMA MODE		–	–	GRAPHICS	GRAPHICS
	COLOR TEMP		LOW	LOW	HIGH	HIGH
	COLOR SYS		AUTO	AUTO	AUTO	AUTO
INPUT SETTING	DOT PHASE					
	SIZE H					
	SHIFT					
	SCAN CONV					
	ASPECT					
	BLANKING					
SET SETTING	STATUS	ON				
	INPUT-A	COMPUTER				
	AUTO INPUT SEL	OFF				
	LANGUAGE	ENGLSH				
	SPEAKER	ON				
	POWER SAVING	OFF				
	SIRCS RECEIVER	FRONT&REAR				
INSTALL SETTING	KEYSTONE MEM.	ON				
	DIGIT KEYSTONE	0				
	INSTALLATION	FLOOR-FRONT				
	LAMP MODE	STANDARD				
	LAMP TIMER	Indication only				
INFORMATION	fH	Indication only				
	fV	Indication only				
	ROM Ver	Indication only				
	OPERATION TIMER	Indication only				
	PREVIOUS LAMP TIMER	Indication only				
W/B ADJUST	GAIN R					
	GAIN G					
	GAIN B					
	BIAS R					
	BIAS G					
	BIAS B					

* : DOT PHASE, SIZE H, SHIFT H/V, SCAN CONV, ASPECT, and BLANKING in the “INPUT SETTING” menu have an initial value respectively in accordance with the input signal (PRESET MEMORY No.).

Note : There are nonadjustable items in accordance with the input signal.

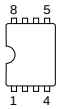
Menu Title	Item Name	Memory Name				
		STATUS MEMORY	W/B MEMORY			
			VIDEO -HIGH	VIDEO -LOW	RGB -HIGH	RGB -LOW
PICTURE CTRL	CONTRAST					
	BRI GHT					
	COLOR					
	HUE					
	SHARP					
	RGB ENHANCER					
	D.PICTURE					
	GAMMA MODE					
	COLOR TEMP					
	COLOR SYS					
INPUT SETTING	DOT PHASE	24(*)				
	SIZE H	*				
	SHIFT	*				
	SCAN CONV	ON (*)				
	ASPECT	4 :3 (*)				
	BLANKING	0 (*)				
SET SETTING	STATUS					
	INPUT-A					
	AUTO INPUT SEL					
	LANGUAGE					
	SPEAKER					
	POWER SAVING					
	SIRCS RECEIVER					
INSTALL SETTING	KEYSTONE MEM.					
	DIGIT KEYSTONE					
	INSTALLATION					
	LAMP MODE					
	LAMP TIMER					
INFORMATION	FH					
	FV					
	ROM Ver					
	OPERATION TIMER					
	PREVIOUS LAMP TIMER					
W/B ADJUST	GAIN R		170	175	170	175
	GAIN G		170	165	170	165
	GAIN B		170	160	170	160
	BIAS R		80	80	80	80
	BIAS G		80	80	80	80
	BIAS B		80	80	80	80

* : DOT PHASE, SIZE H, SHIFT H/V, SCAN CONV, ASPECT, and BLANKING in the “INPUT SETTING” menu have an initial value respectively in accordance with the input signal (PRESET MEMORY No.).

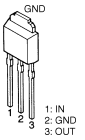
Note : There are nonadjustable items in accordance with the input signal.

Section 5
Semiconductors

24LC21AT/SN



BA09FP-E2
BA12FP-E2



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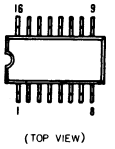
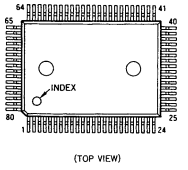
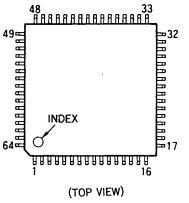
EL4332CS
TC74HC4052AFT
MAX202CSE-T



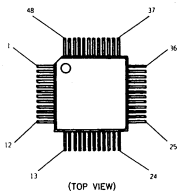
CXA2101AQ



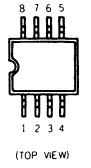
CXA2112R-T6



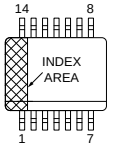
CXD2064Q-T6
CXA1946AR



GS1881-CTA
TC7W14FU (TE12R)
TC7W02FU (TE12R)
BA033FP-E2
TC4W53F
GS4981CTA
LM358P
SN75157
TC7W08FU
TL082CPS-E20
TL431BCDR2
UPC393G2-E2
MC100ELT20DR2
NJM082BM
TC7W14F (TE12R)
SN75453BPSR
ST49C101ACF8-05-TR



HA4314BCB-E2



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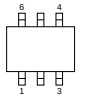

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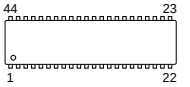
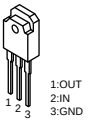
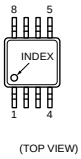


LP29851M5X-3.5
LM7131BCM5X
TC7S04FU
TC7S66FU
TC75S56F (TE85R)
TC7SH14FU (TE85R)

LM2990SX



MAX4223ESA-TG08
M24C64-WMN6T



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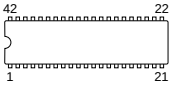

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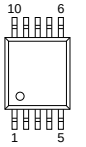
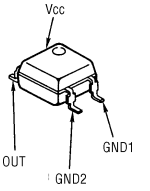
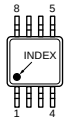


RS-140-T



TC7WH04FU (TE12R)



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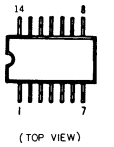
TC74HC02AF (EL)
TC74LCX04FT
TC74VHC14FT
TC74LCX125FT



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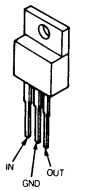

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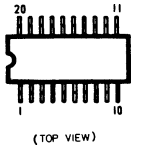
IMISM530AYB-D
M62399FP-TE2
TC74VHCT541AFT



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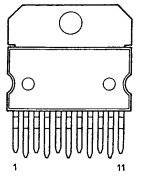

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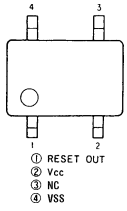
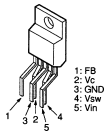


S-80840ANUP-ED4-T2

PQ20VZ1U
PQ20VZ5U



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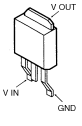

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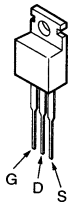

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2SA1213Y-TE12L
2SA1462
2SA1611T1-M5M6
2SC2412K-T-146-R
2SC2712-YG-TE85L
2SC3326N
2SC3545
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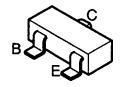
DTC144EKA-T146



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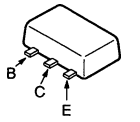
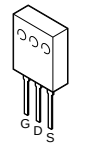


2SK2198



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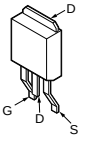

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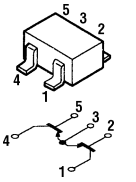
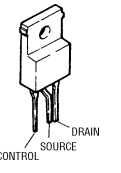


TOP223Y-BB



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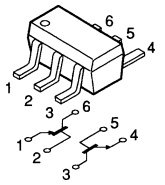

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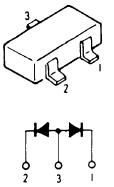
DAP202K-T-146
FMG-G2CS



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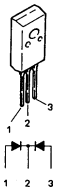

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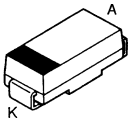
D1FS4A-TA
D2FL20U



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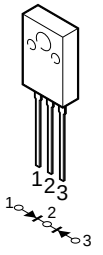

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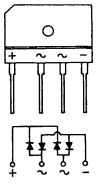

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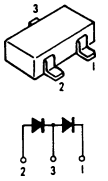
MA157-TX



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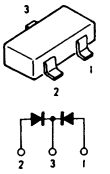

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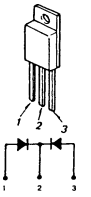

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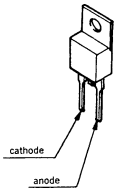

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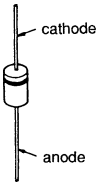

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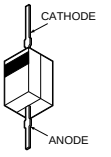

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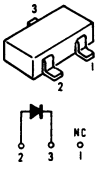

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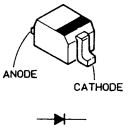
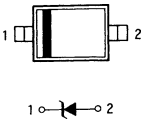
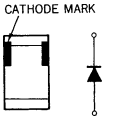
UDZ-TE-17-3.3B
1SS355TE-17
MA111
RB501V-40TE-17
RD3.3SB2-T1
RD9.1SB2-T1
UDZ-TE-17-3.9B
D2FS6-TA
RD5.6SB-T1
RD27SB-T1



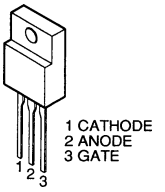
RD5.6SB2-T1



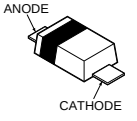
SEC1401C
SEC1801C
SEC1901C
SEC2422C



TF861S



UDZ-TE-17-2.2B
UDZ-TE-17-27B



Section 6
Exploded Views

NOTE :

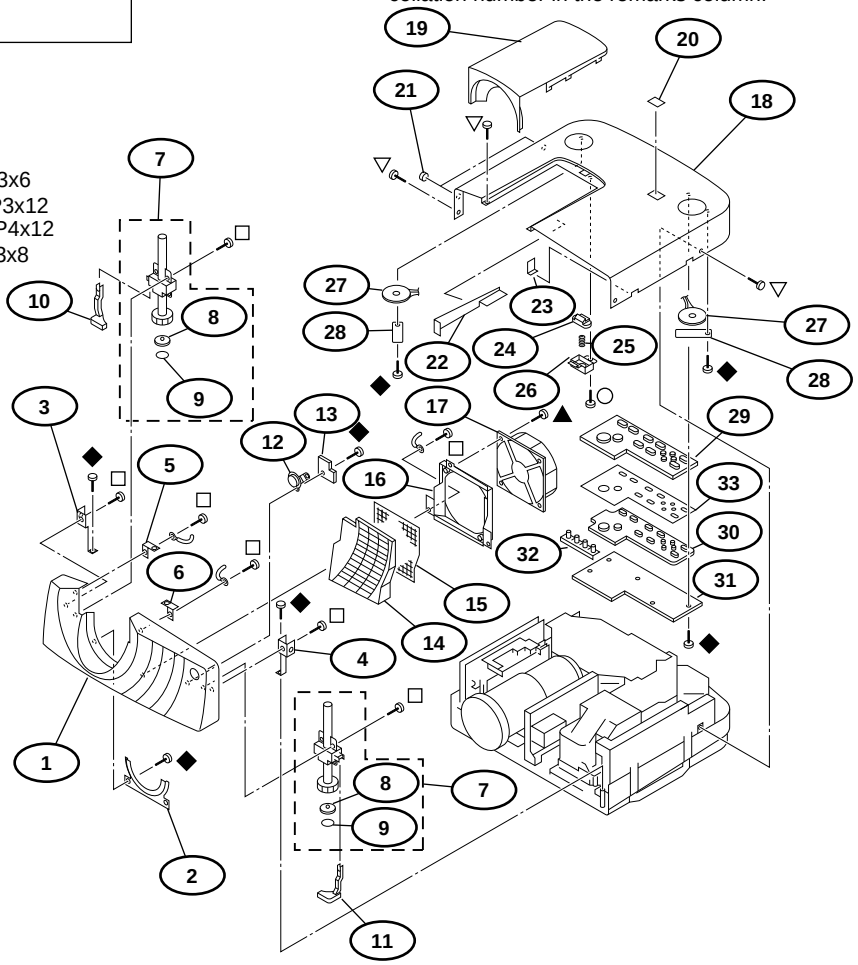
The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

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

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

6-1. Cabinet

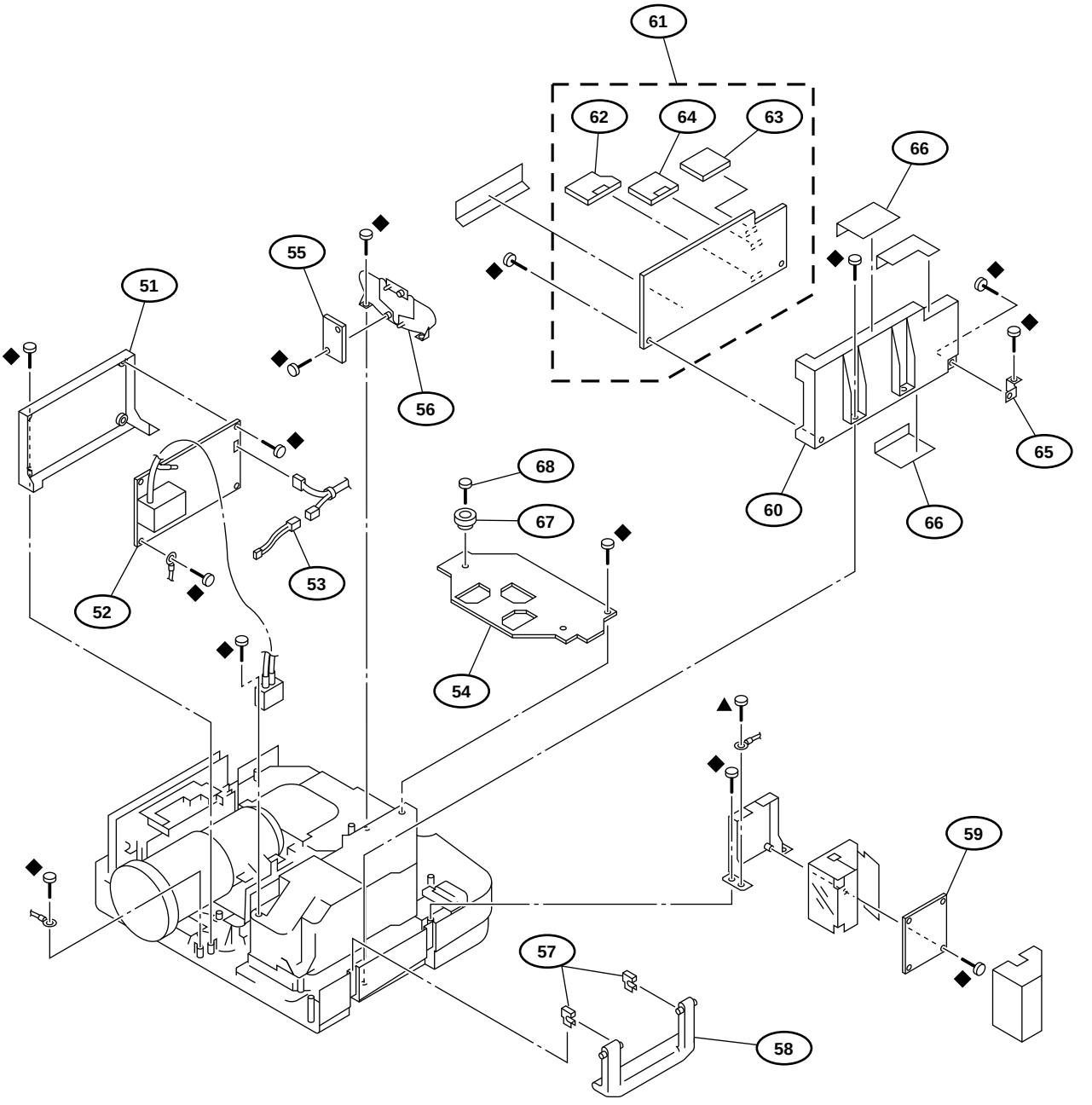
○ : 7-682-148-01 +P3x8
◆ : 7-682-903-11 +PWH3x6
□ : 7-685-648-79 +PVTP3x12
▲ : 7-682-663-09 +BSWP4x12
▽ : 7-682-548-04 +PWH3x8



REF NO.		PART NO.	DESCRIPTION	REMARK
1	*	X-4037-378-1	COVER ASSY, FRONT	
2		4-073-765-01	COVER (BT), LENS	
3	*	4-073-760-01	HOLDER (FBHL)	
4	*	4-073-759-01	HOLDER (FBHR)	
5	*	4-073-763-01	HOLDER (FHL)	
6	*	4-073-762-01	HOLDER (FHR)	
7		X-4037-376-1	ADJUSTER ASSY	8, 9
8		4-073-784-01	SHAFT, ADJUSTABLE	
9		4-073-783-01	SHEET, UR	
10		4-073-767-01	LEVER (L), ADJUSTER	
11		4-073-766-01	LEVER (R), ADJUSTER	
12	*	4-073-758-01	RM (FR)	
13	*	1-675-457-11	NF BOARD	
14	*	4-073-772-01	DUCT, FAN	
15	*	4-073-771-01	NET, FAN	
16	*	4-073-770-01	HOLDER, FAN	
17		1-763-422-11	FAN, DC	
18	*	4-073-768-01	HOOD	
19	*	4-073-764-01	COVER (TP), LENS	
20	*	4-073-773-01	EMBLEM (PX30)	
21	*	4-063-685-01	FOOT	
22	*	4-073-774-01	GUARD (H1), LIGHTING	
23	*	4-073-775-01	SPACER (H)	
24	*	4-063-672-01	STOPPER (LCT)	
25	*	4-063-686-01	SPRING, COMPRESSION	
26	*	4-063-673-01	HOLDER (LCT)	
27		1-529-499-11	SPEAKER (4.5CM)	
28	*	4-073-777-01	HOLDER (T), SP	
29		4-073-747-01	BUTTON, CONTROL	
30	*	4-073-748-01	GUIDE, BUTTON	
31	*	A-1375-193-A	H COMPL	
32	*	4-073-746-01	GUIDE, LED	
33	*	4-074-574-01	GUID (H2), LIGHTING	

6-2. Chassis Block

◆: 7-682-903-01 +PWH3x6
▲: 7-685-663-09 +PSW4x12

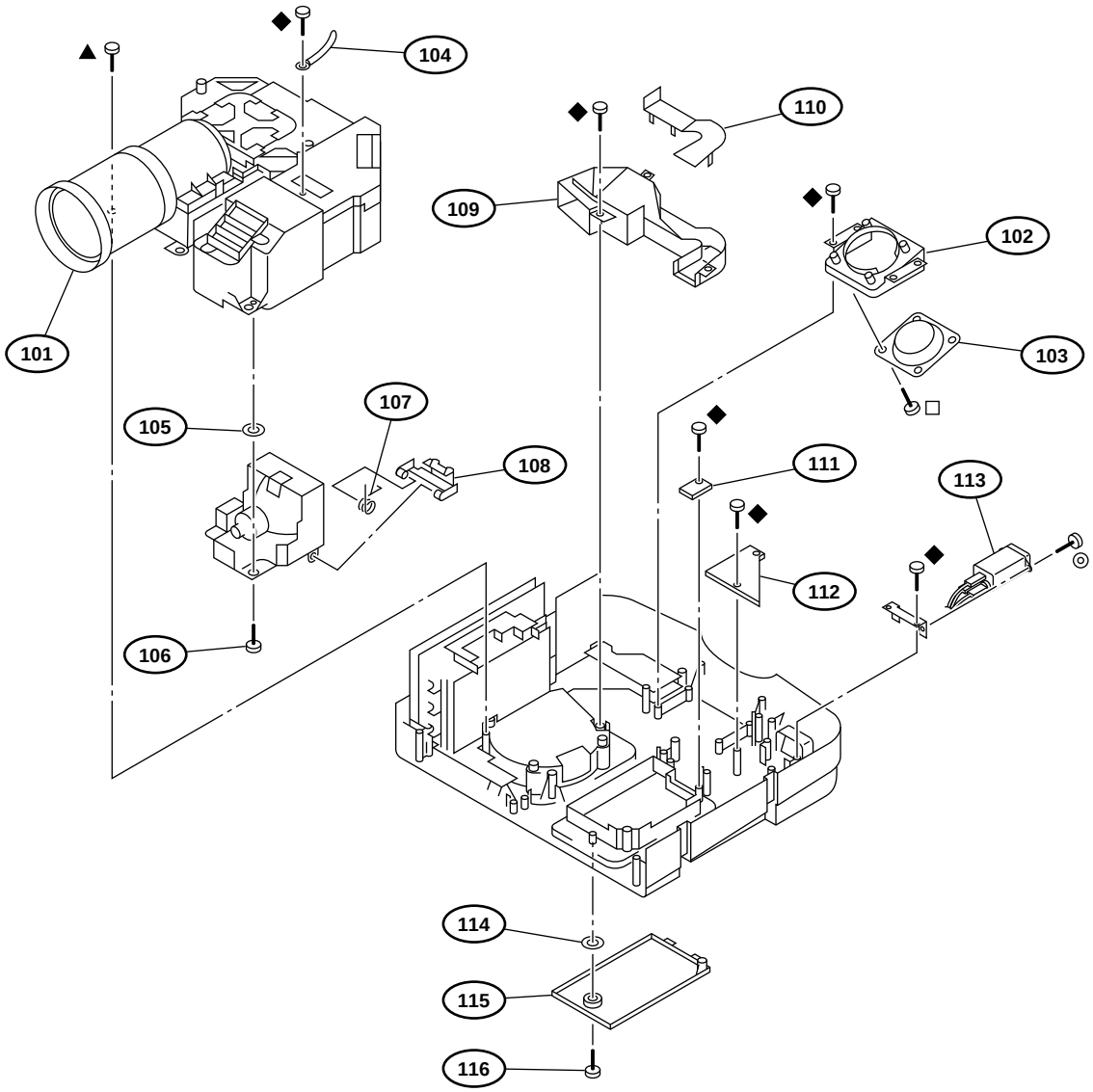


REF NO.		PART NO.	DESCRIPTION	REMARK
51	*	4-073-731-01	HOLDER (L)	
52	⚠	1-468-445-11	POWER BLOCK	
53		1-900-249-68	CONNECTOR ASSY, FUSE 2P	
54	*	A-1335-121-A	C COMPL	
55	*	A-1390-974-A	NR MOUNT	
56	*	X-4037-377-1	RM (ER) ASSY	
57	*	4-073-752-01	BUSH, HANDLE	
58		4-073-753-01	HANDLE	
59	*	A-1241-395-A	F MOUNT	
60	*	4-073-730-01	HOLDER (G)	

REF NO.		PART NO.	DESCRIPTION	REMARK
61	*	A-1316-486-A	GA COMPL	62-64
62	*	A-1316-485-A	GD COMPL	
63	*	A-1316-484-A	GC COMPL	
64	*	A-1316-487-A	GB COMPL	
65	*	4-073-735-01	PLATE (G), EARTH	
66	*	4-073-990-01	SHEET (G2), INSULATOR	
67		4-074-968-01	SPACER (C)	
68		3-701-809-31	SCREW, TERMINAL (M3X8)	

6-3. Optics Unit

◎ : 7-682-246-09 +K3x5
◆ : 7-682-903-11 +BWH3x6
□ : 7-685-648-79 +BVTP3x12
▲ : 7-682-663-09 +PSW4x12

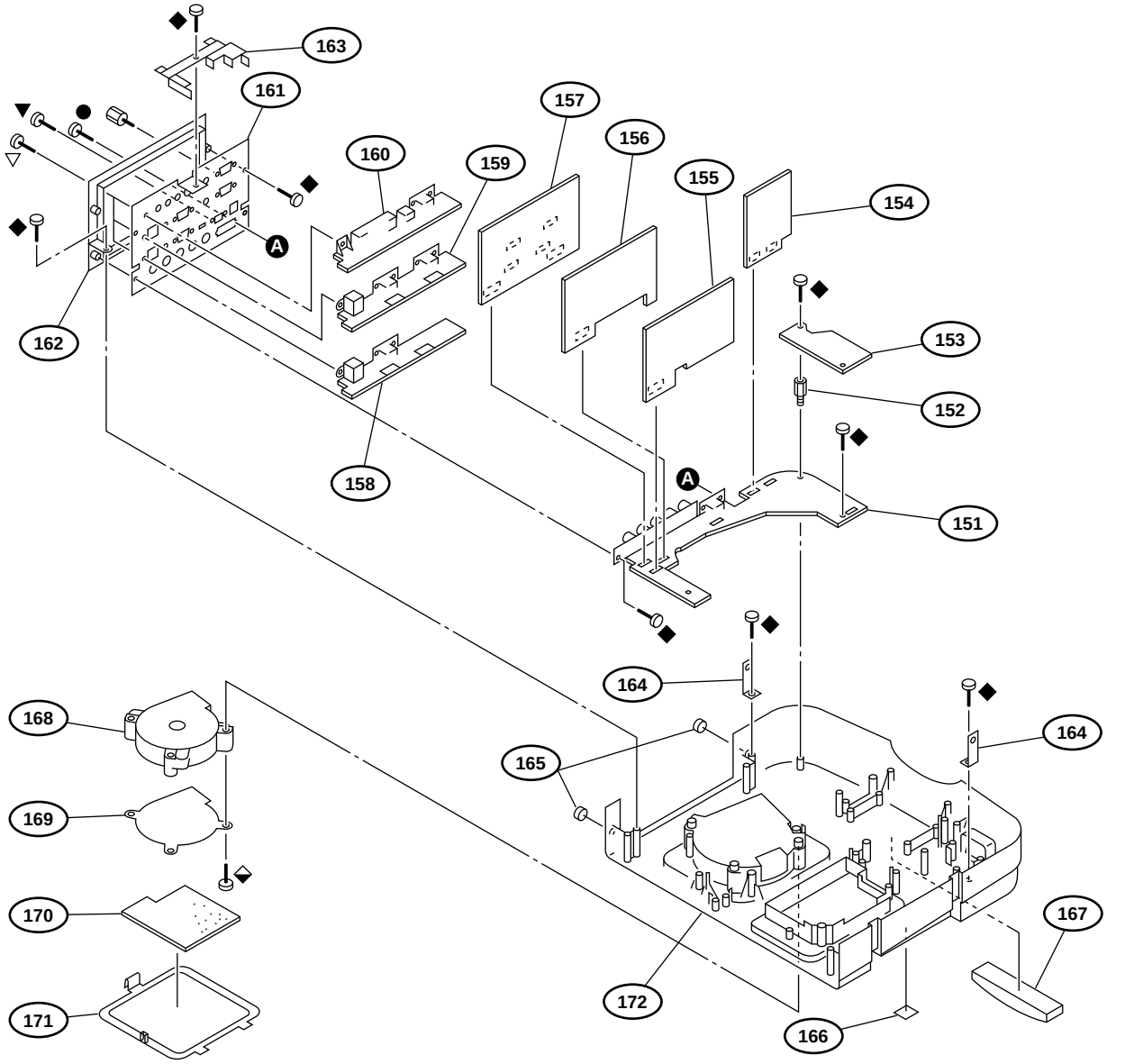


REF NO.		PART NO.	DESCRIPTION	REMARK
101		1-758-440-11	OPTICAL UNIT (VPL-PX30)	
		1-758-452-11	OPTICAL UNIT (VPL-PX20)	
102	*	4-073-740-01	HOLDER (L), SPEAKER	
103		1-505-600-11	SPEAKER (065W004)	
104		3-701-822-01	HOLDER, WIRE	
105	*	3-715-526-01	WASHER (M3)	
106		4-066-202-01	SCREW, M3	
107	*	4-073-788-01	SPRING, DOOR	
108	*	4-073-787-01	DOOR, DUCT	
109	*	4-073-729-01	DUCT	

REF NO.		PART NO.	DESCRIPTION	REMARK
110	*	4-073-728-01	COVER, DUCT	
111	*	A-1390-975-A	S MOUNT	
112	*	A-1385-189-A	K COMPL	
113	⚠	1-526-813-12	INLET, AC (3P)	
115	*	4-073-750-01	LAMP COVER	
116		4-073-989-01	SCREW (+B M3X12), PREVENTION	

6-4. Base Block

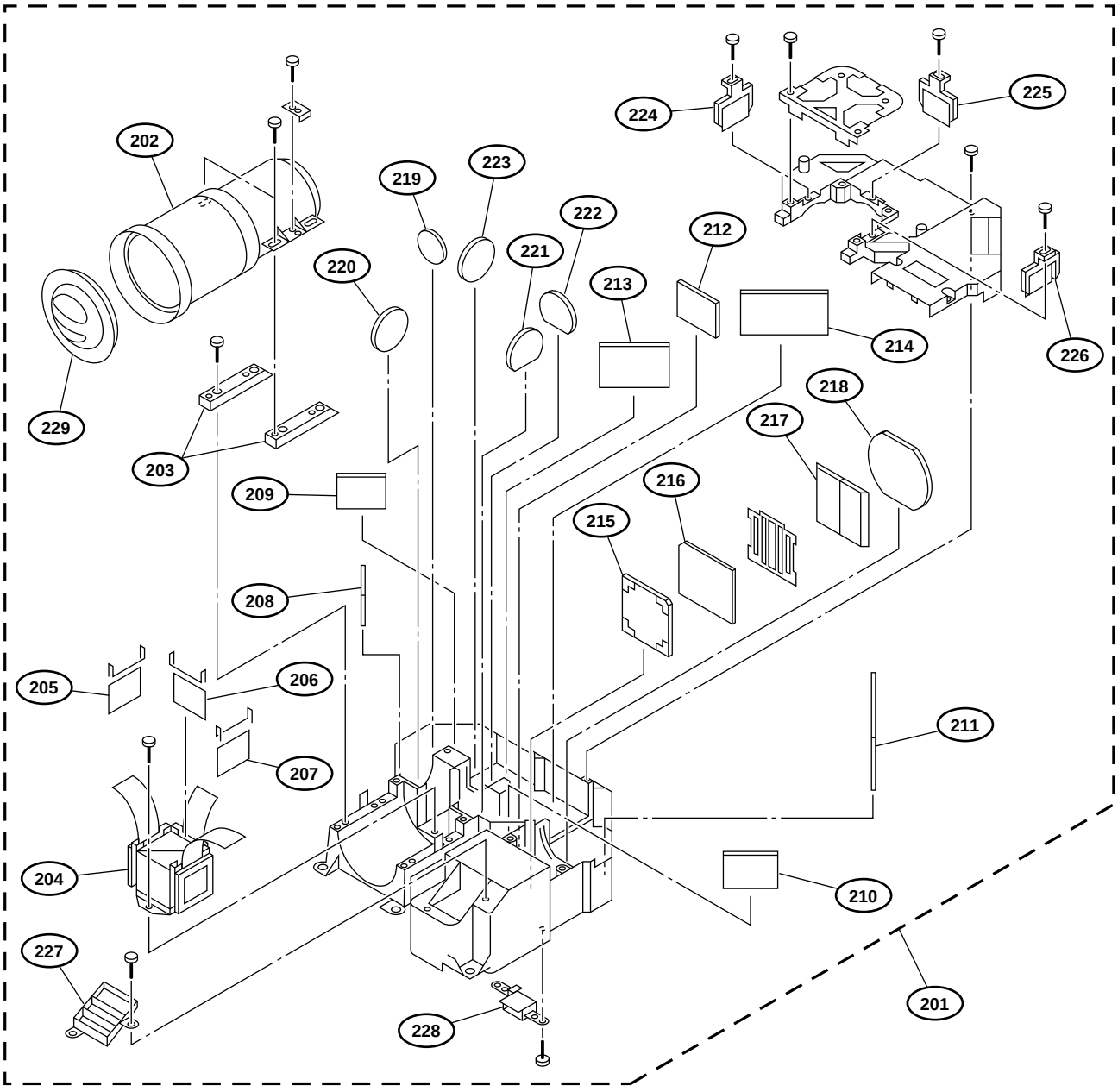
◆ : 7-682-903-11 +PWH3x6
● : 7-621-259-52 +P2.6x8
▼ : 7-621-772-38 +B2x6
◈ : 7-682-568-09 +B4x13
▽ : 7-682-548-04 +PWH3x8



REF NO.		PART NO.	DESCRIPTION	REMARK
151	*	A-1136-039-A	BB COMPL	
152		4-066-549-11	SPACER	
153	*	A-1385-190-A	KS COMPL	
154	*	A-1136-040-A	BC COMPL	
155	*	A-1394-958-A	Y COMPL	
156	*	A-1136-038-A	BA COMPL	
157	*	A-1275-178-A	QA COMPL	
158	*	A-1275-180-A	QB COMPL	
159	*	A-1275-179-A	QC COMPL	
160	*	A-1275-181-A	QD COMPL	

REF NO.		PART NO.	DESCRIPTION	REMARK
161	*	4-073-744-01	PANEL, CONNECTOR	
162	*	4-073-745-01	HOLDER, CONNECTOR PANEL	
163	*	4-073-749-01	HOLDER, PWB	
164	*	4-073-761-01	HOLDER (BH)	
165	*	4-063-685-01	FOOT	
166	*	4-073-751-01	CUSHION, HANDLE	
167	*	4-073-741-01	FOOT (RE)	
168		1-763-417-11	FAN, DC	
169	*	4-073-739-01	GUARD, FAN	
170		4-073-737-01	FILTER	
171	*	4-073-738-01	COVER, FILTER	
172	*	X-4037-413-1	BASE ASSY	

6-5. Optical unit



REF NO.		PART NO.	DESCRIPTION	REMARK
201		1-758-440-11	OPTICAL UNIT (VPL-PX30)	202-229
		1-758-452-11	OPTICAL UNIT (VPL-PX20)	202-229
202		9-885-000-52	PROJECTION LENS	
203		9-885-000-65	SPACER	
204		1-758-459-11	PRISM BLOCK	
205		9-885-000-76	POLORIZER, G-OUT PLATE	
206		9-885-000-72	POLORIZER, G-OUT PLATE	
207		9-885-000-74	POLORIZER, G-OUT PLATE	
208	*	9-885-000-63	MIRROR C	
209	*	9-885-000-62	MIRROR B	
210	*	9-885-000-64	MIRROR D	
211	*	9-885-000-61	MIRROR A	
212	*	9-885-000-69	UV PROOF GLASS	
213	*	9-885-000-60	G REFLECTION DICHROIC MIRROR	
214	*	9-885-000-59	B REFLECTION DICHROIC MIRROR	

REF NO.		PART NO.	DESCRIPTION	REMARK
215		9-885-000-53	LENS A, FLYEYE	
216	*	9-885-000-54	LENS B, FLYEYE	
217		9-885-000-55	FLYEYE/PS CONVERTER LENS	
218	*	9-885-000-66	MAIN CONDENSER LENS	
219	*	9-885-000-68	LENS B, RELAY	
220		9-885-000-58	POLARIZER, R/CONDENSER LENS	
221		9-885-000-57	POLARIZER, B/CONDENSER LENS	
222		9-885-000-56	POLARIZER, G/CONDENSER LENS	
223	*	9-885-000-67	LENS A, RELAY	
224		9-885-000-75	POLORIZER, R-IN PLATE	
225		9-885-000-71	POLORIZER, G-IN PLATE	
226		9-885-000-73	POLORIZER, B-IN PLATE	
227		4-073-776-01	GUARD (L), LIGHTING	
228		4-073-785-01	DUCT (F)	
229		9-885-000-70	CAP, LENS	

Section 7
Electrical Parts List

NOTE :

The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

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

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.

RESISTORS
- All resistors are in ohms.
- F: nonflammable
- METAL: Metal-film resistor
- METAL OXIDE: Metal oxide-film resistor

Ref.No.	Part No.	Description			Remark
	* A-1136-038-A	BA COMPL **********			
	<CAPACITOR>				
C101	1-131-998-21	TANTALUM	82µF	20%	6.3V
C102	1-128-065-11	ELECT CHIP	68µF	20%	10V
C103	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C104	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C105	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C106	1-128-004-11	ELECT CHIP	10µF	20%	16V
C107	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C108	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C109	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C110	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C111	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C112	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C114	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C115	1-131-998-21	TANTALUM	82µF	20%	6.3V
C116	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C117	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C118	1-127-820-91	CERAMIC	4.7µF	0	16V
C119	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C120	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C121	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C122	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C123	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C124	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C125	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C126	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C127	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C128	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C131	1-115-565-11	CERAMIC CHIP	2.2µF	10%	10V
C133	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C136	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C137	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C138	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C139	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C140	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C141	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C142	1-128-004-11	ELECT CHIP	10µF	20%	16V
C143	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C144	1-128-065-11	ELECT CHIP	68µF	20%	10V
C145	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C146	1-128-065-11	ELECT CHIP	68µF	20%	10V
C147	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C149	1-126-204-11	ELECT CHIP	47µF	20%	16V
C150	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C151	1-128-004-11	ELECT CHIP	10µF	20%	16V
C152	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C153	1-126-204-11	ELECT CHIP	47µF	20%	16V
C154	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C155	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C156	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C157	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C158	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C159	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C160	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C161	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C162	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C163	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C164	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C165	1-128-004-11	ELECT CHIP	10µF	20%	16V
C166	1-128-004-11	ELECT CHIP	10µF	20%	16V
C167	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C168	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C169	1-128-065-11	ELECT CHIP	68µF	20%	10V
C170	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C171	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C172	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C173	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C174	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C175	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C176	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C177	1-128-004-11	ELECT CHIP	10µF	20%	16V
C178	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C179	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C180	1-128-004-11	ELECT CHIP	10µF	20%	16V
C181	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C182	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C183	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C184	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C185	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C186	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C187	1-126-204-11	ELECT CHIP	47µF	20%	16V
C188	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C189	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C190	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C191	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C192	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V

BA

Ref.No.	Part No.	Description				Remark
C193	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V	
C194	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V	
C195	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V	
C196	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V	
C197	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V	
C198	1-128-013-11	ELECT CHIP	1µF	20%	50V	
C199	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V	
C200	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V	
C201	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V	
C202	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V	
C203	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V	
C204	1-128-013-11	ELECT CHIP	1µF	20%	50V	
C205	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V	
C206	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V	
C207	1-126-205-11	ELECT CHIP	47µF	20%	6.3V	
C208	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V	
C209	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V	
C210	1-163-245-11	CERAMIC CHIP	56PF	5%	50V	
C211	1-163-235-11	CERAMIC CHIP	22PF	5%	50V	
C212	1-126-206-11	ELECT CHIP	100µF	20%	6.3V	
C213	1-165-319-11	CERAMIC CHIP	0.1µF		50V	
C214	1-163-237-11	CERAMIC CHIP	27PF	5%	50V	
C215	1-163-245-11	CERAMIC CHIP	56PF	5%	50V	
C216	1-128-004-11	ELECT CHIP	10µF	20%	16V	
C218	1-163-237-11	CERAMIC CHIP	27PF	5%	50V	
C219	1-163-245-11	CERAMIC CHIP	56PF	5%	50V	
C220	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V	
C221	1-126-204-11	ELECT CHIP	47µF	20%	16V	
C222	1-126-204-11	ELECT CHIP	47µF	20%	16V	
C223	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C224	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V	
C225	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V	
C226	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V	
C227	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V	
C239	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C240	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C241	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C242	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C243	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V	
C244	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V	
C250	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C251	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C252	1-126-204-11	ELECT CHIP	47µF	20%	16V	
C253	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C254	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C256	1-163-131-00	CERAMIC CHIP	390PF	5%	50V	
C257	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C258	1-135-346-21	TANTALUM	39µF	20%	16V	
C259	1-126-204-11	ELECT CHIP	47µF	20%	16V	
C260	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C261	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C263	1-128-065-11	ELECT CHIP	68µF	20%	10V	
C264	1-128-065-11	ELECT CHIP	68µF	20%	10V	
C265	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C266	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C267	1-117-681-11	ELECT CHIP	100µF	20%	16V	
		<CONNECTOR>				
CN101	* 1-793-797-21	CONNECTOR, BOARD TO BOARD				
CN102	* 1-580-789-21	PIN, CONNECTOR (SMD) 6P				
		<DIODE>				
D101	8-719-988-61	DIODE 1SS355TE-17				

Ref.No.	Part No.	Description	Remark
		<FILTER>	
FL100	1-233-736-21	FILTER, EMI	
FL101	1-233-736-21	FILTER, EMI	
FL102	1-233-736-21	FILTER, EMI	
FL106	1-233-736-21	FILTER, EMI	
FL107	1-233-736-21	FILTER, EMI	
FL251	1-239-466-21	FILTER, EMI	
		<IC>	
IC101	8-752-094-47	IC CXA2123AQ-T6	
IC102	8-752-086-33	IC CXA2101AQ-TL	
IC103	8-759-242-64	IC TC4W53F	
IC105	8-759-031-84	IC SC7S04F	
IC106	8-759-031-84	IC SC7S04F	
IC221	8-752-390-37	IC CXD2064Q-T6	
IC250	8-752-072-94	IC CXA1875AM-T4	
IC251	8-759-242-64	IC TC4W53F	
IC252	8-759-031-84	IC SC7S04F	
IC253	8-759-494-88	IC TC75S56F(TE85R)	
IC254	8-759-084-79	IC TC7S14F	
IC255	8-759-460-79	IC BA09FP-E2	
IC256	8-759-344-12	IC GS4981CTA	
IC257	8-759-038-15	IC MC74HC4538AF	
IC258	8-759-157-17	IC PQ05SZ1U	
IC259	8-759-433-92	IC TC7W14F-TE12L	
		<COIL>	
L100	1-412-058-11	INDUCTOR CHIP	10µH
L101	1-412-058-11	INDUCTOR CHIP	10µH
L102	1-412-058-11	INDUCTOR CHIP	10µH
L103	1-412-058-11	INDUCTOR CHIP	10µH
L104	1-412-058-11	INDUCTOR CHIP	10µH
L105	1-412-058-11	INDUCTOR CHIP	10µH
L106	1-412-363-21	FERRITE	0µH
L108	1-412-363-21	FERRITE	0µH
L109	1-412-363-21	FERRITE	0µH
L110	1-410-389-31	INDUCTOR CHIP	47µH
L111	1-410-385-11	INDUCTOR CHIP	22µH
L112	1-410-383-31	INDUCTOR CHIP	15µH
L113	1-410-383-31	INDUCTOR CHIP	15µH
L251	1-409-556-11	INDUCTOR	47µH
		<TRANSISTOR>	
Q101	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q103	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q107	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q108	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q109	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q110	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q111	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q112	8-729-902-96	TRANSISTOR FMS1	
Q113	8-729-902-96	TRANSISTOR FMS1	
Q114	8-729-902-96	TRANSISTOR FMS1	
Q115	8-729-107-31	TRANSISTOR 2SC3545-T43	
Q116	8-729-107-31	TRANSISTOR 2SC3545-T43	
Q117	8-729-107-31	TRANSISTOR 2SC3545-T43	
Q118	8-729-216-22	TRANSISTOR 2SA1162-G	
Q119	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q120	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q121	8-729-216-22	TRANSISTOR 2SA1162-G	
Q122	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q123	8-729-216-22	TRANSISTOR 2SA1162-G	
Q124	8-729-230-49	TRANSISTOR 2SC2712-YG	

Ref.No.	Part No.	Description			Remark
Q125	8-729-216-22	TRANSISTOR 2SA1162-G			
Q126	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q127	8-729-216-22	TRANSISTOR 2SA1162-G			
Q128	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q129	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q130	8-729-216-22	TRANSISTOR 2SA1162-G			
	<RESISTOR>				
R102	1-216-077-91	RES,CHIP	15K	5%	1/10W
R104	1-216-049-91	RES,CHIP	1K	5%	1/10W
R105	1-216-678-11	METAL CHIP	13K	0.50%	1/10W
R106	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R107	1-216-049-91	RES,CHIP	1K	5%	1/10W
R108	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R109	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R110	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R111	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R112	1-216-619-11	METAL CHIP	47	0.50%	1/10W
R113	1-216-081-00	RES,CHIP	22K	5%	1/10W
R114	1-216-081-00	RES,CHIP	22K	5%	1/10W
R115	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R116	1-216-295-91	SHORT	0		
R118	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R119	1-208-796-11	METAL CHIP	3.9K	0.50%	1/10W
R120	1-216-025-91	RES,CHIP	100	5%	1/10W
R121	1-216-017-91	RES,CHIP	47	5%	1/10W
R122	1-216-644-11	METAL CHIP	510	0.50%	1/10W
R123	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R124	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R125	1-216-047-91	RES,CHIP	820	5%	1/10W
R126	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R127	1-216-649-11	METAL CHIP	820	0.50%	1/10W
R130	1-216-025-91	RES,CHIP	100	5%	1/10W
R131	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R132	1-216-025-91	RES,CHIP	100	5%	1/10W
R133	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R134	1-216-025-91	RES,CHIP	100	5%	1/10W
R136	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R137	1-216-049-91	RES,CHIP	1K	5%	1/10W
R138	1-216-295-91	SHORT	0		
R139	1-216-295-91	SHORT	0		
R140	1-216-081-00	RES,CHIP	22K	5%	1/10W
R141	1-216-081-00	RES,CHIP	22K	5%	1/10W
R142	1-216-295-91	SHORT	0		
R143	1-216-129-00	RES,CHIP	2.2M	5%	1/10W
R147	1-216-049-91	RES,CHIP	1K	5%	1/10W
R148	1-216-025-91	RES,CHIP	100	5%	1/10W
R149	1-216-295-91	SHORT	0		
R150	1-216-025-91	RES,CHIP	100	5%	1/10W
R151	1-216-017-91	RES,CHIP	47	5%	1/10W
R152	1-216-047-91	RES,CHIP	820	5%	1/10W
R153	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R154	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R155	1-216-049-91	RES,CHIP	1K	5%	1/10W
R156	1-216-049-91	RES,CHIP	1K	5%	1/10W
R157	1-216-049-91	RES,CHIP	1K	5%	1/10W
R158	1-216-083-00	RES,CHIP	27K	5%	1/10W
R159	1-216-089-91	RES,CHIP	47K	5%	1/10W
R160	1-216-017-91	RES,CHIP	47	5%	1/10W
R161	1-216-025-91	RES,CHIP	100	5%	1/10W
R162	1-216-025-91	RES,CHIP	100	5%	1/10W
R163	1-216-133-00	RES,CHIP	3.3M	5%	1/10W
R164	1-216-039-00	RES,CHIP	390	5%	1/10W
R165	1-216-295-91	SHORT	0		
R166	1-216-039-00	RES,CHIP	390	5%	1/10W
R167	1-216-295-91	SHORT	0		
R168	1-216-017-91	RES,CHIP	47	5%	1/10W
R169	1-216-017-91	RES,CHIP	47	5%	1/10W
R170	1-216-041-00	RES,CHIP	470	5%	1/10W
R172	1-216-041-00	RES,CHIP	470	5%	1/10W
R174	1-216-041-00	RES,CHIP	470	5%	1/10W
R176	1-216-017-91	RES,CHIP	47	5%	1/10W
R177	1-216-017-91	RES,CHIP	47	5%	1/10W
R178	1-216-017-91	RES,CHIP	47	5%	1/10W
R179	1-216-017-91	RES,CHIP	47	5%	1/10W
R180	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R181	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R182	1-216-070-00	RES,CHIP	7.5K	5%	1/10W
R183	1-216-017-91	RES,CHIP	47	5%	1/10W
R184	1-216-017-91	RES,CHIP	47	5%	1/10W
R185	1-216-017-91	RES,CHIP	47	5%	1/10W
R186	1-216-077-91	RES,CHIP	15K	5%	1/10W
R187	1-216-017-91	RES,CHIP	47	5%	1/10W
R188	1-216-017-91	RES,CHIP	47	5%	1/10W
R189	1-216-073-00	RES,CHIP	10K	5%	1/10W
R190	1-216-037-00	RES,CHIP	330	5%	1/10W
R191	1-216-017-91	RES,CHIP	47	5%	1/10W
R192	1-216-017-91	RES,CHIP	47	5%	1/10W
R193	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R194	1-216-073-00	RES,CHIP	10K	5%	1/10W
R195	1-216-017-91	RES,CHIP	47	5%	1/10W
R196	1-216-073-00	RES,CHIP	10K	5%	1/10W
R197	1-216-037-00	RES,CHIP	330	5%	1/10W
R198	1-216-017-91	RES,CHIP	47	5%	1/10W
R202	1-216-017-91	RES,CHIP	47	5%	1/10W
R203	1-216-017-91	RES,CHIP	47	5%	1/10W
R204	1-216-017-91	RES,CHIP	47	5%	1/10W
R205	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R206	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R207	1-216-017-91	RES,CHIP	47	5%	1/10W
R208	1-216-081-00	RES,CHIP	22K	5%	1/10W
R209	1-216-017-91	RES,CHIP	47	5%	1/10W
R210	1-216-017-91	RES,CHIP	47	5%	1/10W
R211	1-216-017-91	RES,CHIP	47	5%	1/10W
R212	1-216-017-91	RES,CHIP	47	5%	1/10W
R213	1-216-081-00	RES,CHIP	22K	5%	1/10W
R214	1-216-037-00	RES,CHIP	330	5%	1/10W
R215	1-216-629-11	METAL CHIP	120	0.50%	1/10W
R216	1-216-629-11	METAL CHIP	120	0.50%	1/10W
R217	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R224	1-216-025-91	RES,CHIP	100	5%	1/10W
R225	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R226	1-216-644-11	METAL CHIP	510	0.50%	1/10W
R227	1-216-682-11	METAL CHIP	20K	0.50%	1/10W
R228	1-216-035-00	RES,CHIP	270	5%	1/10W
R229	1-216-649-11	METAL CHIP	820	0.50%	1/10W
R230	1-216-047-91	RES,CHIP	820	5%	1/10W
R231	1-216-025-91	RES,CHIP	100	5%	1/10W
R232	1-216-682-11	METAL CHIP	20K	0.50%	1/10W
R233	1-216-035-00	RES,CHIP	270	5%	1/10W
R234	1-216-017-91	RES,CHIP	47	5%	1/10W
R235	1-216-047-91	RES,CHIP	820	5%	1/10W
R236	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R238	1-216-017-91	RES,CHIP	47	5%	1/10W
R250	1-216-073-00	RES,CHIP	10K	5%	1/10W
R251	1-216-073-00	RES,CHIP	10K	5%	1/10W
R252	1-216-073-00	RES,CHIP	10K	5%	1/10W
R253	1-216-073-00	RES,CHIP	10K	5%	1/10W
R254	1-216-025-91	RES,CHIP	100	5%	1/10W
R255	1-216-025-91	RES,CHIP	100	5%	1/10W
R256	1-216-025-91	RES,CHIP	100	5%	1/10W
R257	1-216-025-91	RES,CHIP	100	5%	1/10W
R258	1-216-025-91	RES,CHIP	100	5%	1/10W

BA BB

Ref.No.	Part No.	Description			Remark
R259	1-216-017-91	RES,CHIP	47	5%	1/10W
R260	1-216-025-91	RES,CHIP	100	5%	1/10W
R261	1-216-017-91	RES,CHIP	47	5%	1/10W
R262	1-216-017-91	RES,CHIP	47	5%	1/10W
R263	1-216-017-91	RES,CHIP	47	5%	1/10W
R264	1-216-017-91	RES,CHIP	47	5%	1/10W
R265	1-216-017-91	RES,CHIP	47	5%	1/10W
R266	1-216-017-91	RES,CHIP	47	5%	1/10W
R267	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R268	1-218-762-11	METAL CHIP	270K	0.50%	1/10W
R269	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R270	1-216-017-91	RES,CHIP	47	5%	1/10W
R271	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R272	1-216-041-00	RES,CHIP	470	5%	1/10W
R273	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R274	1-216-017-91	RES,CHIP	47	5%	1/10W
R275	1-216-017-91	RES,CHIP	47	5%	1/10W
R276	1-216-073-00	RES,CHIP	10K	5%	1/10W
R277	1-216-025-91	RES,CHIP	100	5%	1/10W
R278	1-216-017-91	RES,CHIP	47	5%	1/10W
R279	1-216-017-91	RES,CHIP	47	5%	1/10W
R280	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R281	1-216-041-00	RES,CHIP	470	5%	1/10W
R282	1-216-035-00	RES,CHIP	270	5%	1/10W
R283	1-216-047-91	RES,CHIP	820	5%	1/10W
R284	1-216-017-91	RES,CHIP	47	5%	1/10W
R285	1-216-017-91	RES,CHIP	47	5%	1/10W
R288	1-216-295-91	SHORT	0		
R289	1-216-295-91	SHORT	0		
R290	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R291	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R292	1-216-295-91	SHORT	0		
R294	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R295	1-216-091-00	RES,CHIP	56K	5%	1/10W
R296	1-216-043-91	RES,CHIP	560	5%	1/10W
		<TEST PIN>			
TP100	1-535-757-11	CHIP, CHECKER			
TP101	1-535-757-11	CHIP, CHECKER			
TP102	1-535-757-11	CHIP, CHECKER			
TP103	1-535-757-11	CHIP, CHECKER			
TP104	1-535-757-11	CHIP, CHECKER			
TP105	1-535-757-11	CHIP, CHECKER			
TP106	1-535-757-11	CHIP, CHECKER			
TP107	1-535-757-11	CHIP, CHECKER			
TP108	1-535-757-11	CHIP, CHECKER			
TP109	1-535-757-11	CHIP, CHECKER			
TP110	1-535-757-11	CHIP, CHECKER			
TP111	1-535-757-11	CHIP, CHECKER			
TP112	1-535-757-11	CHIP, CHECKER			
TP113	1-535-757-11	CHIP, CHECKER			
TP114	1-535-757-11	CHIP, CHECKER			
TP115	1-535-757-11	CHIP, CHECKER			
TP116	1-535-757-11	CHIP, CHECKER			
		<CRYSTAL>			
X100	1-781-730-21	VIBRATOR, CRYSTAL (16.2MHz)			

Ref.No.	Part No.	Description			Remark
**********					
	* A-1136-039-A	BB COMPL			
		**********			
		<CAPACITOR>			
C301	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C302	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C303	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C304	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C305	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C306	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C307	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C308	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C309	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C310	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C311	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C313	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C314	1-119-667-11	CERAMIC CHIP	22µF		10V
C316	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C317	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C318	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C319	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C320	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C321	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C322	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C323	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C324	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C325	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C326	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C327	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C328	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C329	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C330	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C331	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C332	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C333	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C334	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C335	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C336	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C337	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C338	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C339	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C340	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C341	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C342	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C343	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C344	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C345	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C346	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C347	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C348	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C349	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C350	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C351	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C352	1-119-667-11	CERAMIC CHIP	22µF		10V
C353	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C354	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C355	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C356	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C357	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C358	1-162-920-11	CERAMIC CHIP	27PF	5%	50V
C359	1-164-677-11	CERAMIC CHIP	0.033µF	10%	16V
C360	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C361	1-115-416-11	CERAMIC CHIP	1000PF	5%	25V
C362	1-162-920-11	CERAMIC CHIP	27PF	5%	50V

Ref.No.	Part No.	Description			Remark
C363	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C365	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C366	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C367	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C368	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C369	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C370	1-117-681-11	ELECT CHIP	100µF	20%	16V
C371	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C372	1-128-391-11	ELECT CHIP	330µF	20%	6.3V
C373	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C374	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C375	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C376	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C377	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C378	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C379	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C380	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C381	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C382	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C383	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C384	1-119-667-11	CERAMIC CHIP	22µF		10V
C385	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C386	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C387	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C388	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C389	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C391	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C392	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C393	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C394	1-119-667-11	CERAMIC CHIP	22µF		10V
C395	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C396	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C397	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C399	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C400	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C401	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C402	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C403	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C404	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C405	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C406	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C408	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C409	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C412	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C413	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C421	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C422	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C423	1-117-681-11	ELECT CHIP	100µF	20%	16V
		<CONNECTOR>			
CN300	1-778-465-11	SOCKET, CONNECTOR 20P			
CN301	* 1-785-306-21	CONNECTOR, BOARD TO BOARD70P			
CN303	* 1-785-306-21	CONNECTOR, BOARD TO BOARD70P			
CN304	1-694-649-11	TERMINAL BOARD ASSY, INPUT/OUT			
CN305	* 1-785-306-21	CONNECTOR, BOARD TO BOARD70P			
CN306	* 1-793-798-21	CONNECTOR, BOARD TO BOARD			
CN307	* 1-785-306-21	CONNECTOR, BOARD TO BOARD70P			
CN308	* 1-764-007-11	PIN, CONNECTOR (SMD) 12P			
CN309	* 1-793-798-21	CONNECTOR, BOARD TO BOARD			
CN310	* 1-695-223-21	PIN, CONNECTOR (SMD) 10P			
CN311	* 1-793-798-21	CONNECTOR, BOARD TO BOARD			
CN312	* 1-764-177-11	PIN, CONNECTOR (SMD)(1.5MM) 7P			

Ref.No.	Part No.	Description	Remark
		<DIODE>	
D300	8-719-024-77	DIODE HN1D03FU-TE85L	
D301	8-719-024-77	DIODE HN1D03FU-TE85L	
D302	8-719-024-77	DIODE HN1D03FU-TE85L	
D303	8-719-024-77	DIODE HN1D03FU-TE85L	
D314	8-719-024-77	DIODE HN1D03FU-TE85L	
D315	8-719-024-77	DIODE HN1D03FU-TE85L	
D316	8-719-073-01	DIODE MA111-(K8).S0	
D317	8-719-073-01	DIODE MA111-(K8).S0	
D318	8-719-977-95	DIODE DTZ-TT11-2.4B	
		<FERRITE BEAD>	
FB300	1-414-921-11	INDUCTOR CHIP	0µH
FB301	1-414-921-11	INDUCTOR CHIP	0µH
FB302	1-414-921-11	INDUCTOR CHIP	0µH
FB304	1-414-921-11	INDUCTOR CHIP	0µH
FB307	1-414-921-11	INDUCTOR CHIP	0µH
FB308	1-414-921-11	INDUCTOR CHIP	0µH
FB311	1-414-921-11	INDUCTOR CHIP	0µH
FB313	1-414-921-11	INDUCTOR CHIP	0µH
FB314	1-414-921-11	INDUCTOR CHIP	0µH
FB315	1-414-921-11	INDUCTOR CHIP	0µH
FB316	1-414-921-11	INDUCTOR CHIP	0µH
FB317	1-414-921-11	INDUCTOR CHIP	0µH
FB318	1-414-921-11	INDUCTOR CHIP	0µH
FB319	1-414-921-11	INDUCTOR CHIP	0µH
FB320	1-414-921-11	INDUCTOR CHIP	0µH
FB321	1-414-921-11	INDUCTOR CHIP	0µH
FB322	1-414-921-11	INDUCTOR CHIP	0µH
FB323	1-414-921-11	INDUCTOR CHIP	0µH
		<FILTER>	
FL302	1-239-899-21	FILTER, CHIP EMI	
		<IC>	
IC300	8-759-645-78	IC SII151	
IC301	8-759-523-96	IC TC74VHC86FT(EL)	
IC302	8-759-475-43	IC TC74LCX125FT(EL)	
IC304	8-759-645-12	IC AD9884AKS-140	
IC305	8-759-531-92	IC TC7WH04FU(TE12R)	
IC306	8-759-544-01	IC S-80828ANNP-EDR-T2	
IC307	8-759-475-43	IC TC74LCX125FT(EL)	
IC308	8-759-646-15	IC ST49C101ACF8-05-TR	
IC309	8-759-647-53	IC IMISM530AYB-D REV.T	
IC311	8-759-460-72	IC BA033FP-E2	
IC312	8-759-388-31	IC PQ20VZ1U	
IC313	8-759-598-12	IC LP2985IM5X-3.5	
IC314	* 8-759-655-74	IC MBM29LV400TC-70PFTN-SX1696	
IC315	8-759-645-48	IC IDT71V016S15PH-TL	
IC316	8-759-442-20	IC 24LC21AT/SN	
IC317	8-759-594-71	IC TC7SH14FU-TE85R	
IC318	8-759-523-79	IC TC74VHC02FT(EL)	
		<COIL>	
L300	1-410-992-11	INDUCTOR CHIP	0.82µH
L301	1-409-529-21	INDUCTOR	10µH
L302	1-410-989-11	INDUCTOR CHIP	0.47µH
L303	1-410-989-11	INDUCTOR CHIP	0.47µH
		<TRANSISTOR>	
Q302	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q303	8-729-230-49	TRANSISTOR 2SC2712-YG	

BB

Ref.No.	Part No.	Description			Remark
	<RESISTOR>				
R300	1-216-864-11	SHORT	0		
R301	1-216-864-11	SHORT	0		
R302	1-216-864-11	SHORT	0		
R303	1-216-864-11	SHORT	0		
R304	1-216-864-11	SHORT	0		
R305	1-216-864-11	SHORT	0		
R306	1-216-864-11	SHORT	0		
R307	1-216-864-11	SHORT	0		
R309	1-216-805-11	RES,CHIP	47	5%	1/16W
R310	1-216-801-11	RES,CHIP	22	5%	1/16W
R311	1-216-817-11	RES,CHIP	470	5%	1/16W
R313	1-216-833-91	RES,CHIP	10K	5%	1/16W
R314	1-216-805-11	RES,CHIP	47	5%	1/16W
R320	1-216-864-11	SHORT	0		
R322	1-216-864-11	SHORT	0		
R323	1-216-864-11	SHORT	0		
R325	1-216-864-11	SHORT	0		
R327	1-216-833-91	RES,CHIP	10K	5%	1/16W
R328	1-216-864-11	SHORT	0		
R329	1-216-864-11	SHORT	0		
R330	1-216-864-11	SHORT	0		
R331	1-218-285-11	RES,CHIP	75	5%	1/16W
R332	1-218-285-11	RES,CHIP	75	5%	1/16W
R333	1-218-285-11	RES,CHIP	75	5%	1/16W
R334	1-216-801-11	RES,CHIP	22	5%	1/16W
R335	1-216-801-11	RES,CHIP	22	5%	1/16W
R338	1-216-809-11	RES,CHIP	100	5%	1/16W
R339	1-216-833-91	RES,CHIP	10K	5%	1/16W
R340	1-218-696-11	METAL CHIP	1.5K	0.50%	1/16W
R341	1-216-805-11	RES,CHIP	47	5%	1/16W
R342	1-216-805-11	RES,CHIP	47	5%	1/16W
R343	1-216-801-11	RES,CHIP	22	5%	1/16W
R344	1-216-833-91	RES,CHIP	10K	5%	1/16W
R346	1-216-809-11	RES,CHIP	100	5%	1/16W
R347	1-216-809-11	RES,CHIP	100	5%	1/16W
R348	1-216-809-11	RES,CHIP	100	5%	1/16W
R349	1-216-809-11	RES,CHIP	100	5%	1/16W
R350	1-216-809-11	RES,CHIP	100	5%	1/16W
R353	1-216-833-91	RES,CHIP	10K	5%	1/16W
R354	1-216-827-11	RES,CHIP	3.3K	5%	1/16W
R355	1-216-827-11	RES,CHIP	3.3K	5%	1/16W
R356	1-216-833-91	RES,CHIP	10K	5%	1/16W
R357	1-216-833-91	RES,CHIP	10K	5%	1/16W
R358	1-216-833-91	RES,CHIP	10K	5%	1/16W
R359	1-216-833-91	RES,CHIP	10K	5%	1/16W
R360	1-216-821-11	RES,CHIP	1K	5%	1/16W
R362	1-216-864-11	SHORT	0		
R371	1-216-805-11	RES,CHIP	47	5%	1/16W
R372	1-216-805-11	RES,CHIP	47	5%	1/16W
R373	1-216-805-11	RES,CHIP	47	5%	1/16W
R387	1-216-864-11	SHORT	0		
R392	1-216-805-11	RES,CHIP	47	5%	1/16W
R393	1-216-805-11	RES,CHIP	47	5%	1/16W
R394	1-216-821-11	RES,CHIP	1K	5%	1/16W
R395	1-216-821-11	RES,CHIP	1K	5%	1/16W
R396	1-216-821-11	RES,CHIP	1K	5%	1/16W
R397	1-216-821-11	RES,CHIP	1K	5%	1/16W
R398	1-216-809-11	RES,CHIP	100	5%	1/16W
R399	1-216-809-11	RES,CHIP	100	5%	1/16W
R411	1-216-837-11	RES,CHIP	22K	5%	1/16W
R412	1-216-833-91	RES,CHIP	10K	5%	1/16W
R413	1-216-805-11	RES,CHIP	47	5%	1/16W
R414	1-216-805-11	RES,CHIP	47	5%	1/16W
R421	1-216-809-11	RES,CHIP	100	5%	1/16W
R423	1-216-833-91	RES,CHIP	10K	5%	1/16W
R424	1-216-821-11	RES,CHIP	1K	5%	1/16W
R425	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R426	1-216-809-11	RES,CHIP	100	5%	1/16W
R427	1-216-809-11	RES,CHIP	100	5%	1/16W
R428	1-216-833-91	RES,CHIP	10K	5%	1/16W
R429	1-216-833-91	RES,CHIP	10K	5%	1/16W
R430	1-216-805-11	RES,CHIP	47	5%	1/16W
R433	1-216-801-11	RES,CHIP	22	5%	1/16W
R434	1-216-801-11	RES,CHIP	22	5%	1/16W
R435	1-216-833-91	RES,CHIP	10K	5%	1/16W
R436	1-216-833-91	RES,CHIP	10K	5%	1/16W
R438	1-216-801-11	RES,CHIP	22	5%	1/16W
R439	1-216-801-11	RES,CHIP	22	5%	1/16W
R441	1-216-851-11	RES,CHIP	330K	5%	1/16W
R442	1-216-845-11	RES,CHIP	100K	5%	1/16W
R443	1-216-805-11	RES,CHIP	47	5%	1/16W
R445	1-216-809-11	RES,CHIP	100	5%	1/16W
R446	1-216-809-11	RES,CHIP	100	5%	1/16W
R450	1-216-833-91	RES,CHIP	10K	5%	1/16W
R451	1-216-833-91	RES,CHIP	10K	5%	1/16W
R452	1-216-809-11	RES,CHIP	100	5%	1/16W
R454	1-216-833-91	RES,CHIP	10K	5%	1/16W

	<NETWORK>	
RB301	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB324	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB325	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB326	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB327	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB328	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB329	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB330	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB331	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB332	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB333	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB334	1-239-409-11	RES, CHIP NETWORK 47 (3216)
RB335	1-239-409-11	RES, CHIP NETWORK 47 (3216)
	<SWITCH>	
S300	1-570-245-11	SWITCH, MICRO (FILTER COVER)
	<TEST PIN>	
TP303	1-535-757-11	CHIP, CHECKER
TP321	1-535-757-11	CHIP, CHECKER
TP322	1-535-757-11	CHIP, CHECKER
TP323	1-535-757-11	CHIP, CHECKER
TP324	1-535-757-11	CHIP, CHECKER
TP325	1-535-757-11	CHIP, CHECKER
TP326	1-535-757-11	CHIP, CHECKER
	<CRYSTAL>	
X300	1-781-774-21	VIBRATOR, CRYSTAL (18.0MHz)
X301	1-781-665-21	VIBRATOR, CRYSTAL (34.0MHz)

Ref.No.	Part No.	Description			Remark
**********					
	* A-1136-040-A	BC COMPL			
		**********			
		<CAPACITOR>			
C500	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C501	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C505	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C506	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C507	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C510	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C511	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C514	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C515	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C516	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C517	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C518	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C519	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C521	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C522	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C523	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C524	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C525	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C526	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C528	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C529	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C533	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C534	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C535	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C536	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C537	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C545	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C546	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C548	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
		<CONNECTOR>			
CN500	* 1-793-797-21	CONNECTOR, BOARD TO BOARD			
CN501	* 1-785-305-21	CONNECTOR, BOARD TO BOARD 70P			
CN502	* 1-793-797-21	CONNECTOR, BOARD TO BOARD			
CN503	1-573-806-21	PIN, CONNECTOR (1.5MM) (SMD)6P			
		<DIODE>			
D500	8-719-985-01	DIODE LM385M-1.2			
D501	8-719-073-01	DIODE MA111-(K8).S0			
		<FERRITE BEAD>			
FB500	1-414-921-11	INDUCTOR CHIP	0µH		
FB501	1-414-921-11	INDUCTOR CHIP	0µH		
FB502	1-414-921-11	INDUCTOR CHIP	0µH		
FB504	1-414-921-11	INDUCTOR CHIP	0µH		
FB505	1-414-921-11	INDUCTOR CHIP	0µH		
		<FILTER>			
FL501	1-234-011-11	FILTER, EMI			
FL502	1-234-011-11	FILTER, EMI			
FL503	1-234-011-11	FILTER, EMI			
FL507	1-239-899-21	FILTER, CHIP EMI			
		<IC>			
IC500	8-759-475-35	IC TC74LCX04FT(EL)			
IC501	8-759-649-90	IC W152-2G-E2			
IC502	8-759-592-38	IC CXD9512Q			
IC503	8-759-492-55	IC M24C64-WMN6T			
IC505	8-759-475-43	IC TC74LCX125FT(EL)			
IC506	8-759-645-13	IC ADV7123KST140			
IC511	8-759-544-01	IC S-80828ANNP-EDR-T2			
		<TRANSISTOR>			
Q500	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q501	8-729-140-63	TRANSISTOR 2SA1611-M5M6			
		<RESISTOR>			
R500	1-216-805-11	RES,CHIP	47	5%	1/16W
R501	1-216-805-11	RES,CHIP	47	5%	1/16W
R503	1-216-805-11	RES,CHIP	47	5%	1/16W
R504	1-216-841-11	RES,CHIP	47K	5%	1/16W
R505	1-216-864-11	SHORT	0		
R506	1-216-841-11	RES,CHIP	47K	5%	1/16W
R507	1-216-864-11	SHORT	0		
R508	1-216-833-91	RES,CHIP	10K	5%	1/16W
R509	1-216-805-11	RES,CHIP	47	5%	1/16W
R510	1-216-805-11	RES,CHIP	47	5%	1/16W
R511	1-216-805-11	RES,CHIP	47	5%	1/16W
R512	1-216-805-11	RES,CHIP	47	5%	1/16W
R513	1-216-809-11	RES,CHIP	100	5%	1/16W
R514	1-216-809-11	RES,CHIP	100	5%	1/16W
R517	1-216-841-11	RES,CHIP	47K	5%	1/16W
R518	1-216-821-11	RES,CHIP	1K	5%	1/16W
R519	1-216-827-11	RES,CHIP	3.3K	5%	1/16W
R520	1-216-827-11	RES,CHIP	3.3K	5%	1/16W
R521	1-216-864-11	SHORT	0		
R526	1-216-831-11	RES,CHIP	6.8K	5%	1/16W
R527	1-216-831-11	RES,CHIP	6.8K	5%	1/16W
R528	1-216-821-11	RES,CHIP	1K	5%	1/16W
R529	1-216-864-11	SHORT	0		
R530	1-216-805-11	RES,CHIP	47	5%	1/16W
R531	1-216-805-11	RES,CHIP	47	5%	1/16W
R534	1-216-805-11	RES,CHIP	47	5%	1/16W
R537	1-216-827-11	RES,CHIP	3.3K	5%	1/16W
R540	1-216-817-11	RES,CHIP	470	5%	1/16W
R541	1-218-285-11	RES,CHIP	75	5%	1/16W
R542	1-218-285-11	RES,CHIP	75	5%	1/16W
R543	1-218-285-11	RES,CHIP	75	5%	1/16W
R548	1-216-827-11	RES,CHIP	3.3K	5%	1/16W
R560	1-216-864-11	SHORT	0		
R561	1-216-864-11	SHORT	0		
R562	1-216-833-91	RES,CHIP	10K	5%	1/16W
R563	1-216-831-11	RES,CHIP	6.8K	5%	1/16W
R565	1-216-833-91	RES,CHIP	10K	5%	1/16W
R568	1-216-831-11	RES,CHIP	6.8K	5%	1/16W
R569	1-216-831-11	RES,CHIP	6.8K	5%	1/16W
		<NETWORK>			
RB501	1-239-409-11	RES, CHIP NETWORK 47 (3216)			
RB502	1-239-409-11	RES, CHIP NETWORK 47 (3216)			
RB503	1-239-409-11	RES, CHIP NETWORK 47 (3216)			
RB504	1-239-409-11	RES, CHIP NETWORK 47 (3216)			
RB505	1-239-409-11	RES, CHIP NETWORK 47 (3216)			
RB506	1-239-409-11	RES, CHIP NETWORK 47 (3216)			
RB507	1-239-409-11	RES, CHIP NETWORK 47 (3216)			
		<SWITCH>			
S500	1-571-674-11	SWITCH, SLIDE			

BC F QA

Ref.No.	Part No.	Description				Remark
		<TEST PIN>				
TP501	1-535-757-11	CHIP, CHECKER				
TP502	1-535-757-11	CHIP, CHECKER				
TP503	1-535-757-11	CHIP, CHECKER				
TP504	1-535-757-11	CHIP, CHECKER				
TP505	1-535-757-11	CHIP, CHECKER				
TP506	1-535-757-11	CHIP, CHECKER				
**********						
	* A-1241-395-A	F MOUNT				
		**********				
	1-533-223-11	HOLDER, FUSE				
	* 4-374-846-01	COVER, CAPACITOR, CAP TYPE				
		<CAPACITOR>				
C2002	⚠1-107-533-11	FILM	1µF	20%	275V	
C2003	⚠1-115-166-11	FILM	0.22µF	20%	275V	
		<CONNECTOR>				
CN2000	* 1-900-249-66	TERMINL ASSY, FASTEN				
CN2002	* 1-900-249-67	CONNECTOR ASSY, RELAY (F) 3P				
		<FUSE>				
F2000	⚠1-576-233-11	FUSE (H.B.C.) (6.3A/250V)				
		<COIL>				
L2000	⚠1-415-967-11	INDUCTOR	5mmH			
		<RESISTOR>				
R2000	⚠1-202-847-00	SOLID	560K	20%	1/2W	
		<VARISTOR>				
VD2000	⚠1-801-073-41	VARISTOR ERZV14D471				
**********						
	* A-1275-178-A	QA COMPL				
		**********				
		<CAPACITOR>				
C801	1-124-778-00	ELECT CHIP	22µF	20%	6.3V	
C802	1-110-666-11	ELECT CHIP	22µF	20%	6.3V	
C803	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C804	1-128-453-21	ELECT CHIP	47µF	20%	6.3V	
C805	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C806	1-113-701-21	ELECT CHIP	22µF	20%	16V	
C807	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C808	1-126-204-11	ELECT CHIP	47µF	20%	16V	
C809	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C810	1-126-205-11	ELECT CHIP	47µF	20%	6.3V	
C811	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C812	1-126-205-11	ELECT CHIP	47µF	20%	6.3V	
C813	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C816	1-125-817-11	CERAMIC CHIP	10µF	10%	6.3V	
C817	1-125-817-11	CERAMIC CHIP	10µF	10%	6.3V	
C820	1-109-982-11	CERAMIC CHIP	1µF	10%	10V	
C821	1-164-344-11	CERAMIC CHIP	0.068µF	10%	25V	
C822	1-128-004-11	ELECT CHIP	10µF	20%	16V	
C824	1-163-259-91	CERAMIC CHIP	220PF	5%	50V	
C825	1-126-205-11	ELECT CHIP	47µF	20%	6.3V	
C826	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C827	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C828	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C829	1-124-778-00	ELECT CHIP	22µF	20%	6.3V	
C830	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C831	1-163-245-11	CERAMIC CHIP	56PF	5%	50V	
C832	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C833	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C834	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C835	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C836	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C837	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C838	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C839	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V	
C840	1-124-778-00	ELECT CHIP	22µF	20%	6.3V	
C841	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V	
C842	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C843	1-126-204-11	ELECT CHIP	47µF	20%	16V	
C844	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C845	1-126-204-11	ELECT CHIP	47µF	20%	16V	
C846	1-126-204-11	ELECT CHIP	47µF	20%	16V	
C847	1-126-204-11	ELECT CHIP	47µF	20%	16V	
C848	1-126-205-11	ELECT CHIP	47µF	20%	6.3V	
C849	1-124-778-00	ELECT CHIP	22µF	20%	6.3V	
C850	1-124-778-00	ELECT CHIP	22µF	20%	6.3V	
C851	1-128-453-21	ELECT CHIP	47µF	20%	6.3V	
C852	1-128-453-21	ELECT CHIP	47µF	20%	6.3V	
C853	1-128-453-21	ELECT CHIP	47µF	20%	6.3V	
C854	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C855	1-128-004-11	ELECT CHIP	10µF	20%	16V	
C856	1-163-217-11	CERAMIC CHIP	1PF	0.25PF	50V	
C857	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C858	1-128-004-11	ELECT CHIP	10µF	20%	16V	
C859	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C860	1-128-004-11	ELECT CHIP	10µF	20%	16V	
C861	1-163-217-11	CERAMIC CHIP	1PF	0.25PF	50V	
C862	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C863	1-128-004-11	ELECT CHIP	10µF	20%	16V	
C864	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C865	1-128-004-11	ELECT CHIP	10µF	20%	16V	
C866	1-163-217-11	CERAMIC CHIP	1PF	0.25PF	50V	
C867	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C868	1-128-004-11	ELECT CHIP	10µF	20%	16V	
C869	1-128-004-11	ELECT CHIP	10µF	20%	16V	
C870	1-128-004-11	ELECT CHIP	10µF	20%	16V	
C871	1-128-399-11	ELECT CHIP	330µF	20%	16V	
C872	1-128-399-11	ELECT CHIP	330µF	20%	16V	
C873	1-128-399-11	ELECT CHIP	330µF	20%	16V	
C874	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C875	1-128-004-11	ELECT CHIP	10µF	20%	16V	
C876	1-128-004-11	ELECT CHIP	10µF	20%	16V	
C877	1-128-004-11	ELECT CHIP	10µF	20%	16V	
C878	1-128-013-11	ELECT CHIP	1µF	20%	50V	
C879	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C880	1-126-395-11	ELECT CHIP	22µF	20%	16V	
C881	1-126-395-11	ELECT CHIP	22µF	20%	16V	
C882	1-126-395-11	ELECT CHIP	22µF	20%	16V	
C883	1-128-004-11	ELECT CHIP	10µF	20%	16V	
C884	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C885	1-128-013-11	ELECT CHIP	1µF	20%	50V	
C886	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C887	1-126-204-11	ELECT CHIP	47µF	20%	16V	

Ref.No.	Part No.	Description			Remark
C888	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C891	1-124-778-00	ELECT CHIP	22µF	20%	6.3V
C892	1-124-778-00	ELECT CHIP	22µF	20%	6.3V
C893	1-110-666-11	ELECT CHIP	22µF	20%	6.3V
C894	1-110-666-11	ELECT CHIP	22µF	20%	6.3V
C895	1-110-666-11	ELECT CHIP	22µF	20%	6.3V
C896	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C897	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C898	1-110-666-11	ELECT CHIP	22µF	20%	6.3V
C899	1-110-666-11	ELECT CHIP	22µF	20%	6.3V
C900	1-124-778-00	ELECT CHIP	22µF	20%	6.3V
C901	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C902	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C903	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C904	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C905	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C906	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C907	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C908	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C909	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C911	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C912	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C914	1-128-004-11	ELECT CHIP	10µF	20%	16V
C915	1-128-004-11	ELECT CHIP	10µF	20%	16V
C916	1-128-004-11	ELECT CHIP	10µF	20%	16V
C917	1-128-004-11	ELECT CHIP	10µF	20%	16V
C920	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C921	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C922	1-128-004-11	ELECT CHIP	10µF	20%	16V
C923	1-128-004-11	ELECT CHIP	10µF	20%	16V
C924	1-128-004-11	ELECT CHIP	10µF	20%	16V
C925	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C926	1-117-681-11	ELECT CHIP	100µF	20%	16V
C927	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C928	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C929	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C930	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C931	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C936	1-126-395-11	ELECT CHIP	22µF	20%	16V
C937	1-163-023-00	CERAMIC CHIP	0.015µF	10%	50V
C938	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C939	1-128-004-11	ELECT CHIP	10µF	20%	16V
C940	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C941	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C942	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C943	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C944	1-126-395-11	ELECT CHIP	22µF	20%	16V
C945	1-126-395-11	ELECT CHIP	22µF	20%	16V
C946	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C947	1-126-395-11	ELECT CHIP	22µF	20%	16V
C948	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C949	1-110-666-11	ELECT CHIP	22µF	20%	6.3V
C950	1-128-004-11	ELECT CHIP	10µF	20%	16V
C951	1-126-204-11	ELECT CHIP	47µF	20%	16V
C952	1-128-004-11	ELECT CHIP	10µF	20%	16V
C953	1-128-065-11	ELECT CHIP	68µF	20%	10V
C954	1-128-004-11	ELECT CHIP	10µF	20%	16V
C955	1-128-065-11	ELECT CHIP	68µF	20%	10V
C958	1-110-666-11	ELECT CHIP	22µF	20%	6.3V
C959	1-110-666-11	ELECT CHIP	22µF	20%	6.3V
C960	1-128-453-21	ELECT CHIP	47µF	20%	6.3V
C961	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C962	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C963	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C964	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C965	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C966	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C967	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C968	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C969	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C970	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C971	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C972	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C973	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C974	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C975	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C976	1-164-506-11	CERAMIC CHIP	4.7µF		16V
C977	1-164-506-11	CERAMIC CHIP	4.7µF		16V
C978	1-113-701-21	ELECT CHIP	22µF	20%	16V
C979	1-164-506-11	CERAMIC CHIP	4.7µF		16V
C980	1-128-453-21	ELECT CHIP	47µF	20%	6.3V
C981	1-113-701-21	ELECT CHIP	22µF	20%	16V
C982	1-128-004-11	ELECT CHIP	10µF	20%	16V
C983	1-128-004-11	ELECT CHIP	10µF	20%	16V
C984	1-128-004-11	ELECT CHIP	10µF	20%	16V

<CONNECTOR>

CN801	*	1-785-305-21	CONNECTOR, BOARD TO BOARD 70P
CN802	*	1-785-305-21	CONNECTOR, BOARD TO BOARD 70P
CN803	*	1-793-798-21	CONNECTOR, BOARD TO BOARD
CN804	*	1-793-798-21	CONNECTOR, BOARD TO BOARD
CN805	*	1-793-798-21	CONNECTOR, BOARD TO BOARD
CN806	*	1-793-798-21	CONNECTOR, BOARD TO BOARD
CN807	*	1-580-057-11	PIN, CONNECTOR (SMD) 4P
CN808	*	1-580-055-21	PIN, CONNECTOR (SMD) 2P
CN809	*	1-580-056-21	PIN, CONNECTOR (SMD) 3P
CN810	*	1-760-388-11	CONNECTOR PIN (SMD) 9 PIN

<DIODE>

D801	8-719-800-76	DIODE 1SS226
D802	8-719-800-76	DIODE 1SS226
D803	8-719-800-76	DIODE 1SS226
D804	8-719-800-76	DIODE 1SS226
D805	8-719-800-76	DIODE 1SS226
D807	8-719-800-76	DIODE 1SS226
D808	8-719-800-76	DIODE 1SS226
D809	8-719-800-76	DIODE 1SS226
D810	8-719-800-76	DIODE 1SS226
D811	8-719-800-76	DIODE 1SS226
D812	8-719-800-76	DIODE 1SS226
D813	8-719-914-43	DIODE DAN202K
D814	8-719-800-76	DIODE 1SS226
D815	8-719-914-43	DIODE DAN202K
D816	8-719-800-76	DIODE 1SS226
D817	8-719-800-76	DIODE 1SS226
D818	8-719-800-76	DIODE 1SS226
D819	8-719-800-76	DIODE 1SS226
D820	8-719-800-76	DIODE 1SS226
D821	8-719-800-76	DIODE 1SS226
D822	8-719-800-76	DIODE 1SS226
D823	8-719-800-76	DIODE 1SS226
D824	8-719-158-37	DIODE RD9.1SB2
D825	8-719-158-37	DIODE RD9.1SB2
D826	8-719-988-61	DIODE 1SS355TE-17
D827	8-719-988-61	DIODE 1SS355TE-17
D831	8-719-422-12	DIODE MA8039
D832	8-719-422-12	DIODE MA8039
D833	8-719-158-15	DIODE RD5.6SB
D834	8-719-422-12	DIODE MA8039
D835	8-719-422-12	DIODE MA8039
D836	8-719-158-37	DIODE RD9.1SB2

Ref.No.	Part No.	Description	Remark
D837	8-719-158-37	DIODE RD9.1SB2	
D838	8-719-158-37	DIODE RD9.1SB2	
D839	8-719-158-37	DIODE RD9.1SB2	
D840	8-719-158-37	DIODE RD9.1SB2	
D841	8-719-158-37	DIODE RD9.1SB2	
D842	8-719-036-76	DIODE RD3.3SB2-T1	
D843	8-719-914-43	DIODE DAN202K	
D844	8-719-914-43	DIODE DAN202K	
D845	8-719-036-76	DIODE RD3.3SB2-T1	
D846	8-719-158-37	DIODE RD9.1SB2	
D847	8-719-158-37	DIODE RD9.1SB2	
D848	8-719-158-37	DIODE RD9.1SB2	
D871	8-719-058-24	DIODE RB501V-40TE-17	
D872	8-719-058-24	DIODE RB501V-40TE-17	
	<FERRITE BEAD>		
FB801	1-414-234-22	INDUCTOR CHIP	0µH
FB802	1-414-234-22	INDUCTOR CHIP	0µH
FB803	1-414-234-22	INDUCTOR CHIP	0µH
FB804	1-414-234-22	INDUCTOR CHIP	0µH
	<FILTER>		
FL802	1-239-466-21	FILTER, EMI	
FL803	1-239-466-21	FILTER, EMI	
FL804	1-469-577-21	INDUCTOR	0µH
	<IC>		
IC801	8-759-491-93	IC EL4332CS-TE2	
IC802	8-759-646-02	IC M52347FP-TE	
IC803	8-759-174-16	IC TC74VHC244F	
IC804	8-759-186-43	IC TC74VHC123AF	
IC805	8-759-457-53	IC GS1881-CTA	
IC806	8-752-072-94	IC CXA1875AM-T4	
IC807	8-752-072-94	IC CXA1875AM-T4	
IC808	8-759-542-11	IC MAX4223ESA-TG068	
IC809	8-759-542-11	IC MAX4223ESA-TG068	
IC810	8-759-542-11	IC MAX4223ESA-TG068	
IC811	8-759-523-01	IC TC74HC4052AFT(EL)	
IC812	8-759-700-78	IC NJM082M	
IC813	8-759-092-82	IC SN75157PS-ELL2000	
IC814	8-759-090-19	IC SN75453BPS	
IC816	8-759-460-79	IC BA09FP-E2	
IC817	8-759-157-17	IC PQ05SZ1U	
IC818	8-759-539-89	IC LM2990SX-5.0	
IC819	8-752-074-42	IC CXA1946AR	
IC821	8-759-983-69	IC LM358PS	
IC822	8-759-655-59	IC UPD16875G-E2	
IC823	8-759-422-82	IC HA4314BCB-E2	
IC824	8-759-422-82	IC HA4314BCB-E2	
IC825	8-759-422-82	IC HA4314BCB-E2	
	<COIL>		
L801	1-414-235-22	INDUCTOR CHIP	0µH
L802	1-412-058-11	INDUCTOR CHIP	10µH
L803	1-412-058-11	INDUCTOR CHIP	10µH
L804	1-412-058-11	INDUCTOR CHIP	10µH
L805	1-412-058-11	INDUCTOR CHIP	10µH
L808	1-412-363-21	FERRITE	0µH
L809	1-412-363-21	FERRITE	0µH
L810	1-412-363-21	FERRITE	0µH
L811	1-412-363-21	FERRITE	0µH
L812	1-412-363-21	FERRITE	0µH
L813	1-412-363-21	FERRITE	0µH
L814	1-412-363-21	FERRITE	0µH
L815	1-412-363-21	FERRITE	0µH
L816	1-414-235-22	INDUCTOR CHIP	0µH
L817	1-412-060-11	INDUCTOR CHIP	22µH
	<TRANSISTOR>		
Q802	8-729-900-53	TRANSISTOR DTC114EK	
Q805	8-729-112-65	TRANSISTOR 2SA1462-Y33	
Q808	8-729-900-53	TRANSISTOR DTC114EK	
Q809	8-729-216-22	TRANSISTOR 2SA1162-G	
Q810	8-729-900-53	TRANSISTOR DTC114EK	
Q811	8-729-107-31	TRANSISTOR 2SC3545-T1T44	
Q812	8-729-107-31	TRANSISTOR 2SC3545-T1T44	
Q813	8-729-107-31	TRANSISTOR 2SC3545-T1T44	
Q821	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q822	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q823	8-729-216-22	TRANSISTOR 2SA1162-G	
Q824	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q825	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q826	8-729-216-22	TRANSISTOR 2SA1162-G	
Q831	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q832	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q833	8-729-216-22	TRANSISTOR 2SA1162-G	
Q834	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q835	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q836	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q837	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q838	8-729-230-49	TRANSISTOR 2SC2712-YG	
	<RESISTOR>		
R801	1-216-631-11	METAL CHIP	150 0.50% 1/10W
R802	1-216-631-11	METAL CHIP	150 0.50% 1/10W
R803	1-216-049-91	RES,CHIP	1K 5% 1/10W
R804	1-216-631-11	METAL CHIP	150 0.50% 1/10W
R805	1-216-631-11	METAL CHIP	150 0.50% 1/10W
R806	1-216-631-11	METAL CHIP	150 0.50% 1/10W
R807	1-216-631-11	METAL CHIP	150 0.50% 1/10W
R808	1-216-013-00	RES,CHIP	33 5% 1/10W
R809	1-216-043-91	RES,CHIP	560 5% 1/10W
R810	1-216-631-11	METAL CHIP	150 0.50% 1/10W
R811	1-216-631-11	METAL CHIP	150 0.50% 1/10W
R812	1-216-631-11	METAL CHIP	150 0.50% 1/10W
R813	1-216-631-11	METAL CHIP	150 0.50% 1/10W
R814	1-216-631-11	METAL CHIP	150 0.50% 1/10W
R815	1-216-631-11	METAL CHIP	150 0.50% 1/10W
R816	1-216-013-00	RES,CHIP	33 5% 1/10W
R817	1-216-043-91	RES,CHIP	560 5% 1/10W
R818	1-216-049-91	RES,CHIP	1K 5% 1/10W
R819	1-216-025-91	RES,CHIP	100 5% 1/10W
R821	1-216-025-91	RES,CHIP	100 5% 1/10W
R822	1-216-095-00	RES,CHIP	82K 5% 1/10W
R823	1-216-089-91	RES,CHIP	47K 5% 1/10W
R824	1-216-025-91	RES,CHIP	100 5% 1/10W
R825	1-216-025-91	RES,CHIP	100 5% 1/10W
R826	1-216-089-91	RES,CHIP	47K 5% 1/10W
R827	1-216-079-00	RES,CHIP	18K 5% 1/10W
R828	1-216-071-00	RES,CHIP	8.2K 5% 1/10W
R829	1-216-625-11	METAL CHIP	82 0.50% 1/10W
R830	1-216-059-00	RES,CHIP	2.7K 5% 1/10W
R831	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R832	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R833	1-216-025-91	RES,CHIP	100 5% 1/10W
R834	1-216-095-00	RES,CHIP	82K 5% 1/10W
R835	1-216-089-91	RES,CHIP	47K 5% 1/10W
R836	1-216-089-91	RES,CHIP	47K 5% 1/10W

Ref.No.	Part No.	Description			Remark
R837	1-216-095-00	RES,CHIP	82K	5%	1/10W
R838	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R839	1-216-095-00	RES,CHIP	82K	5%	1/10W
R840	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R841	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R842	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R843	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R845	1-216-091-00	RES,CHIP	56K	5%	1/10W
R846	1-216-666-11	METAL CHIP	4.3K	0.50%	1/10W
R847	1-216-073-00	RES,CHIP	10K	5%	1/10W
R848	1-216-073-00	RES,CHIP	10K	5%	1/10W
R849	1-216-073-00	RES,CHIP	10K	5%	1/10W
R850	1-216-690-11	METAL CHIP	43K	0.50%	1/10W
R851	1-216-073-00	RES,CHIP	10K	5%	1/10W
R853	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R854	1-216-629-11	METAL CHIP	120	0.50%	1/10W
R855	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R856	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R857	1-216-025-91	RES,CHIP	100	5%	1/10W
R858	1-216-025-91	RES,CHIP	100	5%	1/10W
R859	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R860	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R861	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R862	1-216-025-91	RES,CHIP	100	5%	1/10W
R863	1-216-049-91	RES,CHIP	1K	5%	1/10W
R864	1-216-049-91	RES,CHIP	1K	5%	1/10W
R865	1-216-025-91	RES,CHIP	100	5%	1/10W
R866	1-218-767-11	METAL CHIP	430K	0.50%	1/10W
R867	1-216-025-91	RES,CHIP	100	5%	1/10W
R868	1-216-025-91	RES,CHIP	100	5%	1/10W
R869	1-216-025-91	RES,CHIP	100	5%	1/10W
R870	1-216-025-91	RES,CHIP	100	5%	1/10W
R871	1-216-025-91	RES,CHIP	100	5%	1/10W
R872	1-216-025-91	RES,CHIP	100	5%	1/10W
R873	1-216-025-91	RES,CHIP	100	5%	1/10W
R874	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R875	1-216-025-91	RES,CHIP	100	5%	1/10W
R876	1-216-025-91	RES,CHIP	100	5%	1/10W
R877	1-216-025-91	RES,CHIP	100	5%	1/10W
R878	1-216-073-00	RES,CHIP	10K	5%	1/10W
R879	1-216-073-00	RES,CHIP	10K	5%	1/10W
R880	1-216-073-00	RES,CHIP	10K	5%	1/10W
R881	1-216-073-00	RES,CHIP	10K	5%	1/10W
R882	1-216-073-00	RES,CHIP	10K	5%	1/10W
R883	1-216-025-91	RES,CHIP	100	5%	1/10W
R884	1-216-025-91	RES,CHIP	100	5%	1/10W
R885	1-216-025-91	RES,CHIP	100	5%	1/10W
R886	1-216-025-91	RES,CHIP	100	5%	1/10W
R887	1-216-025-91	RES,CHIP	100	5%	1/10W
R888	1-216-025-91	RES,CHIP	100	5%	1/10W
R889	1-216-073-00	RES,CHIP	10K	5%	1/10W
R890	1-216-073-00	RES,CHIP	10K	5%	1/10W
R891	1-216-073-00	RES,CHIP	10K	5%	1/10W
R894	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R895	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R897	1-216-295-91	SHORT	0		
R899	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R900	1-216-017-91	RES,CHIP	47	5%	1/10W
R901	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R902	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R903	1-216-025-91	RES,CHIP	100	5%	1/10W
R904	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R905	1-216-017-91	RES,CHIP	47	5%	1/10W
R906	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R907	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R908	1-216-025-91	RES,CHIP	100	5%	1/10W
R909	1-216-063-91	RES,CHIP	3.9K	5%	1/10W

Ref.No.	Part No.	Description			Remark
R910	1-216-017-91	RES,CHIP	47	5%	1/10W
R911	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R912	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R913	1-216-025-91	RES,CHIP	100	5%	1/10W
R914	1-216-049-91	RES,CHIP	1K	5%	1/10W
R915	1-216-013-00	RES,CHIP	33	5%	1/10W
R916	1-216-043-91	RES,CHIP	560	5%	1/10W
R917	1-216-029-00	RES,CHIP	150	5%	1/10W
R918	1-216-029-00	RES,CHIP	150	5%	1/10W
R919	1-216-029-00	RES,CHIP	150	5%	1/10W
R920	1-216-029-00	RES,CHIP	150	5%	1/10W
R921	1-216-029-00	RES,CHIP	150	5%	1/10W
R922	1-216-029-00	RES,CHIP	150	5%	1/10W
R923	1-216-025-91	RES,CHIP	100	5%	1/10W
R924	1-216-025-91	RES,CHIP	100	5%	1/10W
R925	1-216-095-00	RES,CHIP	82K	5%	1/10W
R926	1-216-095-00	RES,CHIP	82K	5%	1/10W
R927	1-216-025-91	RES,CHIP	100	5%	1/10W
R928	1-216-095-00	RES,CHIP	82K	5%	1/10W
R929	1-216-095-00	RES,CHIP	82K	5%	1/10W
R930	1-216-025-91	RES,CHIP	100	5%	1/10W
R931	1-216-025-91	RES,CHIP	100	5%	1/10W
R932	1-216-025-91	RES,CHIP	100	5%	1/10W
R941	1-216-025-91	RES,CHIP	100	5%	1/10W
R942	1-216-089-91	RES,CHIP	47K	5%	1/10W
R943	1-216-089-91	RES,CHIP	47K	5%	1/10W
R944	1-216-001-00	RES,CHIP	10	5%	1/10W
R945	1-216-295-91	SHORT	0		
R946	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R947	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R948	1-216-001-00	RES,CHIP	10	5%	1/10W
R949	1-216-295-91	SHORT	0		
R950	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R951	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R952	1-216-001-00	RES,CHIP	10	5%	1/10W
R953	1-216-295-91	SHORT	0		
R954	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R955	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R956	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R957	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R958	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R959	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R960	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R961	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R962	1-216-049-91	RES,CHIP	1K	5%	1/10W
R963	1-216-089-91	RES,CHIP	47K	5%	1/10W
R964	1-216-089-91	RES,CHIP	47K	5%	1/10W
R965	1-216-089-91	RES,CHIP	47K	5%	1/10W
R966	1-216-095-00	RES,CHIP	82K	5%	1/10W
R967	1-216-073-00	RES,CHIP	10K	5%	1/10W
R968	1-216-073-00	RES,CHIP	10K	5%	1/10W
R969	1-216-025-91	RES,CHIP	100	5%	1/10W
R970	1-216-041-00	RES,CHIP	470	5%	1/10W
R971	1-216-097-91	RES,CHIP	100K	5%	1/10W
R972	1-216-095-00	RES,CHIP	82K	5%	1/10W
R973	1-216-089-91	RES,CHIP	47K	5%	1/10W
R974	1-216-089-91	RES,CHIP	47K	5%	1/10W
R975	1-216-017-91	RES,CHIP	47	5%	1/10W
R976	1-216-081-00	RES,CHIP	22K	5%	1/10W
R977	1-216-081-00	RES,CHIP	22K	5%	1/10W
R978	1-216-025-91	RES,CHIP	100	5%	1/10W
R979	1-216-049-91	RES,CHIP	1K	5%	1/10W
R980	1-216-095-00	RES,CHIP	82K	5%	1/10W
R981	1-216-101-00	RES,CHIP	150K	5%	1/10W
R982	1-216-099-00	RES,CHIP	120K	5%	1/10W
R983	1-216-095-00	RES,CHIP	82K	5%	1/10W

QA QC

Ref.No.	Part No.	Description			Remark
R984	1-216-013-00	RES,CHIP	33	5%	1/10W
R985	1-216-013-00	RES,CHIP	33	5%	1/10W
R987	1-216-001-00	RES,CHIP	10	5%	1/10W
R988	1-216-186-00	RES,CHIP	330	5%	1/8W
R989	1-216-186-00	RES,CHIP	330	5%	1/8W
R990	1-216-017-91	RES,CHIP	47	5%	1/10W
R991	1-216-186-00	RES,CHIP	330	5%	1/8W
R992	1-216-186-00	RES,CHIP	330	5%	1/8W
R993	1-216-017-91	RES,CHIP	47	5%	1/10W
R994	1-216-017-91	RES,CHIP	47	5%	1/10W
R995	1-216-017-91	RES,CHIP	47	5%	1/10W
R997	1-216-025-91	RES,CHIP	100	5%	1/10W
R998	1-216-025-91	RES,CHIP	100	5%	1/10W
R999	1-216-025-91	RES,CHIP	100	5%	1/10W
R1000	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1001	1-216-025-91	RES,CHIP	100	5%	1/10W
R1002	1-216-025-91	RES,CHIP	100	5%	1/10W
R1003	1-216-025-91	RES,CHIP	100	5%	1/10W
R1004	1-216-025-91	RES,CHIP	100	5%	1/10W
R1005	1-216-025-91	RES,CHIP	100	5%	1/10W
R1006	1-216-095-00	RES,CHIP	82K	5%	1/10W
R1007	1-216-025-91	RES,CHIP	100	5%	1/10W
R1008	1-216-095-00	RES,CHIP	82K	5%	1/10W
R1009	1-216-095-00	RES,CHIP	82K	5%	1/10W
R1010	1-216-095-00	RES,CHIP	82K	5%	1/10W
R1011	1-216-017-91	RES,CHIP	47	5%	1/10W
R1013	1-216-095-00	RES,CHIP	82K	5%	1/10W
R1014	1-216-025-91	RES,CHIP	100	5%	1/10W
R1015	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1016	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1017	1-216-025-91	RES,CHIP	100	5%	1/10W
R1018	1-216-025-91	RES,CHIP	100	5%	1/10W
R1019	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1021	1-216-295-91	SHORT	0		
R1022	1-216-295-91	SHORT	0		
R1031	1-216-077-91	RES,CHIP	15K	5%	1/10W
R1032	1-216-077-91	RES,CHIP	15K	5%	1/10W
R1033	1-216-077-91	RES,CHIP	15K	5%	1/10W
R1034	1-216-077-91	RES,CHIP	15K	5%	1/10W
R1035	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1036	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1037	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1038	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1039	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1040	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1042	1-216-295-91	SHORT	0		
R1043	1-216-295-91	SHORT	0		
R1044	1-216-295-91	SHORT	0		
R1046	1-216-295-91	SHORT	0		
R1047	1-216-295-91	SHORT	0		
R1048	1-216-295-91	SHORT	0		
R1049	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1050	1-216-025-91	RES,CHIP	100	5%	1/10W
R1051	1-216-025-91	RES,CHIP	100	5%	1/10W
R1052	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1053	1-216-025-91	RES,CHIP	100	5%	1/10W
R1061	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1064	1-216-025-91	RES,CHIP	100	5%	1/10W
R1065	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1068	1-216-025-91	RES,CHIP	100	5%	1/10W
R1069	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1070	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1071	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1072	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1073	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1074	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1075	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1076	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1077	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1078	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1079	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1080	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1081	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1082	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1083	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1084	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1085	1-216-025-91	RES,CHIP	100	5%	1/10W
R1086	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1087	1-216-668-11	METAL CHIP	5.1K	0.50%	1/10W
R1088	1-216-025-91	RES,CHIP	100	5%	1/10W
R1089	1-216-668-11	METAL CHIP	5.1K	0.50%	1/10W
R1090	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1091	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1092	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1093	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1094	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1095	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1096	1-216-033-00	RES,CHIP	220	5%	1/10W
R1097	1-216-033-00	RES,CHIP	220	5%	1/10W
R1100	1-216-057-00	RES,CHIP	2.2K	5%	1/10W

<THERMISTOR>

TH801	1-809-020-11	THERMISTOR	

****

* A-1275-179-A QC COMPL
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<CAPACITOR>

C1801	1-126-204-11	ELECT CHIP	47µF	20%	16V
C1802	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1803	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1804	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1805	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1806	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1807	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1808	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1810	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C1811	1-163-231-11	CERAMIC CHIP	15PF	5%	50V

<CONNECTOR>

CN1801	1-778-830-21	CONNECTOR (BUS) (INPUT B MOUS)
CN1802	1-784-828-11	CONNECTOR, D SUB (RGB)
CN1803	1-784-828-11	CONNECTOR, D SUB (MONITOR OUT)
CN1804	* 1-793-797-21	CONNECTOR, BOARD TO BOARD
CN1805	* 1-793-797-21	CONNECTOR, BOARD TO BOARD

<DIODE>

D1801	8-719-158-15	DIODE RD5.6SB
D1802	8-719-058-24	DIODE RB501V-40TE-17
D1803	8-719-158-15	DIODE RD5.6SB
D1804	8-719-158-15	DIODE RD5.6SB
D1805	8-719-158-15	DIODE RD5.6SB
D1806	8-719-158-15	DIODE RD5.6SB
D1807	8-719-158-15	DIODE RD5.6SB
D1808	8-719-158-15	DIODE RD5.6SB
D1809	8-719-988-61	DIODE 1SS355TE-17
D1811	8-719-158-15	DIODE RD5.6SB

Ref.No.	Part No.	Description			Remark
D1812	8-719-988-61	DIODE 1SS355TE-17			
D1815	8-719-988-61	DIODE 1SS355TE-17			
D1816	8-719-158-37	DIODE RD9.1SB2			
D1817	8-719-158-15	DIODE RD5.6SB			
D1818	8-719-058-24	DIODE RB501V-40TE-17			
D1819	8-719-158-15	DIODE RD5.6SB			
D1820	8-719-158-15	DIODE RD5.6SB			
D1821	8-719-158-15	DIODE RD5.6SB			
D1822	8-719-158-15	DIODE RD5.6SB			
D1823	8-719-158-15	DIODE RD5.6SB			
D1824	8-719-158-15	DIODE RD5.6SB			
D1825	8-719-158-15	DIODE RD5.6SB			
D1826	8-719-158-15	DIODE RD5.6SB			
		<IC>			
IC1801	8-759-654-25	IC RCV4-A1S-OTP			
IC1802	8-759-442-20	IC 24LC21AT/SN			
IC1803	8-759-925-72	IC SN74HC02ANS			
IC1804	8-759-542-91	IC S-80840ANUP-ED4-T2			
		<JACK>			
J1801	1-566-822-21	JACK (AUDIO IN)			
J1802	1-566-822-21	JACK (AUDIO OUT)			
		<TRANSISTOR>			
Q1801	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1802	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1803	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1804	8-729-216-22	TRANSISTOR 2SA1162-G			
		<RESISTOR>			
R1801	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1802	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1803	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1804	1-216-085-00	RES,CHIP	33K	5%	1/10W
R1805	1-216-121-91	RES,CHIP	1M	5%	1/10W
R1806	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1807	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1808	1-216-025-91	RES,CHIP	100	5%	1/10W
R1809	1-216-025-91	RES,CHIP	100	5%	1/10W
R1810	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1811	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1812	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1813	1-216-017-91	RES,CHIP	47	5%	1/10W
R1814	1-216-017-91	RES,CHIP	47	5%	1/10W
R1815	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1816	1-216-025-91	RES,CHIP	100	5%	1/10W
R1817	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1818	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1819	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1820	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1821	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1822	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1823	1-216-085-00	RES,CHIP	33K	5%	1/10W
R1824	1-216-017-91	RES,CHIP	47	5%	1/10W
R1825	1-216-017-91	RES,CHIP	47	5%	1/10W
R1826	1-216-295-91	SHORT	0		
R1827	1-216-295-91	SHORT	0		
R1828	1-216-033-00	RES,CHIP	220	5%	1/10W
R1829	1-216-295-91	SHORT	0		
R1830	1-216-295-91	SHORT	0		
R1831	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1832	1-216-121-91	RES,CHIP	1M	5%	1/10W
R1833	1-216-025-91	RES,CHIP	100	5%	1/10W
R1834	1-216-033-00	RES,CHIP	220	5%	1/10W
R1835	1-216-077-91	RES,CHIP	15K	5%	1/10W
R1836	1-216-077-91	RES,CHIP	15K	5%	1/10W
R1837	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1838	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1839	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1840	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1841	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1842	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1843	1-216-073-00	RES,CHIP	10K	5%	1/10W
		<NETWORK>			
RB1801	1-233-576-11	RES, CHIP NETWORK 100			
		<CRYSTAL>			
X1801	1-781-163-11	VIBRATOR, OSCILLATOR (24.0MHz)			
X1802	1-781-170-21	VIBRATOR, CERAMIC (6.0MHz)			
**********					
	* A-1275-180-A	QB COMPL **********			
		<CAPACITOR>			
C1201	1-126-204-11	ELECT CHIP	47µF	20%	16V
C1202	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1203	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1204	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1205	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1206	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1207	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1208	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1209	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1210	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C1211	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
		<CONNECTOR>			
CN1201	1-778-830-21	CONNECTOR (BUS)			
CN1202	1-784-828-11	CONNECTOR, D SUB (RGB)			
CN1203	* 1-793-797-21	CONNECTOR, BOARD TO BOARD			
CN1204	* 1-793-797-21	CONNECTOR, BOARD TO BOARD			
		<DIODE>			
D1201	8-719-158-15	DIODE RD5.6SB			
D1202	8-719-058-24	DIODE RB501V-40TE-17			
D1203	8-719-158-15	DIODE RD5.6SB			
D1204	8-719-158-15	DIODE RD5.6SB			
D1205	8-719-158-15	DIODE RD5.6SB			
D1206	8-719-158-15	DIODE RD5.6SB			
D1207	8-719-158-15	DIODE RD5.6SB			
D1208	8-719-158-15	DIODE RD5.6SB			
D1209	8-719-988-61	DIODE 1SS355TE-17			
D1210	8-719-058-24	DIODE RB501V-40TE-17			
D1211	8-719-158-15	DIODE RD5.6SB			
D1212	8-719-988-61	DIODE 1SS355TE-17			
D1214	8-719-988-61	DIODE 1SS355TE-17			
D1215	8-719-988-61	DIODE 1SS355TE-17			
D1216	8-719-158-37	DIODE RD9.1SB2			
D1217	8-719-158-15	DIODE RD5.6SB			
D1218	8-719-058-24	DIODE RB501V-40TE-17			
D1219	8-719-158-15	DIODE RD5.6SB			

Ref.No.	Part No.	Description			Remark
D1220	8-719-158-15	DIODE RD5.6SB			
D1221	8-719-158-15	DIODE RD5.6SB			
D1222	8-719-158-15	DIODE RD5.6SB			
D1223	8-719-158-15	DIODE RD5.6SB			
D1224	8-719-158-15	DIODE RD5.6SB			
D1225	8-719-158-15	DIODE RD5.6SB			
D1226	8-719-158-15	DIODE RD5.6SB			
D1227	8-719-158-15	DIODE RD5.6SB			
	<IC>				
IC1201	8-759-654-25	IC RCV4-A1S-OTP			
IC1202	8-759-442-20	IC 24LC21AT/SN			
IC1203	8-759-925-72	IC SN74HC02ANS			
IC1204	8-759-542-91	IC S-80840ANUP-ED4-T2			
	<JACK>				
J1201	1-793-994-21	CONNECTOR, USB			
J1202	1-779-677-11	CONNECTOR, USB (B)			
J1203	1-566-822-21	JACK (AUDIO)			
	<TRANSISTOR>				
Q1201	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1202	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1203	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1204	8-729-216-22	TRANSISTOR 2SA1162-G			
	<RESISTOR>				
R1201	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1202	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1203	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1204	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1205	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1206	1-216-025-91	RES,CHIP	100	5%	1/10W
R1207	1-216-025-91	RES,CHIP	100	5%	1/10W
R1208	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1209	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1210	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1211	1-216-017-91	RES,CHIP	47	5%	1/10W
R1212	1-216-017-91	RES,CHIP	47	5%	1/10W
R1213	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1214	1-216-025-91	RES,CHIP	100	5%	1/10W
R1215	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1216	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1217	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1218	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1219	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1220	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1221	1-216-017-91	RES,CHIP	47	5%	1/10W
R1222	1-216-017-91	RES,CHIP	47	5%	1/10W
R1223	1-216-085-00	RES,CHIP	33K	5%	1/10W
R1224	1-216-033-00	RES,CHIP	220	5%	1/10W
R1225	1-216-295-91	SHORT	0		
R1226	1-216-295-91	SHORT	0		
R1227	1-216-017-91	RES,CHIP	47	5%	1/10W
R1228	1-216-017-91	RES,CHIP	47	5%	1/10W
R1229	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1230	1-216-121-91	RES,CHIP	1M	5%	1/10W
R1231	1-216-085-00	RES,CHIP	33K	5%	1/10W
R1232	1-216-121-91	RES,CHIP	1M	5%	1/10W
R1233	1-216-025-91	RES,CHIP	100	5%	1/10W
R1234	1-216-033-00	RES,CHIP	220	5%	1/10W
R1235	1-216-077-91	RES,CHIP	15K	5%	1/10W
R1236	1-216-077-91	RES,CHIP	15K	5%	1/10W
R1237	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1238	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1239	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1240	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1241	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1242	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1243	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1244	1-216-073-00	RES,CHIP	10K	5%	1/10W
	<NETWORK>				
RB1201	1-233-576-11	RES, CHIP NETWORK 100			
	<SWITCH>				
SW1201	1-571-589-11	SWITCH, SLIDE (DIGITAL RGB/5BN/RGB)			
	<CRYSTAL>				
X1201	1-781-163-11	VIBRATOR, OSCILLATOR (24.0MHz)			
X1202	1-781-170-21	VIBRATOR, CERAMIC (6.0MHz)			
**********					
*	A-1275-181-A	QD COMPL **********			
	<CAPACITOR>				
C1901	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1902	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1903	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1904	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1905	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1906	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C1908	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C1909	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C1910	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C1911	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C1912	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C1915	1-109-994-11	CERAMIC CHIP	2.2µF	10%	10V
C1916	1-124-779-00	ELECT CHIP	10µF	20%	16V
C1917	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1918	1-109-994-11	CERAMIC CHIP	2.2µF	10%	10V
C1919	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
	<CONNECTOR>				
CN1901	1-573-806-21	PIN, CONNECTOR (1.5MM) (SMD)6P			
CN1902	1-573-290-21	PIN, CONNECTOR (1.5MM) (SMD)4P			
CN1903	* 1-764-177-11	PIN, CONNECTOR (SMD)(1.5MM) 7P			
CN1904	1-565-269-11	SOCKET, CONNECTOR (D-DUB,L) 9P (RS-232C/422)			
	<DIODE>				
D1901	8-719-037-53	DIODE RD27SB-T1			
D1902	8-719-037-53	DIODE RD27SB-T1			
D1903	8-719-914-42	DIODE DA204K			
D1904	8-719-037-53	DIODE RD27SB-T1			
D1905	8-719-037-53	DIODE RD27SB-T1			
D1906	8-719-914-42	DIODE DA204K			
D1907	8-719-914-43	DIODE DAN202K			
D1908	8-719-914-44	DIODE DAP202K			

Ref.No.	Part No.	Description			Remark
D1909	8-719-158-37	DIODE RD9.1SB2			
D1910	8-719-158-37	DIODE RD9.1SB2			
D1911	8-719-158-37	DIODE RD9.1SB2			
D1912	8-719-158-37	DIODE RD9.1SB2			
D1913	8-719-158-37	DIODE RD9.1SB2			
D1914	8-719-158-37	DIODE RD9.1SB2			
	<IC>				
IC1901	8-759-252-59	IC MAX202CSE			
IC1902	8-759-285-61	IC PC74HC123D-T			
	<JACK>				
J1901	1-770-053-11	TERMINAL BLOCK, S(LIGHT ANGLE)			
J1902	1-695-473-11	JACK (CONTROLS-IN)			
	<COIL>				
L1901	1-412-363-21	FERRITE	0µH		
L1902	1-412-363-21	FERRITE	0µH		
L1903	1-412-363-21	FERRITE	0µH		
	<TRANSISTOR>				
Q1901	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1902	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1903	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1904	1-801-806-11	TRANSISTOR DTC144EKA-T146			
	<RESISTOR>				
R1901	1-216-295-91	SHORT	0		
R1902	1-216-295-91	SHORT	0		
R1903	1-216-295-91	SHORT	0		
R1904	1-216-295-91	SHORT	0		
R1914	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1915	1-216-148-00	RES,CHIP	8.2	5%	1/8W
R1916	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1917	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1918	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1919	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1920	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1921	1-216-025-91	RES,CHIP	100	5%	1/10W
R1922	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1923	1-216-025-91	RES,CHIP	100	5%	1/10W
R1924	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R1925	1-216-025-91	RES,CHIP	100	5%	1/10W
R1926	1-216-113-00	RES,CHIP	470K	5%	1/10W
	<NETWORK>				
RB1901	1-233-576-11	RES, CHIP NETWORK 100			
<TEST PIN>					
TP1901	1-535-757-11	CHIP, CHECKER			
TP1902	1-535-757-11	CHIP, CHECKER			

Ref.No.	Part No.	Description			Remark
**********					
	* A-1316-484-A	GC COMPL **********			
	<CAPACITOR>				
C2500	1-126-400-11	ELECT CHIP	22µF	20%	35V
C2501	1-110-501-11	CERAMIC CHIP	0.33µF	10%	16V
C2502	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2503	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C2504	1-164-506-11	CERAMIC CHIP	4.7µF		16V
C2507	1-115-737-11	ELECT	0.001F	20%	10V
C2510	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C2511	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
	<CONNECTOR>				
CN2500	* 1-774-245-11	CONNECTOR, BOARD TO BOARD 8P			
CN2502	* 1-564-509-11	PLUG, CONNECTOR 6P			
	<DIODE>				
D2500	8-719-056-97	DIODE UDZ-TE-17-27B			
D2501	8-719-104-34	DIODE 1S2836			
D2502	8-719-055-30	DIODE D1FS4A-TA			
	<IC>				
IC2500	8-759-389-95	IC MAX797ESE-TE2			
	<COIL>				
L2500	1-416-606-11	INDUCTOR	47µH		
	<TRANSISTOR>				
Q2500	8-729-048-98	TRANSISTOR 2SK2281-4061			
Q2501	8-729-048-98	TRANSISTOR 2SK2281-4061			
	<RESISTOR>				
R2502	1-216-295-91	SHORT	0		
R2504	1-216-295-91	SHORT	0		
R2505	1-216-295-91	SHORT	0		
R2506	1-240-182-91	REGISTER	0		
R2508	1-216-295-91	SHORT	0		
R2509	1-216-295-91	SHORT	0		
**********					
	* A-1316-485-A	GD COMPL **********			
	<CAPACITOR>				
C2700	1-126-400-11	ELECT CHIP	22µF	20%	35V
C2701	1-110-501-11	CERAMIC CHIP	0.33µF	10%	16V
C2702	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C2703	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C2704	1-164-506-11	CERAMIC CHIP	4.7µF		16V
C2705	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C2706	1-126-397-11	ELECT CHIP	33µF	20%	25V
C2707	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2708	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2709	1-111-066-11	ELECT	820µF	20%	25V

Ref.No.	Part No.	Description				Remark
C2710	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V	
C2711	1-126-397-11	ELECT CHIP	33µF	20%	25V	
C2713	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V	
C2726	1-164-505-11	CERAMIC CHIP	2.2µF		16V	
		<CONNECTOR>				
CN2700	* 1-774-245-11	CONNECTOR, BOARD TO BOARD 8P				
CN2701	* 1-564-714-11	PIN, CONNECTOR (SMALL TYPE)12P				
		<DIODE>				
D2700	8-719-056-97	DIODE UDZ-TE-17-27B				
D2701	8-719-104-34	DIODE 1S2836				
D2702	8-719-055-30	DIODE D1FS4A-TA				
		<IC>				
IC2700	8-759-389-95	IC MAX797ESE-TE2				
IC2701	8-759-388-31	IC PQ20VZ1U				
IC2702	8-759-388-31	IC PQ20VZ1U				
		<COIL>				
L2700	1-416-606-11	INDUCTOR	47µH			
		<TRANSISTOR>				
Q2700	8-729-048-98	TRANSISTOR 2SK2281-4061				
Q2701	8-729-048-98	TRANSISTOR 2SK2281-4061				
		<RESISTOR>				
R2701	1-216-085-00	RES,CHIP	33K	5%	1/10W	
R2702	1-216-085-00	RES,CHIP	33K	5%	1/10W	
R2703	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R2704	1-216-643-11	METAL CHIP	470	0.50%	1/10W	
R2705	1-216-687-11	METAL CHIP	33K	0.50%	1/10W	
R2706	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	
R2707	1-216-642-11	METAL CHIP	430	0.50%	1/10W	
R2708	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W	
R2709	1-240-216-91	REGISTER	0			
R2710	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	
R2711	1-216-642-11	METAL CHIP	430	0.50%	1/10W	
R2712	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W	
R2713	1-216-085-00	RES,CHIP	33K	5%	1/10W	
R2714	1-216-085-00	RES,CHIP	33K	5%	1/10W	
R2715	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R2716	1-216-643-11	METAL CHIP	470	0.50%	1/10W	
R2717	1-216-687-11	METAL CHIP	33K	0.50%	1/10W	
R2718	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2719	1-216-689-11	METAL CHIP	39K	0.50%	1/10W	
R2720	1-216-025-91	RES,CHIP	100	5%	1/10W	
R2722	1-216-686-11	METAL CHIP	30K	0.50%	1/10W	

Ref.No.	Part No.	Description				Remark
**********						
	* A-1316-486-A	GA COMPL				
		**********				
	4-034-094-01	SHEET, INSULATOR				
	7-682-648-09	SCREW +PS 3X8				
		<CAPACITOR>				
C2100	1-137-477-61	MYLAR	0.47µF	10%	400V	
C2101	1-164-346-11	CERAMIC CHIP	1µF		16V	
C2102	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V	
C2103	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V	
C2104	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V	
C2105	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V	
C2106	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V	
C2107	1-101-821-00	CERAMIC	0.0022µF		500V	
C2110	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V	
C2112	1-117-751-11	ELECT(BLOCK)	220µF	20%	450V	
C2113	1-117-751-11	ELECT(BLOCK)	220µF	20%	450V	
C2114	1-109-892-11	ELECT CHIP	47µF	20%	25V	
C2115	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V	
C2116	1-107-888-11	ELECT	47µF	20%	25V	
C2117	1-107-889-11	ELECT	220µF	20%	25V	
C2119	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V	
C2121	1-130-202-00	FILM	0.022µF	5%	400V	
C2122	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V	
C2124	1-164-506-11	CERAMIC CHIP	4.7µF		16V	
C2125	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V	
C2126	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V	
C2127	1-115-805-11	ELECT	180µF	20%	35V	
C2128	1-115-798-11	ELECT	0.0039F	20%	25V	
C2129	1-115-785-11	ELECT	470µF	20%	25V	
C2131	1-115-818-11	ELECT	0.0018F	20%	35V	
C2132	1-115-818-11	ELECT	0.0018F	20%	35V	
C2135	1-163-021-91	CERAMIC CHIP	01µF	10%	50V	
C2141	1-163-009-11	CERAMIC CHIP	001µF	10%	50V	
C2165	1-163-021-91	CERAMIC CHIP	01µF	10%	50V	
C2170	1-115-730-11	ELECT	180µF	20%	10V	
C2171	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V	
C2172	1-117-228-11	MYLAR	2.2µF	10%	450V	
C2173	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V	
C2174	1-107-910-11	ELECT	100µF	20%	50V	
C2175	1-164-506-11	CERAMIC CHIP	4.7µF		16V	
C2176	1-115-810-11	ELECT	390µF	20%	35V	
		<CONNECTOR>				
CN2101	* 1-774-248-11	CONNECTOR, BOARD TO BOARD 8P				
CN2102	* 1-774-248-11	CONNECTOR, BOARD TO BOARD 8P				
CN2103	* 1-564-508-11	PLUG, CONNECTOR 5P				
CN2104	* 1-564-511-11	PLUG, CONNECTOR 8P				
CN2105	* 1-564-507-11	PLUG, CONNECTOR 4P				
CN2106	* 1-774-248-11	CONNECTOR, BOARD TO BOARD 8P				
CN2110	* 1-900-249-69	CONNECTOR ASSY, RELAY (GA) 3P				
CN2111	* 1-900-249-70	CONNECTOR ASSY, VH 3P				
		<DIODE>				
D2100	⚠ 8-719-066-75	DIODE D6SB80				
D2102	8-719-066-76	DIODE TF861S				
D2103	8-719-055-30	DIODE D1FS4A-TA				
D2105	8-719-056-97	DIODE UDZ-TE-17-27B				
D2106	8-719-304-63	DIODE RM11C				
D2107	8-719-056-97	DIODE UDZ-TE-17-27B				
D2108	8-719-060-06	DIODE FSF10A60				

Ref.No.	Part No.	Description	Remark
D2110	8-719-073-01	DIODE MA111-(K8).S0	
D2111	8-719-104-34	DIODE 1S2836	
D2112	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D2113	8-719-106-71	DIODE RD12M-B2	
D2114	8-719-071-96	DIODE P6KE350A	
D2115	8-719-073-36	DIODE P6KE300A	
D2116	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D2117	8-719-510-30	DIODE D2FL20	
D2118	8-719-059-23	DIODE P6KE200AG23	
D2119	8-719-051-96	DIODE FMG-G2CS	
D2120	8-719-073-36	DIODE P6KE300A	
D2121	8-719-051-96	DIODE FMG-G2CS	
D2122	8-719-071-96	DIODE P6KE350A	
D2123	8-719-073-36	DIODE P6KE300A	
D2124	8-719-055-33	DIODE D1FL40	
D2125	8-719-510-30	DIODE D2FL20	
D2126	8-719-510-30	DIODE D2FL20	
D2127	8-719-053-50	DIODE FCQ20A06	
D2128	8-719-073-52	DIODE D2FS6-TA	
D2129	8-719-510-41	DIODE D10SC9M	
D2130	8-719-510-30	DIODE D2FL20	
D2131	8-719-510-30	DIODE D2FL20	
D2132	8-719-510-41	DIODE D10SC9M	
D2133	8-719-056-97	DIODE UDZ-TE-17-27B	
D2134	8-719-510-37	DIODE D5LC20U	
D2135	8-719-510-37	DIODE D5LC20U	
D2136	8-719-510-37	DIODE D5LC20U	
D2137	8-719-510-37	DIODE D5LC20U	
D2138	8-719-510-37	DIODE D5LC20U	
D2139	8-719-510-37	DIODE D5LC20U	
D2140	8-719-073-52	DIODE D2FS6-TA	
D2141	8-719-073-52	DIODE D2FS6-TA	
D2142	8-719-073-01	DIODE MA111-(K8).S0	
D2143	8-719-073-01	DIODE MA111-(K8).S0	
D2144	8-719-073-01	DIODE MA111-(K8).S0	
D2145	8-719-073-01	DIODE MA111-(K8).S0	
D2146	8-719-073-01	DIODE MA111-(K8).S0	
D2147	8-719-045-99	DIODE RD2.2M-T1B	
D2148	8-719-978-04	DIODE DTZ-TT11-3.3B	
D2149	8-719-045-99	DIODE RD2.2M-T1B	
		<IC>	
IC2100	8-759-641-00	IC MC33262DR2	
IC2101	8-759-490-02	IC TOP224Y-BB	
IC2102	8-759-470-64	IC TOP223Y-BB	
IC2103	8-759-388-23	IC TL431BCDR2	
IC2104	8-759-100-93	IC UPC393G2	
IC2105	8-759-388-23	IC TL431BCDR2	
		<COIL>	
L2100	1-419-302-11	INDUCTOR 250µH	
L2101	1-406-971-51	INDUCTOR 10µH	
L2102	1-406-665-11	INDUCTOR 100µH	
L2103	1-406-665-11	INDUCTOR 100µH	
L2105	1-406-975-21	INDUCTOR 47µH	
L2106	1-406-975-21	INDUCTOR 47µH	
L2107	1-406-663-21	INDUCTOR 47µH	
L2108	1-406-663-21	INDUCTOR 47µH	
L2109	1-406-971-51	INDUCTOR 10µH	
L2110	1-419-350-11	INDUCTOR 690µH	
L2120	1-416-758-21	INDUCTOR 22µH	

Ref.No.	Part No.	Description			Remark
		<PHOTO COUPLER>			
PH2100	8-749-010-64	PHOTO COUPLER PC123F2			
PH2101	8-749-010-64	PHOTO COUPLER PC123F2			
		<TRANSISTOR>			
Q2100	8-729-041-01	TRANSISTOR 2SK2198			
Q2101	8-729-216-22	TRANSISTOR 2SA1162-G			
Q2102	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q2103	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q2104	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q2105	8-729-101-07	TRANSISTOR 2SB798-DL			
Q2106	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q2107	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q2108	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q2109	8-729-807-51	TRANSISTOR 2SD1623-S			
Q2110	8-729-101-07	TRANSISTOR 2SB798-DL			
Q2111	8-729-216-22	TRANSISTOR 2SA1162-G			
		<RESISTOR>			
R2079	1-218-369-11	RES,CHIP	2.2K	5% 1/2W	
R2085	1-216-039-00	RES,CHIP	390	5% 1/10W	
R2088	1-249-393-11	CARBON	10	5% 1/4W	F
R2089	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R2090	1-216-049-91	RES,CHIP	1K	5% 1/10W	
R2091	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R2092	1-216-025-91	RES,CHIP	100	5% 1/10W	
R2093	1-216-099-00	RES,CHIP	120K	5% 1/10W	
R2094	1-216-099-00	RES,CHIP	120K	5% 1/10W	
R2095	1-216-099-00	RES,CHIP	120K	5% 1/10W	
R2097	1-216-095-00	RES,CHIP	82K	5% 1/10W	
R2098	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R2100	1-216-041-00	RES,CHIP	470	5% 1/10W	
R2101	1-219-363-11	FUSIBLE	5.6	5% 5W	F
R2102	1-216-089-91	RES,CHIP	47K	5% 1/10W	
R2104	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R2105	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R2106	1-219-738-11	METAL	0.08	10% 5W	
R2107	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R2108	1-216-041-00	RES,CHIP	470	5% 1/10W	
R2109	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R2110	1-249-393-11	CARBON	10	5% 1/4W	F
R2111	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R2112	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R2113	1-218-756-11	METAL CHIP	150K	0.50% 1/10W	
R2114	1-218-756-11	METAL CHIP	150K	0.50% 1/10W	
R2115	1-218-756-11	METAL CHIP	150K	0.50% 1/10W	
R2116	1-218-759-11	METAL CHIP	200K	0.50% 1/10W	
R2117	1-218-759-11	METAL CHIP	200K	0.50% 1/10W	
R2118	1-218-760-11	METAL CHIP	220K	0.50% 1/10W	
R2119	1-218-760-11	METAL CHIP	220K	0.50% 1/10W	
R2120	1-218-369-11	RES,CHIP	2.2K	5% 1/2W	
R2121	1-216-681-11	METAL CHIP	18K	0.50% 1/10W	
R2122	1-216-295-91	SHORT	0		
R2124	1-216-295-91	SHORT	0		
R2125	1-216-081-00	RES,CHIP	22K	5% 1/10W	
R2126	1-216-025-91	RES,CHIP	100	5% 1/10W	
R2127	1-218-764-11	METAL CHIP	330K	0.50% 1/10W	
R2128	1-218-760-11	METAL CHIP	220K	0.50% 1/10W	
R2129	1-218-760-11	METAL CHIP	220K	0.50% 1/10W	
R2130	1-218-760-11	METAL CHIP	220K	0.50% 1/10W	
R2131	1-218-760-11	METAL CHIP	220K	0.50% 1/10W	
R2132	1-218-760-11	METAL CHIP	220K	0.50% 1/10W	
R2133	1-216-675-91	METAL CHIP	10K	0.50% 1/10W	
R2134	1-220-337-11	RES,CHIP	270K	5% 1/2W	

GA GB

Ref.No.	Part No.	Description			Remark
R2135	1-220-337-11	RES,CHIP	270K	5%	1/2W
R2136	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2138	1-216-025-91	RES,CHIP	100	5%	1/10W
R2139	1-249-385-11	CARBON	2.2	5%	1/4W F
R2140	1-249-389-11	CARBON	4.7	5%	1/4W F
R2141	1-216-311-00	RES,CHIP	6.8	5%	1/10W
R2142	1-216-033-00	RES,CHIP	220	5%	1/10W
R2143	1-216-311-00	RES,CHIP	6.8	5%	1/10W
R2144	1-216-009-91	RES,CHIP	22	5%	1/10W
R2145	1-216-492-21	METAL OXIDE	82K	5%	3W F
R2146	1-216-492-21	METAL OXIDE	82K	5%	3W F
R2147	1-216-492-21	METAL OXIDE	82K	5%	3W F
R2148	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2149	1-216-039-00	RES,CHIP	390	5%	1/10W
R2150	1-216-039-00	RES,CHIP	390	5%	1/10W
R2151	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2152	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2153	1-216-025-91	RES,CHIP	100	5%	1/10W
R2154	1-215-871-11	METAL OXIDE	2.2K	5%	1W F
R2155	1-215-871-11	METAL OXIDE	2.2K	5%	1W F
R2156	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R2157	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R2158	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R2159	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R2160	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R2161	1-216-029-00	RES,CHIP	150	5%	1/10W
R2162	1-215-871-11	METAL OXIDE	2.2K	5%	1W F
R2163	1-215-871-11	METAL OXIDE	2.2K	5%	1W F
R2164	1-216-099-00	RES,CHIP	120K	5%	1/10W
R2165	1-216-025-91	RES,CHIP	100	5%	1/10W
R2166	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2170	1-218-756-11	METAL CHIP	150K	0.50%	1/10W
R2171	1-218-756-11	METAL CHIP	150K	0.50%	1/10W
R2172	1-218-760-11	METAL CHIP	220K	0.50%	1/10W
R2173	1-218-760-11	METAL CHIP	220K	0.50%	1/10W
R2174	1-218-760-11	METAL CHIP	220K	0.50%	1/10W
R2175	1-218-760-11	METAL CHIP	220K	0.50%	1/10W
R2176	1-218-760-11	METAL CHIP	220K	0.50%	1/10W
R2177	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R2179	1-216-097-91	RES,CHIP	100K	5%	1/10W
R2180	1-216-025-91	RES,CHIP	100	5%	1/10W
R2181	1-216-025-91	RES,CHIP	100	5%	1/10W
R2182	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2183	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2184	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2185	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2186	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2187	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R2188	1-216-041-00	RES,CHIP	470	5%	1/10W
R2189	1-216-077-91	RES,CHIP	15K	5%	1/10W
R2190	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2191	1-216-097-91	RES,CHIP	100K	5%	1/10W
R2192	1-216-097-91	RES,CHIP	100K	5%	1/10W
R2193	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2194	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2195	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R2196	1-216-081-00	RES,CHIP	22K	5%	1/10W
R2197	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2198	1-216-073-00	RES,CHIP	10K	5%	1/10W

Ref.No.	Part No.	Description			Remark
		<TRANSFORMER>			
T2100	1-435-145-11	TRANSFORMER, CONVERTER (SRT)			
T2101	1-435-144-11	TRANSFORMER, CONVERTER (SRT)			
**********					
	* A-1316-487-A	GB COMPL			
		**********			
		<CAPACITOR>			
C2300	1-126-397-11	ELECT CHIP	33µF	20%	25V
C2301	1-110-501-11	CERAMIC CHIP	0.33µF	10%	16V
C2302	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2303	1-164-506-11	CERAMIC CHIP	4.7µF		16V
C2304	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C2305	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2306	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2307	1-115-781-11	ELECT	220µF	20%	10V
C2308	1-115-734-11	ELECT	680µF	20%	10V
C2310	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C2311	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
		<CONNECTOR>			
CN2300	* 1-774-245-11	CONNECTOR, BOARD TO BOARD 8P			
CN2301	* 1-564-508-11	PLUG, CONNECTOR 5P			
		<DIODE>			
D2300	8-719-056-97	DIODE UDZ-TE-17-27B			
D2301	8-719-104-34	DIODE 1S2836			
D2302	8-719-055-30	DIODE D1FS4A-TA			
		<IC>			
IC2300	8-759-389-95	IC MAX797ESE-TE2			
		<COIL>			
L2300	1-406-974-61	INDUCTOR	33µH		
L2301	1-416-949-21	INDUCTOR	15µH		
		<TRANSISTOR>			
Q2300	8-729-048-98	TRANSISTOR 2SK2281-4061			
Q2301	8-729-048-98	TRANSISTOR 2SK2281-4061			
		<RESISTOR>			
R2301	1-216-295-91	SHORT	0		
R2303	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R2304	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R2305	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R2306	1-240-216-91	REGISTER	0		
R2307	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R2308	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R2309	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W

Ref.No.	Part No.	Description			Remark
**********					
	* A-1335-121-A	C COMPL			
		**********			
		<CAPACITOR>			
C600	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C601	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C602	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C604	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C605	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C606	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C607	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C608	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C609	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C610	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C616	1-124-779-00	ELECT CHIP	10µF	20%	16V
C617	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C619	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C626	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C627	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C628	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C629	1-124-778-00	ELECT CHIP	22µF	20%	6.3V
C630	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C631	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C633	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C634	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C635	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C636	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C637	1-128-401-11	ELECT CHIP	100µF	20%	25V
C639	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C640	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C643	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C644	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C645	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C646	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C647	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C648	1-117-681-11	ELECT CHIP	100µF	20%	16V
C649	1-117-681-11	ELECT CHIP	100µF	20%	16V
C650	1-117-681-11	ELECT CHIP	100µF	20%	16V
C651	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C652	1-117-681-11	ELECT CHIP	100µF	20%	16V
C653	1-117-681-11	ELECT CHIP	100µF	20%	16V
C654	1-128-401-11	ELECT CHIP	100µF	20%	25V
C657	1-128-400-11	ELECT CHIP	47µF	20%	25V
C658	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C660	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C662	1-128-401-11	ELECT CHIP	100µF	20%	25V
C663	1-124-778-00	ELECT CHIP	22µF	20%	6.3V
C664	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C665	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C666	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C667	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C668	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C670	1-128-401-11	ELECT CHIP	100µF	20%	25V
C672	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C675	1-164-004-11	CERAMIC CHIP	0.1µMF	10%	25V
C676	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C677	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C678	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C679	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C680	1-117-681-11	ELECT CHIP	100µF	20%	16V
C681	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C683	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C685	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C686	1-124-778-00	ELECT CHIP	22µF	20%	6.3V
C687	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C689	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C690	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C691	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C693	1-128-401-11	ELECT CHIP	100µF	20%	25V
C695	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C698	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C699	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C700	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C701	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C702	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C703	1-117-681-11	ELECT CHIP	100µF	20%	16V
C704	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C706	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C708	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C711	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C719	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C724	1-128-401-11	ELECT CHIP	100µF	20%	25V
C725	1-117-681-11	ELECT CHIP	100µF	20%	16V
C754	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C755	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C757	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C759	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V
C762	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C763	1-126-602-11	ELECT CHIP	3.3µF	20%	50V
C764	1-126-602-11	ELECT CHIP	3.3µF	20%	50V
C765	1-126-602-11	ELECT CHIP	3.3µF	20%	50V
C769	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C772	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C773	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C774	1-115-340-11	CERAMIC CHIP	0.22µF	10%	25V
C778	1-117-681-11	ELECT CHIP	100µF	20%	16V
C779	1-117-681-11	ELECT CHIP	100µF	20%	16V
C780	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C781	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C782	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
C789	1-107-826-91	CERAMIC CHIP	0.1µF	10%	16V
		<CONNECTOR>			
CN600	* 1-691-591-11	PIN, CONNECTOR (1.5MM) (SMD)8P			
CN601	1-774-932-21	CONNECTOR, FFC/FPC (ZIF) 32P			
CN602	1-774-932-21	CONNECTOR, FFC/FPC (ZIF) 32P			
CN603	1-774-932-21	CONNECTOR, FFC/FPC (ZIF) 32P			
CN605	* 1-785-306-21	CONNECTOR, BOARD TO BOARD70P			
		<DIODE>			
D601	8-719-159-06	DIODE RD4.7SB-T2			
D606	8-719-977-95	DIODE DTZ-TT11-2.4B			
		<FERRITE BEAD>			
FB600	1-414-921-11	INDUCTOR CHIP	0µH		
FB602	1-414-921-11	INDUCTOR CHIP	0µH		
FB603	1-414-921-11	INDUCTOR CHIP	0µH		
FB604	1-414-921-11	INDUCTOR CHIP	0µH		
FB605	1-414-921-11	INDUCTOR CHIP	0µH		
FB607	1-414-921-11	INDUCTOR CHIP	0µH		
FB608	1-414-921-11	INDUCTOR CHIP	0µH		
FB609	1-414-921-11	INDUCTOR CHIP	0µH		
FB611	1-414-921-11	INDUCTOR CHIP	0µH		
FB613	1-414-921-11	INDUCTOR CHIP	0µH		
FB614	1-414-921-11	INDUCTOR CHIP	0µH		
FB615	1-414-921-11	INDUCTOR CHIP	0µH		
FB616	1-414-921-11	INDUCTOR CHIP	0µH		
FB618	1-414-921-11	INDUCTOR CHIP	0µH		
FB619	1-414-921-11	INDUCTOR CHIP	0µH		

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Ref.No.	Part No.	Description	Remark
FB620	1-414-921-11	INDUCTOR CHIP	0µH
FB622	1-414-921-11	INDUCTOR CHIP	0µH
FB624	1-414-921-11	INDUCTOR CHIP	0µH
FB625	1-414-921-11	INDUCTOR CHIP	0µH
FB626	1-414-921-11	INDUCTOR CHIP	0µH
FB627	1-414-921-11	INDUCTOR CHIP	0µH
FB629	1-414-921-11	INDUCTOR CHIP	0µH
FB630	1-414-921-11	INDUCTOR CHIP	0µH
FB631	1-414-921-11	INDUCTOR CHIP	0µH
FB633	1-414-921-11	INDUCTOR CHIP	0µH
FB634	1-414-921-11	INDUCTOR CHIP	0µH
FB635	1-414-921-11	INDUCTOR CHIP	0µH
FB636	1-414-921-11	INDUCTOR CHIP	0µH
FB637	1-414-921-11	INDUCTOR CHIP	0µH
FB638	1-414-921-11	INDUCTOR CHIP	0µH
FB639	1-414-748-11	FERRITE	0µH
FB640	1-414-748-11	FERRITE	0µH
FB641	1-414-921-11	INDUCTOR CHIP	0µH
FB642	1-414-921-11	INDUCTOR CHIP	0µH
FB643	1-414-921-11	INDUCTOR CHIP	0µH
FB644	1-414-921-11	INDUCTOR CHIP	0µH
FB645	1-414-921-11	INDUCTOR CHIP	0µH
	<IC>		
IC600	8-759-584-86	IC M52749FP-TP	
IC602	8-759-482-47	IC M62399FP-TE2	
IC603	8-752-080-99	IC CXA2112R	
IC604	8-752-080-99	IC CXA2112R	
IC605	8-759-157-17	IC PQ05SZ1U	
IC606	8-759-157-17	IC PQ05SZ1U	
IC608	8-759-259-77	IC PQ20VZ5U	
IC609	8-752-080-99	IC CXA2112R	
IC610	8-752-080-99	IC CXA2112R	
IC611	8-752-080-99	IC CXA2112R	
IC612	8-752-080-99	IC CXA2112R	
IC613	8-759-351-63	IC TA7812F(TE16L)	
IC614	8-759-490-41	IC TC74VHCT541AFT(EL)	
IC615	8-759-490-41	IC TC74VHCT541AFT(EL)	
IC624	8-759-449-58	IC LM7131BCM5X	
IC625	8-759-482-35	IC MC100ELT20DR2	
IC626	8-759-523-84	IC TC74VHC14FT(EL)	
	<COIL>		
L601	1-410-393-11	INDUCTOR CHIP	100µH
L602	1-410-369-11	INDUCTOR CHIP	1µH
L603	1-410-369-11	INDUCTOR CHIP	1µH
L604	1-410-369-11	INDUCTOR CHIP	1µH
L605	1-410-369-11	INDUCTOR CHIP	1µH
L606	1-410-369-11	INDUCTOR CHIP	1µH
L607	1-410-369-11	INDUCTOR CHIP	1µH
L609	1-410-381-11	INDUCTOR CHIP	10µH
L611	1-409-556-11	INDUCTOR	47µH
L612	1-409-556-11	INDUCTOR	47µH
	<TRANSISTOR>		
Q600	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q601	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q602	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q603	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q604	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q605	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q606	8-729-112-65	TRANSISTOR 2SA1462-Y33	
Q607	8-729-112-65	TRANSISTOR 2SA1462-Y33	
Q608	8-729-112-65	TRANSISTOR 2SA1462-Y33	
Q612	8-729-112-65	TRANSISTOR 2SA1462-Y33	

Ref.No.	Part No.	Description			Remark
	<RESISTOR>				
R470	1-216-805-11	RES,CHIP	47	5%	1/16W
R471	1-216-805-11	RES,CHIP	47	5%	1/16W
R472	1-216-805-11	RES,CHIP	47	5%	1/16W
R474	1-216-805-11	RES,CHIP	47	5%	1/16W
R475	1-216-805-11	RES,CHIP	47	5%	1/16W
R476	1-216-805-11	RES,CHIP	47	5%	1/16W
R477	1-216-805-11	RES,CHIP	47	5%	1/16W
R478	1-216-805-11	RES,CHIP	47	5%	1/16W
R479	1-216-805-11	RES,CHIP	47	5%	1/16W
R480	1-216-805-11	RES,CHIP	47	5%	1/16W
R482	1-216-814-11	RES,CHIP	270	5%	1/16W
R483	1-216-805-11	RES,CHIP	47	5%	1/16W
R484	1-216-817-11	RES,CHIP	470	5%	1/16W
R485	1-216-864-11	SHORT	0		
R486	1-216-864-11	SHORT	0		
R487	1-216-815-11	RES,CHIP	330	5%	1/16W
R488	1-216-815-11	RES,CHIP	330	5%	1/16W
R600	1-216-809-11	RES,CHIP	100	5%	1/16W
R601	1-216-809-11	RES,CHIP	100	5%	1/16W
R602	1-216-809-11	RES,CHIP	100	5%	1/16W
R603	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R604	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R605	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R606	1-216-809-11	RES,CHIP	100	5%	1/16W
R607	1-216-809-11	RES,CHIP	100	5%	1/16W
R608	1-216-816-11	RES,CHIP	390	5%	1/16W
R609	1-220-373-11	RES,CHIP	620	5%	1/16W
R611	1-216-816-11	RES,CHIP	390	5%	1/16W
R613	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R615	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R617	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R618	1-216-789-11	RES,CHIP	2.2	5%	1/16W
R619	1-216-789-11	RES,CHIP	2.2	5%	1/16W
R620	1-216-789-11	RES,CHIP	2.2	5%	1/16W
R621	1-216-789-11	RES,CHIP	2.2	5%	1/16W
R622	1-216-789-11	RES,CHIP	2.2	5%	1/16W
R623	1-216-789-11	RES,CHIP	2.2	5%	1/16W
R624	1-216-864-11	SHORT	0		
R625	1-216-864-11	SHORT	0		
R626	1-216-864-11	SHORT	0		
R629	1-216-805-11	RES,CHIP	47	5%	1/16W
R631	1-220-373-11	RES,CHIP	620	5%	1/16W
R634	1-216-833-91	RES,CHIP	10K	5%	1/16W
R635	1-216-822-11	RES,CHIP	1.2K	5%	1/16W
R636	1-220-158-11	RES,CHIP	3.6K	5%	1/16W
R638	1-216-809-11	RES,CHIP	100	5%	1/16W
R639	1-216-809-11	RES,CHIP	100	5%	1/16W
R640	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R641	1-216-809-11	RES,CHIP	100	5%	1/16W
R644	1-216-821-11	RES,CHIP	1K	5%	1/16W
R645	1-216-805-11	RES,CHIP	47	5%	1/16W
R646	1-216-805-11	RES,CHIP	47	5%	1/16W
R647	1-216-809-11	RES,CHIP	100	5%	1/16W
R648	1-216-809-11	RES,CHIP	100	5%	1/16W
R649	1-216-809-11	RES,CHIP	100	5%	1/16W
R650	1-216-809-11	RES,CHIP	100	5%	1/16W
R652	1-216-816-11	RES,CHIP	390	5%	1/16W
R653	1-220-373-11	RES,CHIP	620	5%	1/16W
R656	1-216-864-11	SHORT	0		
R657	1-216-864-11	SHORT	0		
R658	1-216-864-11	SHORT	0		
R661	1-216-864-11	SHORT	0		
R662	1-216-864-11	SHORT	0		
R663	1-216-864-11	SHORT	0		
R665	1-216-845-11	RES,CHIP	100K	5%	1/16W

Ref.No.	Part No.	Description			Remark
R666	1-216-805-11	RES,CHIP	47	5%	1/16W
R670	1-216-833-91	RES,CHIP	10K	5%	1/16W
R671	1-216-864-11	SHORT	0		
R672	1-216-864-11	SHORT	0		
R674	1-216-864-11	SHORT	0		
R676	1-216-864-11	SHORT	0		
R677	1-216-845-11	RES,CHIP	100K	5%	1/16W
R678	1-216-864-11	SHORT	0		
R682	1-216-864-11	SHORT	0		
R683	1-218-726-11	METAL CHIP	27K	0.50%	1/16W
R684	1-218-726-11	METAL CHIP	27K	0.50%	1/16W
R685	1-216-864-11	SHORT	0		
R686	1-216-805-11	RES,CHIP	47	5%	1/16W
R687	1-216-805-11	RES,CHIP	47	5%	1/16W
R688	1-216-805-11	RES,CHIP	47	5%	1/16W
R689	1-216-805-11	RES,CHIP	47	5%	1/16W
R690	1-216-805-11	RES,CHIP	47	5%	1/16W
R691	1-216-805-11	RES,CHIP	47	5%	1/16W
R692	1-216-805-11	RES,CHIP	47	5%	1/16W
R693	1-216-805-11	RES,CHIP	47	5%	1/16W
R694	1-216-805-11	RES,CHIP	47	5%	1/16W
R695	1-216-805-11	RES,CHIP	47	5%	1/16W
R696	1-216-805-11	RES,CHIP	47	5%	1/16W
R697	1-216-805-11	RES,CHIP	47	5%	1/16W
R698	1-216-864-11	SHORT	0		
R699	1-216-833-91	RES,CHIP	10K	5%	1/16W
R701	1-216-833-91	RES,CHIP	10K	5%	1/16W
R703	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R704	1-216-644-11	METAL CHIP	510	0.50%	1/10W
R705	1-216-682-11	METAL CHIP	20K	0.50%	1/10W
R706	1-216-833-91	RES,CHIP	10K	5%	1/16W
R708	1-216-833-91	RES,CHIP	10K	5%	1/16W
R709	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R710	1-216-864-11	SHORT	0		
R711	1-216-864-11	SHORT	0		
R715	1-216-864-11	SHORT	0		
R716	1-216-864-11	SHORT	0		
R717	1-216-864-11	SHORT	0		
R718	1-216-845-11	RES,CHIP	100K	5%	1/16W
R719	1-216-805-11	RES,CHIP	47	5%	1/16W
R723	1-216-833-91	RES,CHIP	10K	5%	1/16W
R724	1-216-864-11	SHORT	0		
R725	1-216-864-11	SHORT	0		
R727	1-216-864-11	SHORT	0		
R729	1-216-864-11	SHORT	0		
R730	1-216-845-11	RES,CHIP	100K	5%	1/16W
R731	1-216-864-11	SHORT	0		
R735	1-218-726-11	METAL CHIP	27K	0.50%	1/16W
R736	1-218-726-11	METAL CHIP	27K	0.50%	1/16W
R737	1-216-864-11	SHORT	0		
R738	1-216-805-11	RES,CHIP	47	5%	1/16W
R739	1-216-805-11	RES,CHIP	47	5%	1/16W
R740	1-216-805-11	RES,CHIP	47	5%	1/16W
R741	1-216-805-11	RES,CHIP	47	5%	1/16W
R742	1-216-805-11	RES,CHIP	47	5%	1/16W
R743	1-216-805-11	RES,CHIP	47	5%	1/16W
R744	1-216-805-11	RES,CHIP	47	5%	1/16W
R745	1-216-805-11	RES,CHIP	47	5%	1/16W
R746	1-216-805-11	RES,CHIP	47	5%	1/16W
R747	1-216-805-11	RES,CHIP	47	5%	1/16W
R748	1-216-805-11	RES,CHIP	47	5%	1/16W
R749	1-216-805-11	RES,CHIP	47	5%	1/16W
R750	1-216-864-11	SHORT	0		
R751	1-216-864-11	SHORT	0		
R753	1-216-864-11	SHORT	0		
R754	1-216-864-11	SHORT	0		
R755	1-216-864-11	SHORT	0		
R757	1-216-864-11	SHORT	0		
R758	1-216-864-11	SHORT	0		
R762	1-216-864-11	SHORT	0		
R763	1-216-864-11	SHORT	0		
R764	1-216-864-11	SHORT	0		
R765	1-216-845-11	RES,CHIP	100K	5%	1/16W
R766	1-216-797-11	RES,CHIP	10	5%	1/16W
R770	1-216-833-91	RES,CHIP	10K	5%	1/16W
R771	1-216-864-11	SHORT	0		
R772	1-216-864-11	SHORT	0		
R774	1-216-864-11	SHORT	0		
R776	1-216-864-11	SHORT	0		
R777	1-216-845-11	RES,CHIP	100K	5%	1/16W
R778	1-216-864-11	SHORT	0		
R782	1-218-726-11	METAL CHIP	27K	0.50%	1/16W
R783	1-218-726-11	METAL CHIP	27K	0.50%	1/16W
R784	1-216-864-11	SHORT	0		
R785	1-216-805-11	RES,CHIP	47	5%	1/16W
R786	1-216-805-11	RES,CHIP	47	5%	1/16W
R787	1-216-805-11	RES,CHIP	47	5%	1/16W
R788	1-216-805-11	RES,CHIP	47	5%	1/16W
R789	1-216-805-11	RES,CHIP	47	5%	1/16W
R790	1-216-805-11	RES,CHIP	47	5%	1/16W
R791	1-216-805-11	RES,CHIP	47	5%	1/16W
R792	1-216-805-11	RES,CHIP	47	5%	1/16W
R793	1-216-805-11	RES,CHIP	47	5%	1/16W
R794	1-216-805-11	RES,CHIP	47	5%	1/16W
R795	1-216-805-11	RES,CHIP	47	5%	1/16W
R796	1-216-805-11	RES,CHIP	47	5%	1/16W
R797	1-216-864-11	SHORT	0		
R798	1-216-864-11	SHORT	0		
R799	1-216-864-11	SHORT	0		
R1601	1-216-864-11	SHORT	0		
R1603	1-216-841-11	RES,CHIP	47K	5%	1/16W
R1604	1-216-809-11	RES,CHIP	100	5%	1/16W
R1605	1-216-809-11	RES,CHIP	100	5%	1/16W
R1607	1-216-864-11	SHORT	0		
R1610	1-216-864-11	SHORT	0		
R1615	1-216-864-11	SHORT	0		
R1624	1-216-809-11	RES,CHIP	100	5%	1/16W
R1631	1-218-285-11	RES,CHIP	75	5%	1/16W
R1632	1-218-285-11	RES,CHIP	75	5%	1/16W
R1633	1-218-285-11	RES,CHIP	75	5%	1/16W
R1638	1-216-864-11	SHORT	0		
R1641	1-216-864-11	SHORT	0		
R1647	1-216-041-00	RES,CHIP	470	5%	1/10W
R1648	1-216-041-00	RES,CHIP	470	5%	1/10W
R1649	1-216-041-00	RES,CHIP	470	5%	1/10W
R1656	1-216-864-11	SHORT	0		
R1657	1-216-864-11	SHORT	0		
R1658	1-216-864-11	SHORT	0		
R1659	1-216-805-11	RES,CHIP	47	5%	1/16W
R1660	1-216-805-11	RES,CHIP	47	5%	1/16W
R1661	1-216-805-11	RES,CHIP	47	5%	1/16W
R1662	1-216-864-11	SHORT	0		
R1663	1-216-864-11	SHORT	0		
R1664	1-216-864-11	SHORT	0		
R1666	1-216-821-11	RES,CHIP	1K	5%	1/16W
	<THERMISTOR>				
TH600	1-808-656-11	THERMISTOR			

C H

Ref.No.	Part No.	Description	Remark
	<TEST PIN>		
TP600	1-535-757-11	CHIP, CHECKER	
TP601	1-535-757-11	CHIP, CHECKER	
TP602	1-535-757-11	CHIP, CHECKER	
TP603	1-535-757-11	CHIP, CHECKER	
TP604	1-535-757-11	CHIP, CHECKER	
TP605	1-535-757-11	CHIP, CHECKER	
TP606	1-535-757-11	CHIP, CHECKER	
TP607	1-535-757-11	CHIP, CHECKER	
TP608	1-535-757-11	CHIP, CHECKER	
TP609	1-535-757-11	CHIP, CHECKER	
TP610	1-535-757-11	CHIP, CHECKER	
TP611	1-535-757-11	CHIP, CHECKER	
TP612	1-535-757-11	CHIP, CHECKER	
TP616	1-535-757-11	CHIP, CHECKER	
TP617	1-535-757-11	CHIP, CHECKER	
TP618	1-535-757-11	CHIP, CHECKER	
TP619	1-535-757-11	CHIP, CHECKER	
TP620	1-535-757-11	CHIP, CHECKER	
TP621	1-535-757-11	CHIP, CHECKER	
TP625	1-535-757-11	CHIP, CHECKER	
TP626	1-535-757-11	CHIP, CHECKER	
TP627	1-535-757-11	CHIP, CHECKER	

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	* A-1375-193-A	H COMPL	
		**********	
	<CONNECTOR>		
CN3500	* 1-766-383-11	PIN, CONNECTOR (1.5MM)(SMD)12P	
CN3501	1-573-290-21	PIN, CONNECTOR (1.5MM) (SMD)4P	
CN3502	* 1-580-055-21	PIN, CONNECTOR (SMD) 2P	
CN3503	* 1-580-055-21	PIN, CONNECTOR (SMD) 2P	
	<DIODE>		
D3500	8-719-045-53	DIODE SEC1801C	
D3501	8-719-045-53	DIODE SEC1801C	
D3502	8-719-045-53	DIODE SEC1801C	
D3503	8-719-045-53	DIODE SEC1801C	
D3504	8-719-045-53	DIODE SEC1801C	
D3505	8-719-045-53	DIODE SEC1801C	
D3506	8-719-045-53	DIODE SEC1801C	
D3507	8-719-045-60	DIODE SEC1401C	
D3508	8-719-045-53	DIODE SEC1801C	
D3509	8-719-045-53	DIODE SEC1801C	
D3510	8-719-045-53	DIODE SEC1801C	
D3511	8-719-045-53	DIODE SEC1801C	
D3512	8-719-045-53	DIODE SEC1801C	
D3513	8-719-045-53	DIODE SEC1801C	
D3514	8-719-045-53	DIODE SEC1801C	
D3515	8-719-045-53	DIODE SEC1801C	
D3520	8-719-045-53	DIODE SEC1801C	
D3523	8-719-045-53	DIODE SEC1801C	
D3525	8-719-045-53	DIODE SEC1801C	
D3526	8-719-045-53	DIODE SEC1801C	
D3527	8-719-045-60	DIODE SEC1401C	
D3528	8-719-045-53	DIODE SEC1801C	
D3529	8-719-045-53	DIODE SEC1801C	
D3532	8-719-045-53	DIODE SEC1801C	
D3540	8-719-045-61	DIODE SEC1901C (LAMP-LED)	
D3541	8-719-045-61	DIODE SEC1901C (TEMP-LED)	
D3543	8-719-045-53	DIODE SEC1801C (POWER-SAVE)	
D3544	8-719-045-51	DIODE SEC2422C (ON/STBY)	
D3550	8-719-914-43	DIODE DAN202K	
D3551	8-719-914-43	DIODE DAN202K	
D3552	8-719-914-43	DIODE DAN202K	
D3553	8-719-914-43	DIODE DAN202K	
D3554	8-719-914-44	DIODE DAP202K	
D3555	8-719-914-44	DIODE DAP202K	
D3556	8-719-914-44	DIODE DAP202K	
D3557	8-719-914-44	DIODE DAP202K	
	<TRANSISTOR>		
Q3540	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3541	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3542	8-729-027-38	TRANSISTOR DTA144EKA-T146	
	<RESISTOR>		
R3500	1-216-083-00	RES,CHIP 27K 5% 1/10W	
R3501	1-216-075-00	RES,CHIP 12K 5% 1/10W	
R3502	1-216-069-00	RES,CHIP 6.8K 5% 1/10W	
R3503	1-216-063-91	RES,CHIP 3.9K 5% 1/10W	
R3504	1-216-059-00	RES,CHIP 2.7K 5% 1/10W	
R3505	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R3506	1-216-053-00	RES,CHIP 1.5K 5% 1/10W	
R3507	1-216-055-00	RES,CHIP 1.8K 5% 1/10W	
R3508	1-216-083-00	RES,CHIP 27K 5% 1/10W	
R3509	1-216-075-00	RES,CHIP 12K 5% 1/10W	
R3510	1-216-069-00	RES,CHIP 6.8K 5% 1/10W	
R3511	1-216-063-91	RES,CHIP 3.9K 5% 1/10W	
R3512	1-216-059-00	RES,CHIP 2.7K 5% 1/10W	
R3513	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R3514	1-216-053-00	RES,CHIP 1.5K 5% 1/10W	
R3515	1-216-055-00	RES,CHIP 1.8K 5% 1/10W	
R3516	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3517	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3520	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3522	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3523	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3524	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3525	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3526	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3527	1-216-033-00	RES,CHIP 220 5% 1/10W	
R3529	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3532	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3533	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3534	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3540	1-216-061-00	RES,CHIP 3.3K 5% 1/10W	
R3541	1-216-061-00	RES,CHIP 3.3K 5% 1/10W	
R3542	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R3544	1-216-037-00	RES,CHIP 330 5% 1/10W	
R3545	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R3546	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R3550	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3552	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3553	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3554	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3555	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3556	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3557	1-216-033-00	RES,CHIP 220 5% 1/10W	
R3559	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3562	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3563	1-216-041-00	RES,CHIP 470 5% 1/10W	
R3564	1-216-041-00	RES,CHIP 470 5% 1/10W	

Ref.No.	Part No.	Description			Remark
	<SWITCH>				
S3500	1-692-453-11	SWITCH, KEY BOARD (LEFT)			
S3501	1-692-453-11	SWITCH, KEY BOARD (RIGHT)			
S3502	1-692-453-11	SWITCH, KEY BOARD (DOWN)			
S3503	1-692-453-11	SWITCH, KEY BOARD (UP)			
S3504	1-692-453-11	SWITCH, KEY BOARD (ENTER)			
S3505	1-692-453-11	SWITCH, KEY BOARD (MENU)			
S3506	1-692-453-11	SWITCH, KEY BOARD (INPUT)			
S3507	1-692-453-11	SWITCH, KEY BOARD (POWER)			
S3508	1-692-453-11	SWITCH, KEY BOARD (HELP)			
S3509	1-692-453-11	SWITCH, KEY BOARD (LIGHT)			
S3512	1-692-453-11	SWITCH, KEY BOARD (ALITO)			
S3513	1-692-453-11	SWITCH, KEY BOARD (VOL–)			
S3514	1-692-453-11	SWITCH, KEY BOARD (VOL+)			
S3515	1-692-453-11	SWITCH, KEY BOARD (RESET)			
**********					
	* A-1385-189-A	K COMPL **********			
	* 4-032-770-81	HEAT SINK, V-OUT			
	7-682-648-09	SCREW +PS 3X8			
	<CAPACITOR>				
C2900	1-126-200-11	ELECT CHIP	10µF	20%	35V
C2901	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C2902	1-128-401-11	ELECT CHIP	100µF	20%	25V
C2903	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C2904	1-128-401-11	ELECT CHIP	100µF	20%	25V
C2905	1-128-401-11	ELECT CHIP	100µF	20%	25V
C2906	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2907	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2908	1-128-401-11	ELECT CHIP	100µF	20%	25V
	<CONNECTOR>				
CN2900	* 1-580-056-21	PIN, CONNECTOR (SMD) 3P			
CN2901	* 1-580-055-21	PIN, CONNECTOR (SMD) 2P			
CN2903	* 1-580-055-21	PIN, CONNECTOR (SMD) 2P			
	<FILTER>				
FL2001	1-233-736-21	FILTER, EMI			
	<IC>				
IC2900	8-759-980-43	IC TDA2009A			
	<TRANSISTOR>				
Q2900	8-729-216-22	TRANSISTOR 2SA1162-G			
Q2901	8-729-230-49	TRANSISTOR 2SC2712-YG			
	<RESISTOR>				
R2900	1-216-075-00	RES,CHIP	12K	5%	1/10W
R2901	1-216-075-00	RES,CHIP	12K	5%	1/10W
R2902	1-216-097-91	RES,CHIP	100K	5%	1/10W
R2903	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R2904	1-216-041-00	RES,CHIP	470	5%	1/10W
R2905	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R2906	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R2907	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2908	1-216-021-00	RES,CHIP	68	5%	1/10W
R2909	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R2910	1-216-021-00	RES,CHIP	68	5%	1/10W
R2911	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R2912	1-249-385-11	CARBON	2.2	5%	1/4W F
R2913	1-249-385-11	CARBON	2.2	5%	1/4W F
R2914	1-216-637-11	METAL CHIP	270	0.50%	1/10W
**********					
	* A-1385-190-A	KS COMPL **********			
	<CAPACITOR>				
C2950	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C2951	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C2952	1-163-023-00	CERAMIC CHIP	0.015µF	10%	50V
C2953	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C2954	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2955	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2956	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2957	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C2958	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2959	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2960	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C2961	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2962	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C2963	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2964	1-163-023-00	CERAMIC CHIP	0.015µF	10%	50V
C2965	1-126-200-11	ELECT CHIP	10µF	20%	35V
C2966	1-128-401-11	ELECT CHIP	100µF	20%	25V
C2967	1-128-401-11	ELECT CHIP	100µF	20%	25V
	<CONNECTOR>				
CN2951	* 1-766-376-11	PIN, CONNECTOR (1.5MM)(SMD) 9P			
CN2952	* 1-580-057-11	PIN, CONNECTOR (SMD) 4P			
	<IC>				
IC2950	8-759-524-84	IC TEA2025D-013TR			
IC2951	8-759-460-81	IC BA12FP-E2			
	<TRANSISTOR>				
Q2950	8-729-216-22	TRANSISTOR 2SA1162-G			
Q2951	8-729-230-49	TRANSISTOR 2SC2712-YG			
	<RESISTOR>				
R2950	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W
R2951	1-216-646-11	METAL CHIP	620	0.50%	1/10W
R2952	1-216-025-91	RES,CHIP	100	5%	1/10W
R2953	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W
R2954	1-216-025-91	RES,CHIP	100	5%	1/10W
R2955	1-216-075-00	RES,CHIP	12K	5%	1/10W
R2956	1-216-075-00	RES,CHIP	12K	5%	1/10W
R2957	1-216-041-00	RES,CHIP	470	5%	1/10W
R2958	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R2959	1-216-646-11	METAL CHIP	620	0.50%	1/10W
R2960	1-216-097-91	RES,CHIP	100K	5%	1/10W
R2961	1-216-073-00	RES,CHIP	10K	5%	1/10W

NR S NF Y

Ref.No.	Part No.	Description			Remark
**********					
	* A-1390-974-A	NR MOUNT			
		**********			
		<CAPACITOR>			
C3700	1-113-985-11	TANTAL. CHIP	10µF	20%	20V
		<CONNECTOR>			
CN3700	* 1-580-056-21	PIN, CONNECTOR (SMD) 3P			
		<IC>			
IC3700	8-749-012-17	IC RS-140-T			
		<RESISTOR>			
R3700	1-216-025-91	RES,CHIP	100	5%	1/10W
R3701	1-216-017-91	RES,CHIP	47	5%	1/10W
**********					
	* A-1390-975-A	S MOUNT			
		**********			
		<CONNECTOR>			
CN2020	* 1-580-056-21	PIN, CONNECTOR (SMD) 3P			
		<SWITCH>			
S2020	1-570-245-11	SWITCH, MICRO			
		<THERMISTOR>			
TH2020	1-808-656-11	THERMISTOR			
**********					
	* 1-675-457-11	PWB, NF			
		**********			
		<CAPACITOR>			
C3600	1-113-985-11	TANTAL. CHIP	10µF	20%	20V
		<CONNECTOR>			
CN3600	1-691-550-11	PIN, CONNECTOR (1.5MM)(SMD) 3P			
		<IC>			
IC3600	8-749-012-17	IC RS-140-T			
		<RESISTOR>			
R3600	1-216-025-91	RES,CHIP	100	5%	1/10W
R3601	1-216-017-91	RES,CHIP	47	5%	1/10W

Ref.No.	Part No.	Description			Remark
**********					
	* A-1394-958-A	Y COMPL			
	* 4-073-897-01	GUIDE, PWB			
		**********			
		<CAPACITOR>			
C3001	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C3006	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3007	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3008	1-126-395-11	ELECT CHIP	22µF	20%	16V
C3009	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3012	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3013	1-126-395-11	ELECT CHIP	22µF	20%	16V
C3014	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3200	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3202	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C3203	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3204	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C3205	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3206	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3207	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3208	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3209	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C3210	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C3211	1-124-778-00	ELECT CHIP	22µF	20%	6.3V
C3212	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3213	1-124-778-00	ELECT CHIP	22µF	20%	6.3V
C3214	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3215	1-124-778-00	ELECT CHIP	22µF	20%	6.3V
C3216	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C3217	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3218	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3219	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3220	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3301	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C3302	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C3303	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C3304	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C3305	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3306	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C3307	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C3308	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C3309	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3310	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3311	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3312	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3313	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3314	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3315	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3316	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3317	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3318	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3319	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C3320	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C3321	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C3322	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C3323	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3324	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3325	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3326	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C3327	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C3328	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C3330	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C3332	1-117-720-11	CERAMIC CHIP	4.7µF		10V
C3334	1-117-720-11	CERAMIC CHIP	4.7µF		10V
C3401	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V

Ref.No.	Part No.	Description	Remark
C3402	1-125-817-11	CERAMIC CHIP 10µF 10% 6.3V	
C3403	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
		<CONNECTOR>	
CN3000	* 1-785-305-21	CONNECTOR, BOARD TO BOARD 70P	
CN3001	* 1-764-007-11	PIN, CONNECTOR (SMD) 12P	
CN3002	* 1-580-057-11	PIN, CONNECTOR (SMD) 4P	
CN3003	* 1-580-756-21	PIN, CONNECTOR (SMD) 7P	
CN3005	* 1-760-388-11	CONNECTOR PIN (SMD) 9 PIN	
CN3010	* 1-691-551-11	PIN, CONNECTOR (SMD) 8P	
		<DIODE>	
D3200	8-719-914-43	DIODE DAN202K	
D3201	8-719-914-43	DIODE DAN202K	
D3301	8-719-158-19	DIODE RD6.2SB	
D3302	8-719-158-19	DIODE RD6.2SB	
D3303	8-719-158-19	DIODE RD6.2SB	
D3304	8-719-158-19	DIODE RD6.2SB	
D3305	8-719-158-19	DIODE RD6.2SB	
D3306	8-719-158-19	DIODE RD6.2SB	
D3307	8-719-158-19	DIODE RD6.2SB	
D3308	8-719-158-19	DIODE RD6.2SB	
D3309	8-719-158-19	DIODE RD6.2SB	
D3310	8-719-158-19	DIODE RD6.2SB	
D3311	8-719-158-19	DIODE RD6.2SB	
D3312	8-719-158-19	DIODE RD6.2SB	
D3313	8-719-158-19	DIODE RD6.2SB	
D3314	8-719-158-19	DIODE RD6.2SB	
D3315	8-719-158-19	DIODE RD6.2SB	
D3316	8-719-158-19	DIODE RD6.2SB	
D3317	8-719-914-43	DIODE DAN202K	
D3318	8-719-914-43	DIODE DAN202K	
		<FERRITE BEAD>	
FB3200	1-414-234-22	INDUCTOR CHIP 0µH	
FB3201	1-414-234-22	INDUCTOR CHIP 0µH	
		<FILTER>	
FL3000	1-239-899-21	FILTER, CHIP EMI	
FL3001	1-239-899-21	FILTER, CHIP EMI	
FL3002	1-239-899-21	FILTER, CHIP EMI	
		<IC>	
IC3002	8-759-082-58	IC TC7W08FU	
IC3003	8-759-058-58	IC TC7S04FU(TE85R)	
IC3004	8-759-460-72	IC BA033FP-E2	
IC3007	8-759-157-17	IC PQ05SZ1U	
IC3200	8-759-082-58	IC TC7W08FU	
IC3201	8-759-582-91	IC S-80842ANNP-ED6-T2	
IC3202	8-759-544-01	IC S-80828ANNP-EDR-T2	
IC3203	8-759-492-55	IC M24C64-WMN6T	
IC3204	8-759-648-10	IC HD64F2633TE	
IC3301	8-759-653-02	IC IRMF	
IC3302	8-759-242-78	IC TC7W02F	
IC3303	8-759-655-55	IC UPD72012GB-003-3B4	
IC3304	8-759-655-54	IC ST72T631L4M1	
IC3401	8-759-082-60	IC TC7S66FU	
IC3402	8-759-277-63	IC TC7W14FU(TE12R)	
		<TRANSISTOR>	
Q3000	8-729-202-38	TRANSISTOR 2SC3326N-A	
Q3001	8-729-202-38	TRANSISTOR 2SC3326N-A	
Q3002	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3003	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3200	8-729-101-07	TRANSISTOR 2SB798-DL	
Q3201	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3301	8-729-202-38	TRANSISTOR 2SC3326N-A	
Q3302	8-729-202-38	TRANSISTOR 2SC3326N-A	
Q3303	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3306	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3307	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q3310	1-801-806-11	TRANSISTOR DTC144EKA-T146	
		<RESISTOR>	
R3002	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3004	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3005	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R3007	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3008	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3009	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R3012	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3014	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3015	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R3016	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3017	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R3019	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R3020	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3021	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R3030	1-216-017-91	RES,CHIP 47 5% 1/10W	
R3031	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R3032	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R3033	1-216-033-00	RES,CHIP 220 5% 1/10W	
R3201	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R3202	1-216-085-00	RES,CHIP 33K 5% 1/10W	
R3203	1-216-085-00	RES,CHIP 33K 5% 1/10W	
R3204	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R3205	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R3206	1-216-634-11	METAL CHIP 200 0.50% 1/10W	
R3207	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R3208	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3211	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3212	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3213	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3214	1-216-662-11	METAL CHIP 3K 0.50% 1/10W	
R3215	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3216	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R3217	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R3220	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R3221	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R3222	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R3223	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R3224	1-216-295-91	SHORT 0	
R3227	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3228	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3231	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3232	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3234	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3235	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R3237	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R3239	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3243	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3245	1-216-025-91	RES,CHIP 100 5% 1/10W	
R3246	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R3247	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R3248	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R3249	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R3250	1-216-073-00	RES,CHIP 10K 5% 1/10W	

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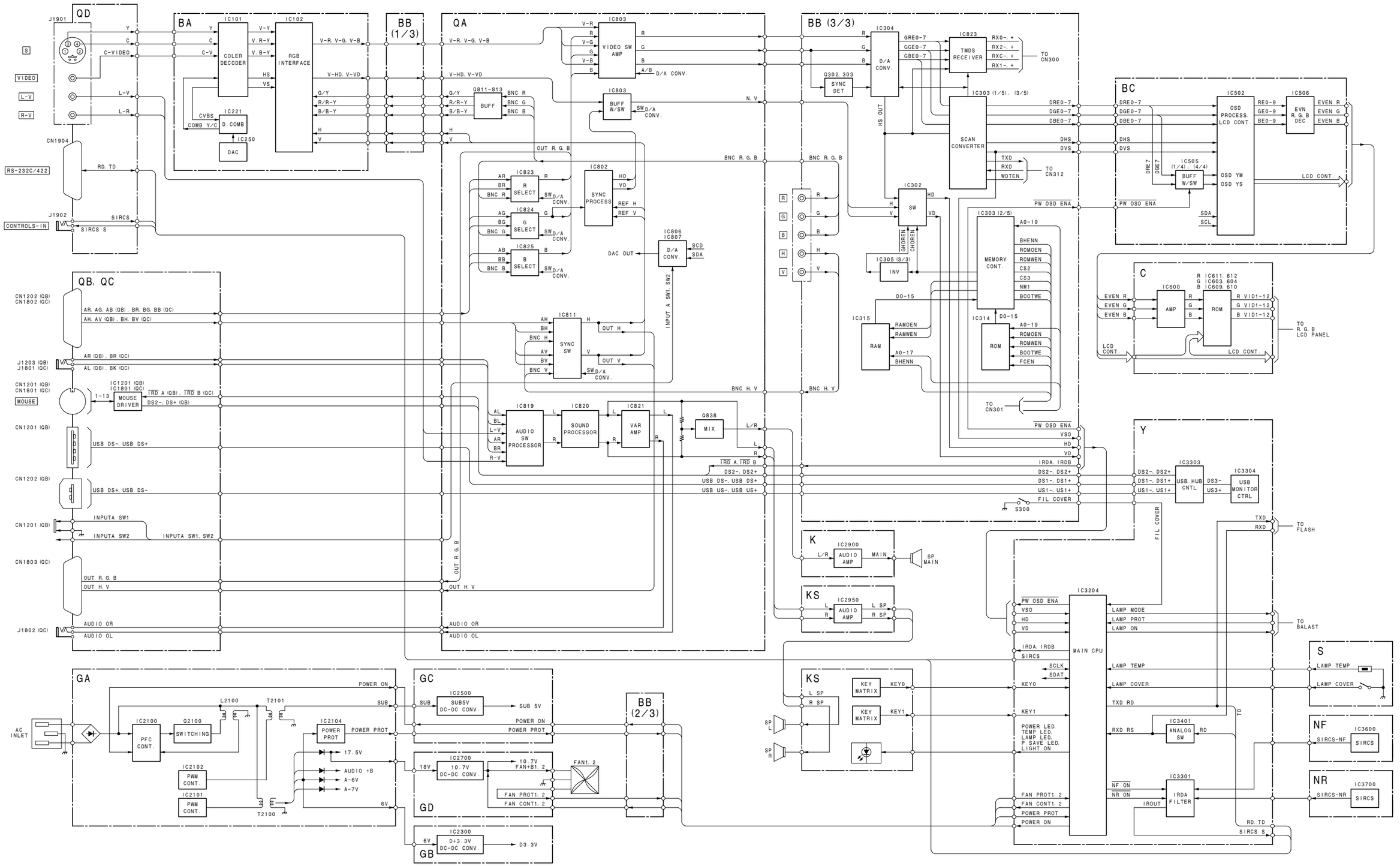
Ref.No.	Part No.	Description			Remark
R3251	1-216-025-91	RES,CHIP	100	5%	1/10W
R3252	1-216-025-91	RES,CHIP	100	5%	1/10W
R3253	1-216-025-91	RES,CHIP	100	5%	1/10W
R3254	1-216-025-91	RES,CHIP	100	5%	1/10W
R3255	1-216-025-91	RES,CHIP	100	5%	1/10W
R3256	1-216-025-91	RES,CHIP	100	5%	1/10W
R3257	1-216-025-91	RES,CHIP	100	5%	1/10W
R3258	1-216-025-91	RES,CHIP	100	5%	1/10W
R3259	1-216-025-91	RES,CHIP	100	5%	1/10W
R3260	1-216-025-91	RES,CHIP	100	5%	1/10W
R3261	1-216-025-91	RES,CHIP	100	5%	1/10W
R3262	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3263	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3264	1-216-025-91	RES,CHIP	100	5%	1/10W
R3265	1-216-025-91	RES,CHIP	100	5%	1/10W
R3267	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3268	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3271	1-216-025-91	RES,CHIP	100	5%	1/10W
R3274	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3275	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3276	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R3277	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R3301	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3302	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3303	1-216-037-00	RES,CHIP	330	5%	1/10W
R3304	1-216-037-00	RES,CHIP	330	5%	1/10W
R3305	1-216-037-00	RES,CHIP	330	5%	1/10W
R3306	1-216-037-00	RES,CHIP	330	5%	1/10W
R3307	1-216-025-91	RES,CHIP	100	5%	1/10W
R3308	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3309	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3310	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3311	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3312	1-216-025-91	RES,CHIP	100	5%	1/10W
R3313	1-216-025-91	RES,CHIP	100	5%	1/10W
R3314	1-216-025-91	RES,CHIP	100	5%	1/10W
R3315	1-216-295-91	SHORT	0		
R3316	1-216-295-91	SHORT	0		
R3317	1-216-025-91	RES,CHIP	100	5%	1/10W
R3318	1-216-025-91	RES,CHIP	100	5%	1/10W
R3319	1-216-017-91	RES,CHIP	47	5%	1/10W
R3320	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3321	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3322	1-216-025-91	RES,CHIP	100	5%	1/10W
R3323	1-216-025-91	RES,CHIP	100	5%	1/10W
R3324	1-216-025-91	RES,CHIP	100	5%	1/10W
R3325	1-216-025-91	RES,CHIP	100	5%	1/10W
R3326	1-216-025-91	RES,CHIP	100	5%	1/10W
R3327	1-216-025-91	RES,CHIP	100	5%	1/10W
R3328	1-216-025-91	RES,CHIP	100	5%	1/10W
R3329	1-216-025-91	RES,CHIP	100	5%	1/10W
R3330	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3331	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3332	1-216-025-91	RES,CHIP	100	5%	1/10W
R3333	1-216-025-91	RES,CHIP	100	5%	1/10W
R3334	1-216-025-91	RES,CHIP	100	5%	1/10W
R3335	1-216-025-91	RES,CHIP	100	5%	1/10W
R3336	1-216-025-91	RES,CHIP	100	5%	1/10W
R3337	1-216-025-91	RES,CHIP	100	5%	1/10W
R3338	1-216-025-91	RES,CHIP	100	5%	1/10W
R3339	1-216-025-91	RES,CHIP	100	5%	1/10W
R3340	1-216-025-91	RES,CHIP	100	5%	1/10W
R3341	1-216-001-00	RES,CHIP	10	5%	1/10W
R3342	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R3343	1-216-121-91	RES,CHIP	1M	5%	1/10W
R3344	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R3345	1-216-005-00	RES,CHIP	15	5%	1/10W
R3346	1-216-005-00	RES,CHIP	15	5%	1/10W
R3347	1-216-005-00	RES,CHIP	15	5%	1/10W
R3348	1-216-005-00	RES,CHIP	15	5%	1/10W
R3349	1-216-005-00	RES,CHIP	15	5%	1/10W
R3350	1-216-005-00	RES,CHIP	15	5%	1/10W
R3351	1-216-005-00	RES,CHIP	15	5%	1/10W
R3352	1-216-005-00	RES,CHIP	15	5%	1/10W
R3353	1-216-005-00	RES,CHIP	15	5%	1/10W
R3354	1-216-005-00	RES,CHIP	15	5%	1/10W
R3355	1-216-005-00	RES,CHIP	15	5%	1/10W
R3356	1-216-005-00	RES,CHIP	15	5%	1/10W
R3357	1-216-077-91	RES,CHIP	15K	5%	1/10W
R3358	1-216-077-91	RES,CHIP	15K	5%	1/10W
R3359	1-216-077-91	RES,CHIP	15K	5%	1/10W
R3360	1-216-077-91	RES,CHIP	15K	5%	1/10W
R3361	1-216-077-91	RES,CHIP	15K	5%	1/10W
R3362	1-216-077-91	RES,CHIP	15K	5%	1/10W
R3363	1-216-025-91	RES,CHIP	100	5%	1/10W
R3364	1-216-662-11	METAL CHIP	3K	0.50%	1/10W
R3365	1-218-769-11	METAL CHIP	510K	0.50%	1/10W
R3366	1-216-097-91	RES,CHIP	100K	5%	1/10W
R3367	1-216-097-91	RES,CHIP	100K	5%	1/10W
R3368	1-218-769-11	METAL CHIP	510K	0.50%	1/10W
R3369	1-216-295-91	SHORT	0		
R3370	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3371	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R3372	1-216-025-91	RES,CHIP	100	5%	1/10W
R3378	1-216-662-11	METAL CHIP	3K	0.50%	1/10W
R3382	1-216-295-91	SHORT	0		
R3383	1-216-295-91	SHORT	0		
R3384	1-216-025-91	RES,CHIP	100	5%	1/10W
R3386	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3389	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3390	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3401	1-216-295-91	SHORT	0		
R3402	1-216-295-91	SHORT	0		
R3403	1-216-025-91	RES,CHIP	100	5%	1/10W
R3404	1-216-025-91	RES,CHIP	100	5%	1/10W
R3405	1-216-103-00	RES,CHIP	180K	5%	1/10W
R3406	1-216-073-00	RES,CHIP	10K	5%	1/10W
		<NETWORK>			
RB3003	1-233-576-11	RES, CHIP NETWORK 100			
		<TEST PIN>			
TP3000	1-535-757-11	CHIP, CHECKER			
TP3001	1-535-757-11	CHIP, CHECKER			
TP3002	1-535-757-11	CHIP, CHECKER			
TP3003	1-535-757-11	CHIP, CHECKER			
TP3004	1-535-757-11	CHIP, CHECKER			
TP3005	1-535-757-11	CHIP, CHECKER			
TP3006	1-535-757-11	CHIP, CHECKER			
TP3007	1-535-757-11	CHIP, CHECKER			
TP3008	1-535-757-11	CHIP, CHECKER			
TP3009	1-535-757-11	CHIP, CHECKER			
TP3200	1-535-757-11	CHIP, CHECKER			
TP3201	1-535-757-11	CHIP, CHECKER			
TP3202	1-535-757-11	CHIP, CHECKER			
TP3203	1-535-757-11	CHIP, CHECKER			
TP3204	1-535-757-11	CHIP, CHECKER			
TP3205	1-535-757-11	CHIP, CHECKER			
TP3206	1-535-757-11	CHIP, CHECKER			
TP3301	1-535-757-11	CHIP, CHECKER			

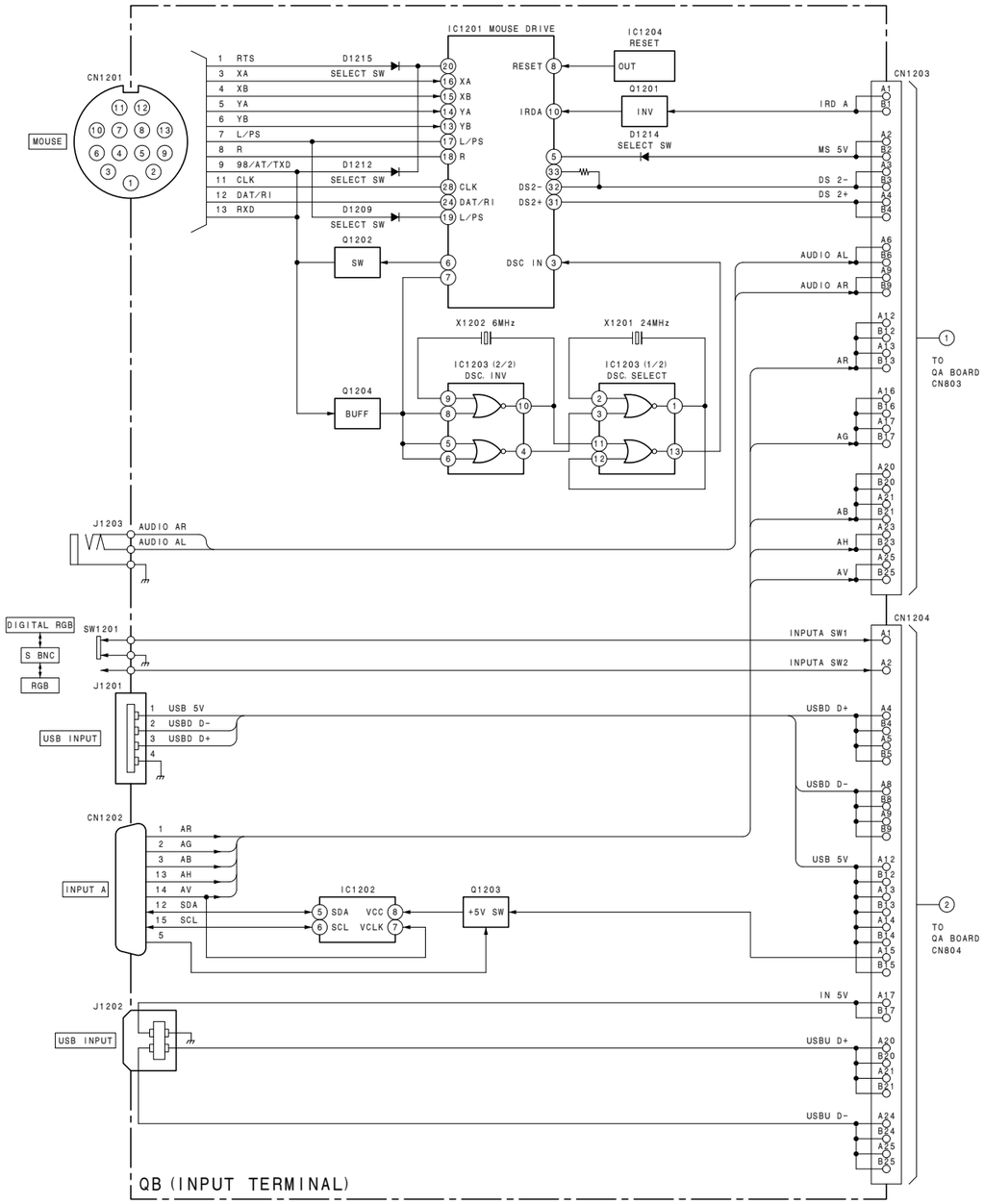
Ref.No.	Part No.	Description	Remark
TP3302	1-535-757-11	CHIP, CHECKER	
TP3303	1-535-757-11	CHIP, CHECKER	
TP3304	1-535-757-11	CHIP, CHECKER	
TP3305	1-535-757-11	CHIP, CHECKER	
TP3306	1-535-757-11	CHIP, CHECKER	
TP3307	1-535-757-11	CHIP, CHECKER	
TP3308	1-535-757-11	CHIP, CHECKER	
TP3309	1-535-757-11	CHIP, CHECKER	
	<CRYSTAL>		
X3200	1-781-659-21	VIBRATOR, CRYSTAL (12.288 MHz)	
X3301	1-767-340-11	VIBRATOR, CRYSTAL (4.0 MHz)	
X3302	1-781-163-11	VIBRATOR, OSCILLATOR (24.0 MHz)	
**********			
		MISCELLANOUS **********	
	1-529-499-11	SPEAKER (4.5CM)	
	1-763-422-11	FAN, DC	
	1-758-440-11	OPTICAL UNIT	
⚠	1-468-445-11	POWER BLOCK	
	1-500-278-11	FILTER, CLAMP (FERRITE CORE)	
	1-505-600-11	SPEAKER (065W004)	
⚠	1-526-813-12	INLET, AC (3P)	
	1-763-417-11	FAN, DC	
	1-900-249-68	CONNECTOR ASSY, FUSE 2P	
**********			
		ACCESSORIES **********	
	1-575-334-11	CORD, CONNECTION	
⚠	1-534-827-14	CORD, POWER (7A/125V)	
⚠	1-777-649-11	CORD, POWER (10A/250V)	
⚠	1-782-929-11	CORD, POWER SUPPLY (BS 3P) (10A/250V)	
	1-790-081-21	CABLE, USB	
	4-073-737-01	FILTER	
	4-073-984-11	OPERATING INSTRUCTIONS (ENGLISH/ FRANCH/SPANISH)	
	4-073-984-21	OPERATING INSTRUCTIONS (GERMAN/ ITALIAN)	
	4-073-987-01	INSTRUCTION MANUAL FOR DEALERS (JAPANESE/ENGLISH/FRENCH/ SPANISH/GERMAN/ITALIAN/CHINESE)	
	4-073-992-01	QUICK REFERENCE CARD (JAPANESE/ ENGLISH/FRENCH/SPANISH/GERMAN/ ITALIAN/CHINESE)	
	9-885-000-17	COVER, BATTERY (RM-PJM610)	

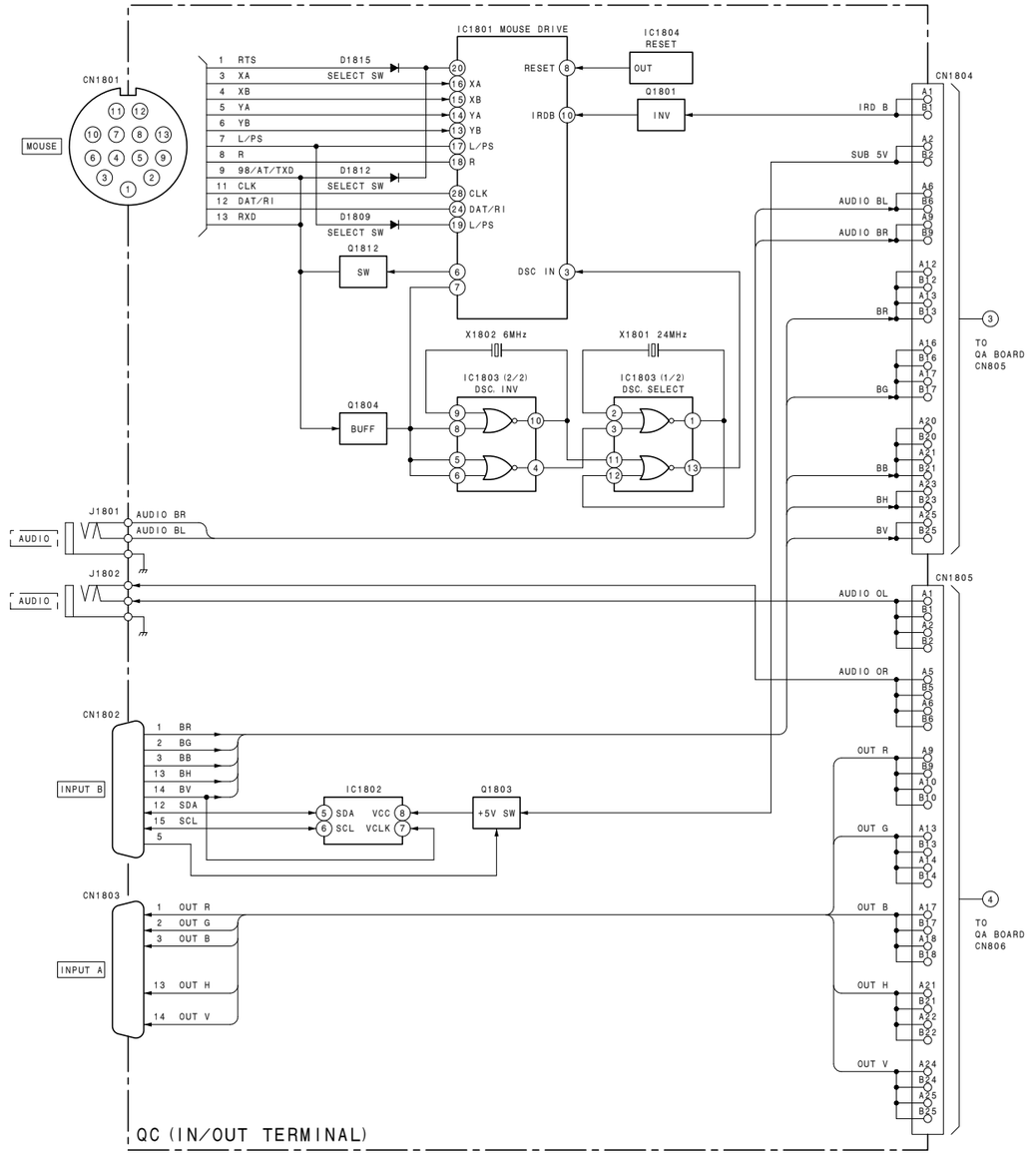
Ref.No.	Part No.	Description	Remark

Section 8
Block Diagrams



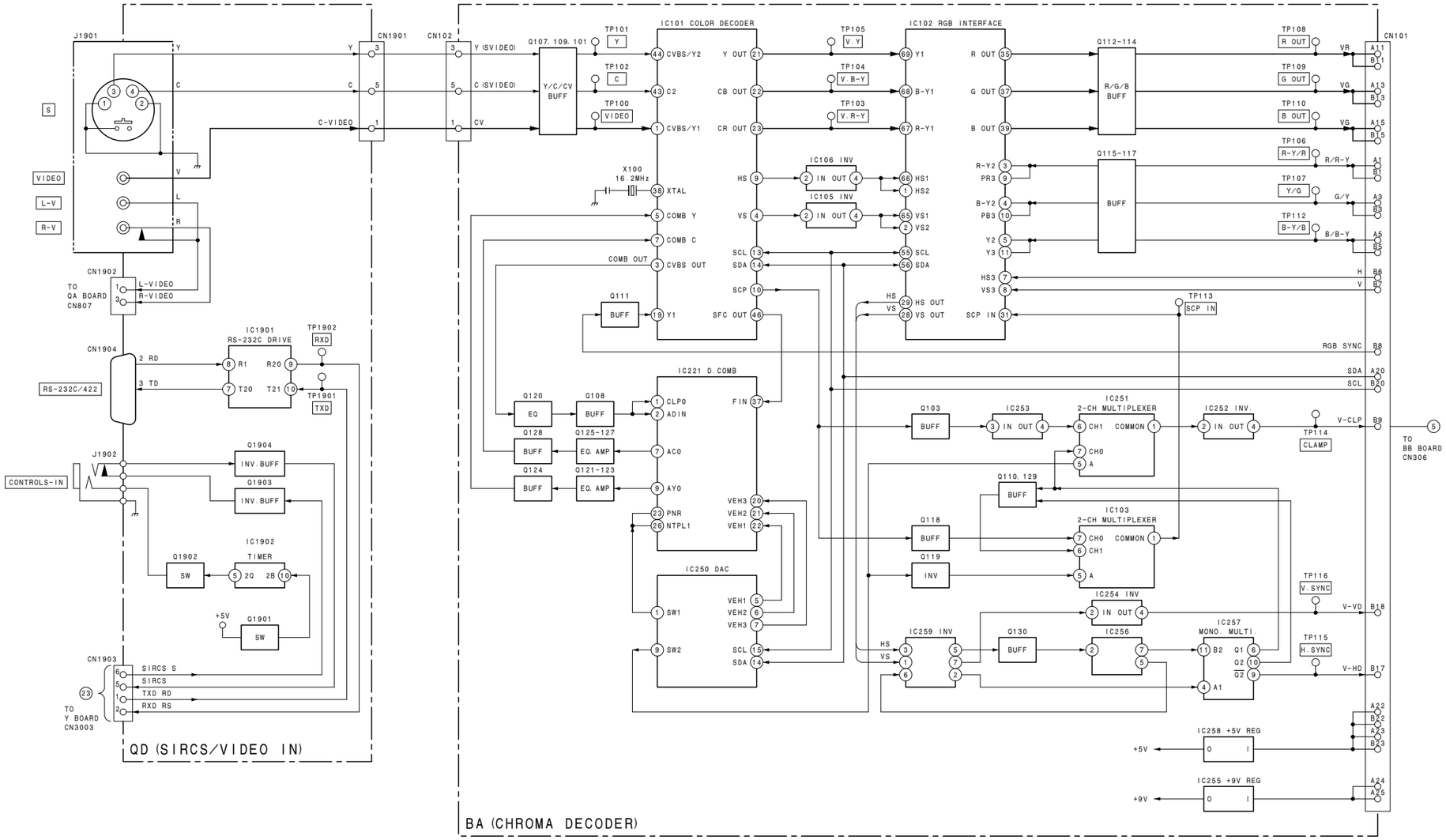
OVERALL BLOCK



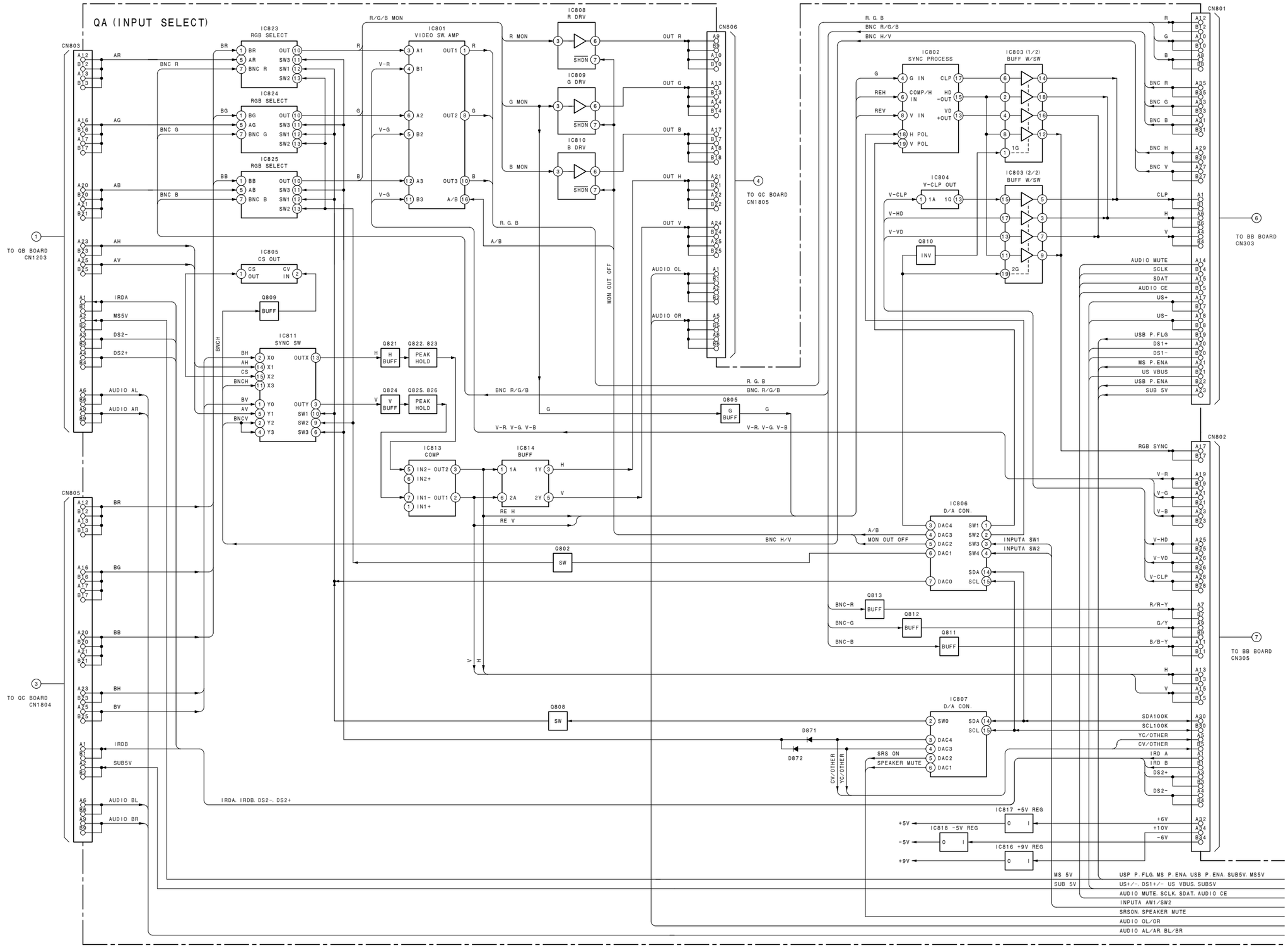


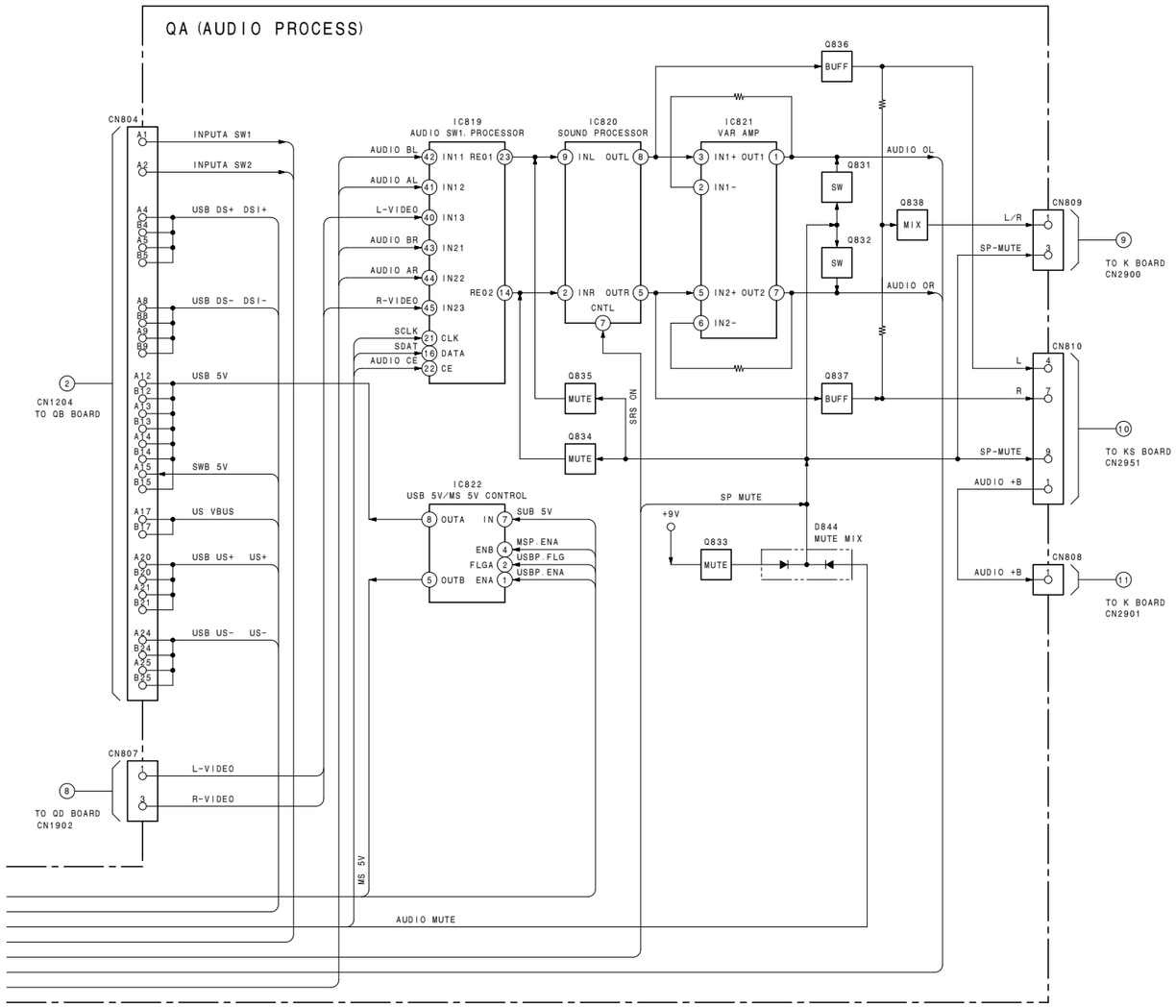
QB BLOCK

QC BLOCK

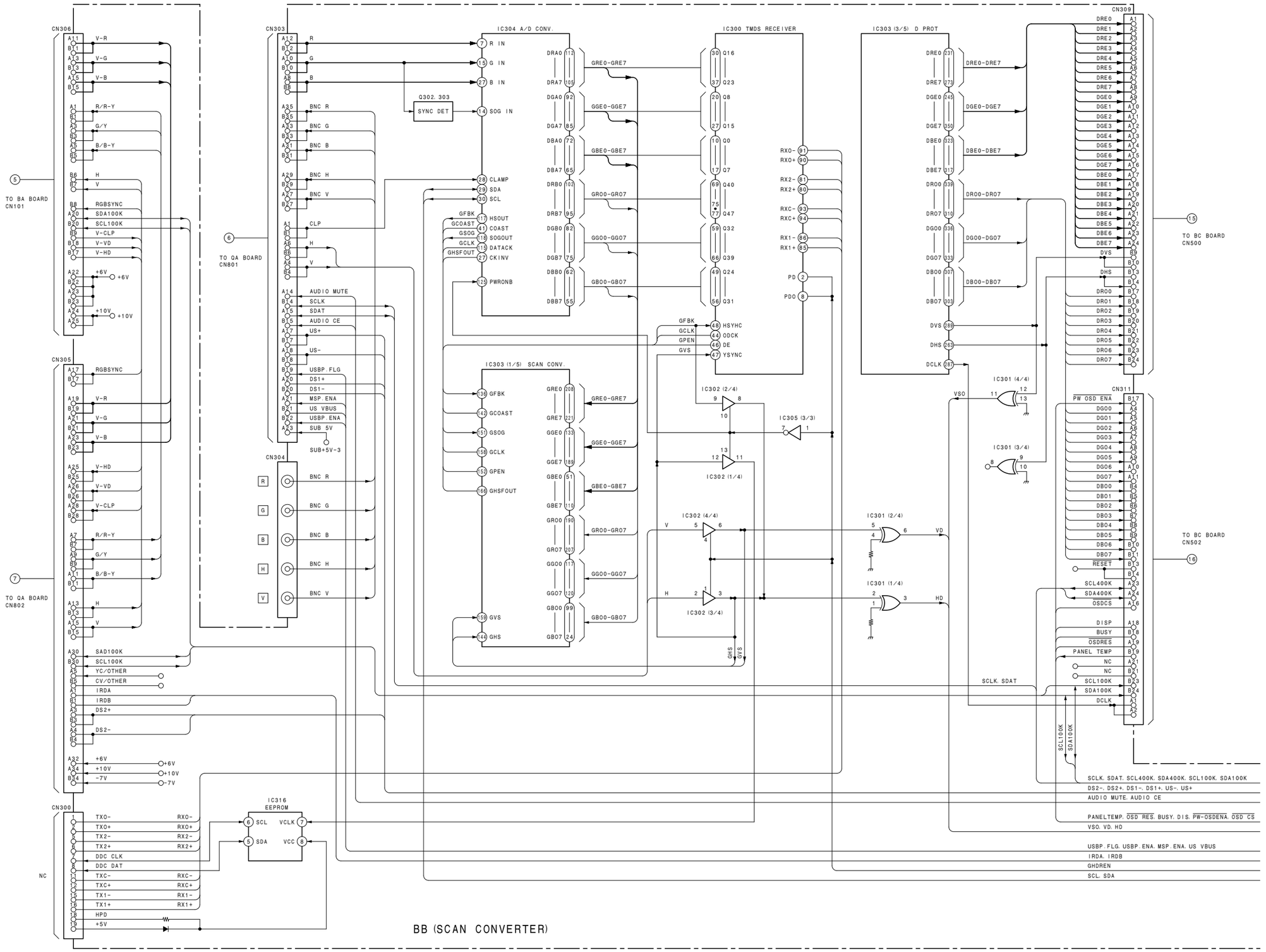

J1901
S
VIDEO
L-V
R-V
Y
C
V
L
R
CN1902
TO
OA BOARD
CN807
L-VIDEO
R-VIDEO
CN1904
RS-232C/422
2 RD
3 TD
IC1901
RS-232C DRIVE
R1
R20
T20
T21
TP1902
RXD
TP1901
TXD
J1902
CONTROLS-IN
Q1904
INV. BUFF
Q1903
INV. BUFF
IC1902
TIMER
Q1902
SW
2Q
2B
Q1901
SW
+5V
CN1903
SIRCS S
SIRCS
TXD RD
RXD RS
TO
Y BOARD
CN3003
QD (SIRCS/VIDEO IN)
CN1901
CN102
Y (SVIDEO)
C (SVIDEO)
CV
C-VIDEO
Q107. 109. 101
Y/C/CV
BUFF
TP101
Y
TP102
C
TP100
VIDEO
IC101 COLOR DECODER
CVBS/Y2
C2
CVBS/Y1
X100
16. 2MHz
XTAL
COMB Y
COMB C
COMB OUT
CVBS OUT
Q111
BUFF
Y1
HS
VS
SCL
SDA
SCP
SFC OUT
TP105
V. Y
TP104
V. B-Y
TP103
V. R-Y
IC102 RGB INTERFACE
Y OUT
CB OUT
CR OUT
IC106 INV
IC105 INV
IN OUT
HS1
HS2
VS1
VS2
HS OUT
VS OUT
SCP IN
TP113
SCP IN
R OUT
G OUT
B OUT
R-Y2
PR3
B-Y2
PB3
Y2
Y3
HS3
VS3
Q112-114
R/G/B
BUFF
Q115-117
BUFF
TP108
R OUT
TP109
G OUT
TP110
B OUT
TP106
R-Y/R
TP107
Y/G
TP112
B-Y/B
VR
VG
VG
R/R-Y
G/Y
B/B-Y
H
V
RGB SYNC
SDA
SCL
CN101
IC221 D. COMB
FIN
CLP0
ADIN
ACO
AYO
PNR
NTPL1
Q120
EQ
Q108
BUFF
Q128
BUFF
Q125-127
EQ. AMP
Q124
BUFF
Q121-123
EQ. AMP
VEH3
VEH2
VEH1
IC250 DAC
SW1
SW2
Q103
BUFF
IC253
IN OUT
IC251
2-CH MULTIPLEXER
CH1
CH0
COMMON
A
IC252 INV
IN OUT
TP114
CLAMP
V-CLP
TO
BB BOARD
CN306
Q110. 129
BUFF
IC103
2-CH MULTIPLEXER
Q118
BUFF
Q119
INV
IC254 INV
IN OUT
IC259 INV
Q130
BUFF
IC256
IC257
MONO. MULTI
B2
Q1
Q2
A1
TP116
V. SYNC
TP115
H. SYNC
V-VD
V-HD
IC258 +5V REG
IC255 +9V REG
+5V
+9V
BA (CHROMA DECODER)

BA, QD BLOCK

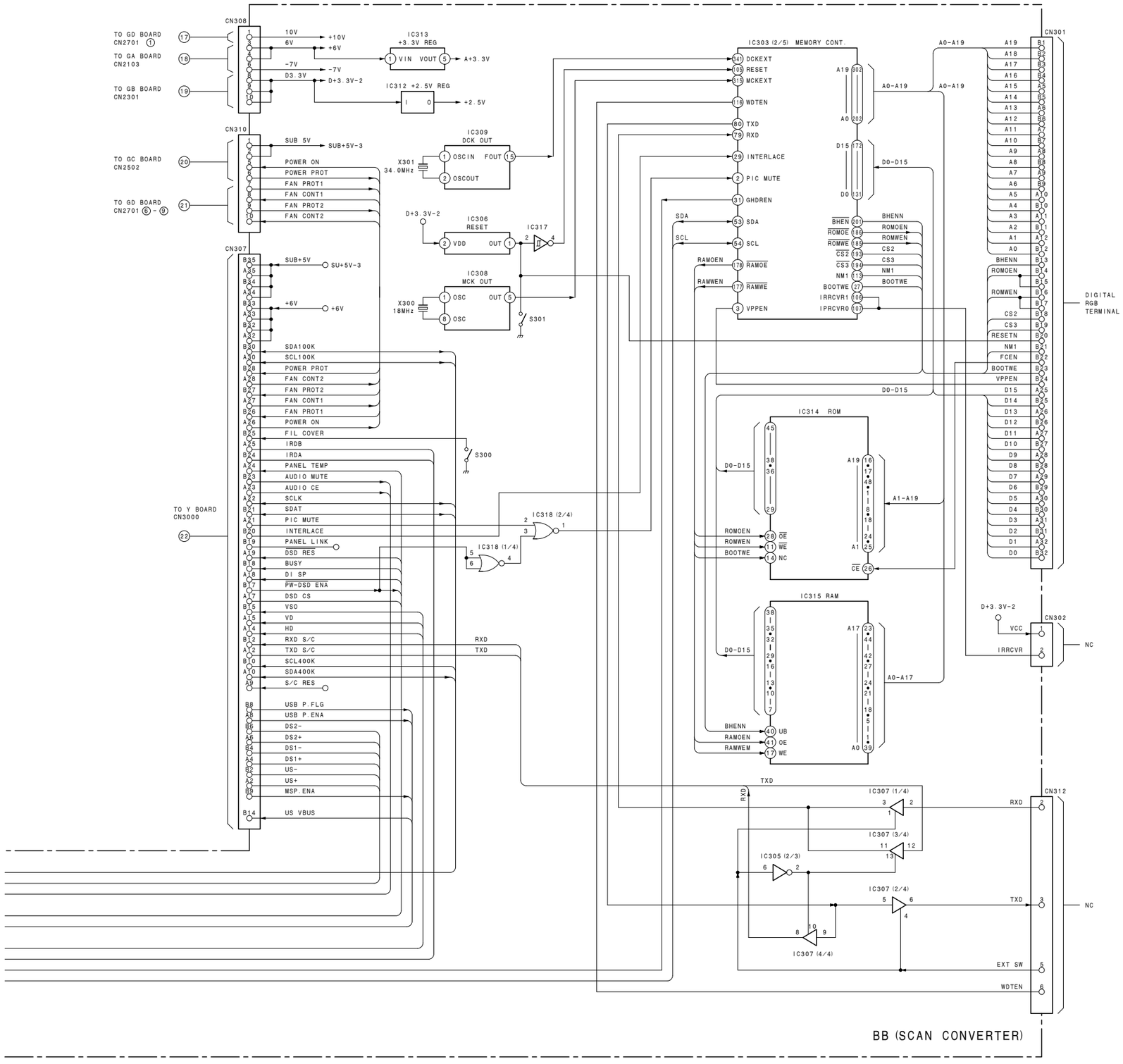

QA (INPUT SELECT)
CN803
CN805
IC823 RGB SELECT
IC824 RGB SELECT
IC825 RGB SELECT
IC801 VIDEO SW AMP
IC805 CS OUT
IC811 SYNC SW
IC813 COMP
IC814 BUFF
IC808 R DRV
IC809 G DRV
IC810 B DRV
CN806
IC802 SYNC PROCESS
IC803 (1/2) BUFF W/SW
IC803 (2/2) BUFF W/SW
IC804 V-CLP OUT
Q810 INV
CN801
CN802
IC806 D/A CON.
IC807 D/A CON.
Q802 SW
Q808 SW
Q809 BUFF
Q821 H BUFF
Q822. 823 PEAK HOLD
Q824 V BUFF
Q825. 826 PEAK HOLD
Q805 G BUFF
Q813 BUFF
Q812 BUFF
Q811 BUFF
D871
D872
IC817 +5V REG
IC818 -5V REG
IC816 +9V REG
TO QB BOARD CN1203
TO QC BOARD CN1804
TO QC BOARD CN1805
TO BB BOARD CN303
TO BB BOARD CN305
R/G/B MON
R MON
G MON
B MON
R. G. B
A/B
MON OUT OFF
BNC R/G/B
BNC. R/G/B
BNC H/V
V-R. V-G. V-B
IRDA. IRDB. DS2-. DS2+
MS 5V
SUB 5V
USP P.FLG. MS P.ENA. USB P.ENA. SUB5V. MS5V
US+/-. DS1+/- US VBUS. SUB5V
AUDIO MUTE. SCLK. SDAT. AUDIO CE
INPUTA AW1/SW2
SRSON. SPEAKER MUTE
AUDIO OL/OR
AUDIO AL/AR. BL/BR


QA (AUDIO PROCESS)
CN804
INPUTA SW1
INPUTA SW2
USB DS+ DSI+
USB DS- DSI-
USB 5V
SWB 5V
US VBUS
USB US+ US+
USB US- US-
CN1204
TO QB BOARD
CN807
L-VIDEO
R-VIDEO
TO QD BOARD
CN1902
IC819
AUDIO SW1. PROCESSOR
AUDIO BL
AUDIO AL
L-VIDEO
AUDIO BR
AUDIO AR
R-VIDEO
SCLK
SDAT
AUDIO CE
IN11 RE01
IN12
IN13
IN21
IN22
IN23
RE02
CLK
DATA
CE
IC820
SOUND PROCESSOR
INL OUTL
INR OUTR
CNTL
IC821
VAR AMP
IN1+ OUT1
IN1-
IN2+ OUT2
IN2-
Q836
BUFF
Q831
SW
Q832
SW
Q838
MIX
AUDIO OL
AUDIO OR
L/R
SP-MUTE
CN809
TO K BOARD
CN2900
CN810
L
R
SP-MUTE
AUDIO +B
TO KS BOARD
CN2951
CN808
AUDIO +B
TO K BOARD
CN2901
Q835
MUTE
Q834
MUTE
SRS ON
Q837
BUFF
IC822
USB 5V/MS 5V CONTROL
OUTA
IN
SUB 5V
ENB
MSP.ENA
FLGA
USBP.FLG
OUTB
ENA
USBP.ENA
MS 5V
SP MUTE
+9V
Q833
MUTE
D844
MUTE MIX
AUDIO MUTE

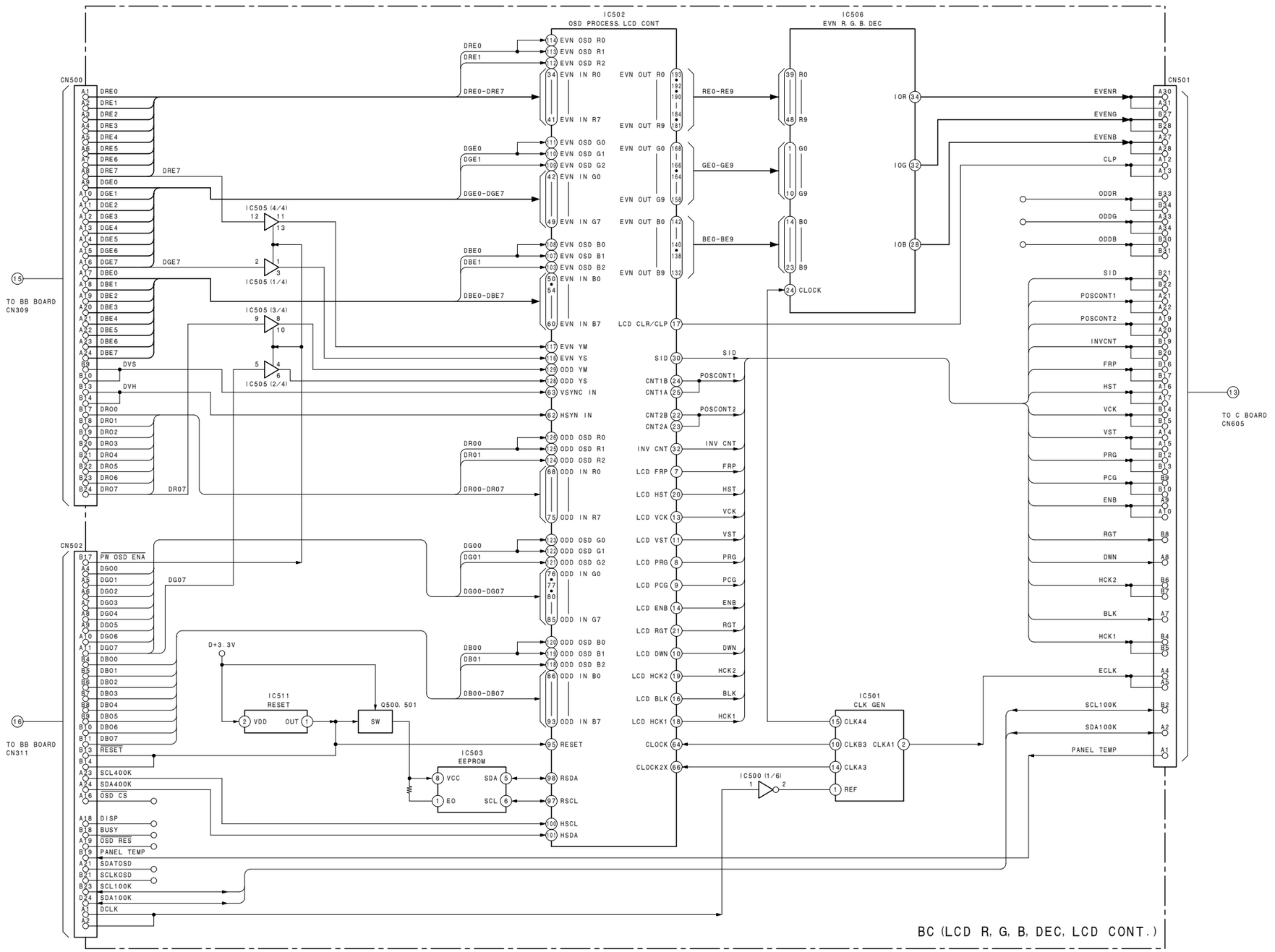
QA BLOCK



BB (SCAN CONVERTER)

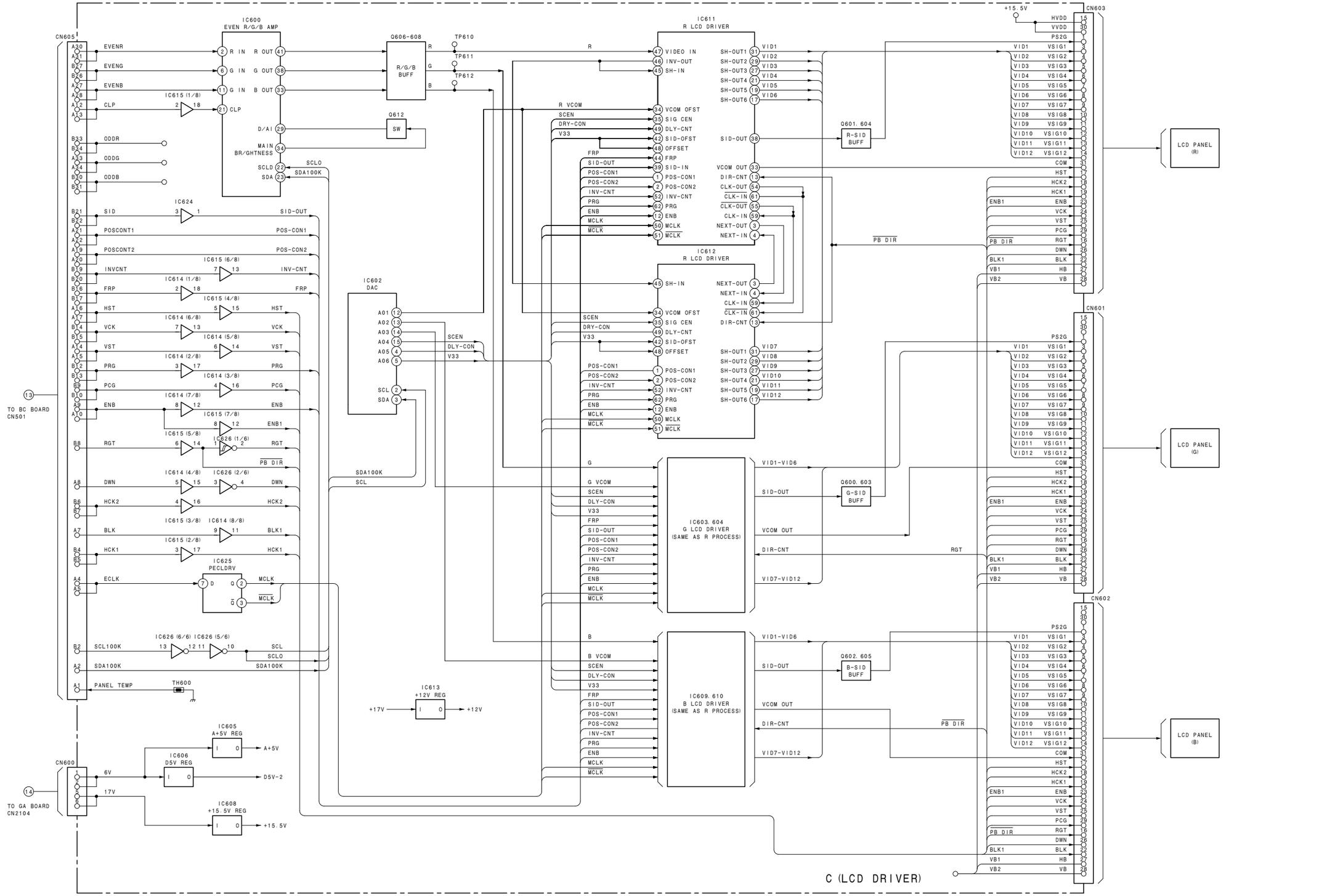

CN308
TO GD BOARD CN2701 (17)
TO GA BOARD CN2103 (18)
TO GB BOARD CN2301 (19)
10V
6V
-7V
D3.3V
+10V
+6V
-7V
D+3.3V-2
IC313 +3.3V REG
VIN VOUT
A+3.3V
IC312 +2.5V REG
+2.5V
CN310
TO GC BOARD CN2502 (20)
TO GD BOARD CN2701 (6) - (9) (21)
SUB 5V
SUB+5V-3
POWER ON
POWER PROT
FAN PROT1
FAN CONT1
FAN PROT2
FAN CONT2
IC309 DCK OUT
X301 34.0MHz
OSCIN FOUT
OSCOUT
IC306 RESET
VDD OUT
IC317
IC308 MCK OUT
X300 18MHz
OSC OUT
S301
CN307
SUB+5V
SU+5V-3
+6V
SDA100K
SCL100K
FIL COVER
S300
IRDB
IRDA
PANEL TEMP
AUDIO MUTE
AUDIO CE
SCLK
SDAT
PIC MUTE
INTERLACE
PANEL LINK
DSD RES
BUSY
DI SP
PW-DSD ENA
DSD CS
VSO
VD
HD
RXD S/C
TXD S/C
SCL400K
SDA400K
S/C RES
USB P.FLG
USB P.ENA
DS2-
DS2+
DS1-
DS1+
US-
US+
MSP.ENA
US VBUS
TO Y BOARD CN3000 (22)
IC318 (2/4)
IC318 (1/4)
RXD
TXD
IC303 (2/5) MEMORY CONT.
DCKEXT
RESET
MCKEXT
WDTEN
TXD
RXD
INTERLACE
PIC MUTE
GHDREN
SDA
SCL
RAMOEN
RAMWEN
VPPEN
A19 (102)
A0 (109)
D15 (72)
D0 (31)
A0-A19
D0-D15
BHEN (81)
ROMOE (88)
ROMWE (89)
CS2 (93)
CS3 (94)
NM1 (13)
BOOTWE (27)
IRRCVR1 (106)
IPRCVR0 (107)
BHENN
ROMOEN
ROMWEN
CS2
CS3
NM1
BOOTWE
CN301
A19 B1
A18 B2
A17 B3
A16 B4
A15 A5
A14 B5
A13 A6
A12 B6
A11 A7
A10 B7
A9 A8
A8 B8
A7 A9
A6 B9
A5 A10
A4 B10
A3 A11
A2 B11
A1 A12
A0 B12
BHENN B13
ROMOEN B14
ROMWEN B16
CS2 B18
CS3 B19
RESETN B20
NM1 B21
FCEN B22
BOOTWE B23
VPPEN B24
D15 A25
D14 B25
D13 A26
D12 B26
D11 A27
D10 B27
D9 A28
D8 B28
D7 A29
D6 B29
D5 A30
D4 B30
D3 A31
D2 B31
D1 A32
D0 B32
DIGITAL RGB TERMINAL
IC314 ROM
A19
A1-A19
ROMOEN
ROMWEN
BOOTWE
OE
WE
NC
CE
IC315 RAM
A17
A0
A0-A17
BHENN
RAMOEN
RAMWEM
UB
OE
WE
D+3.3V-2
CN302
VCC
IRRCVR
NC
CN312
RXD
TXD
EXT SW
WDTEN
IC307 (1/4)
IC307 (3/4)
IC305 (2/3)
IC307 (2/4)
IC307 (4/4)
BB (SCAN CONVERTER)

BB BLOCK

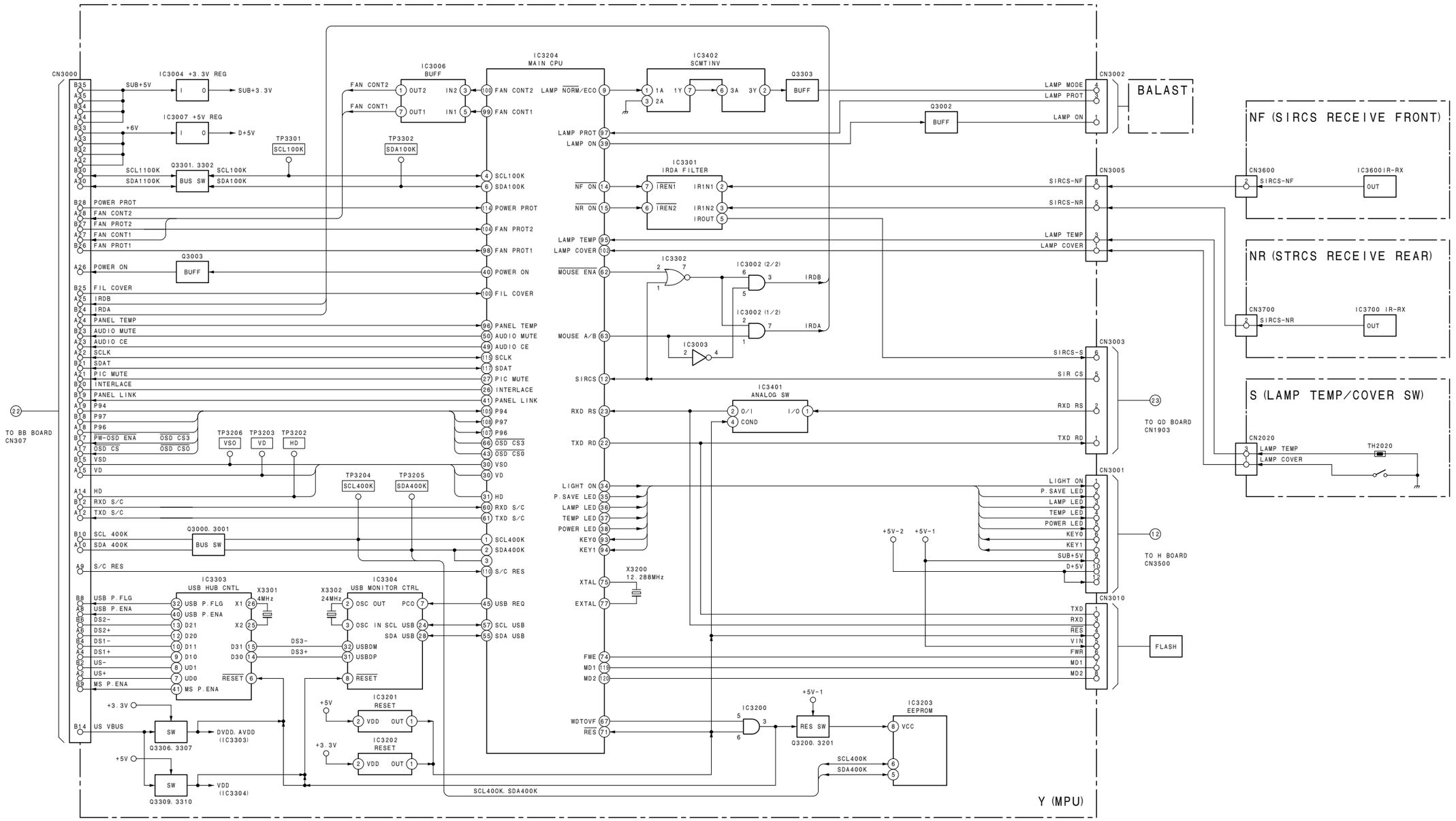


BC BLOCK

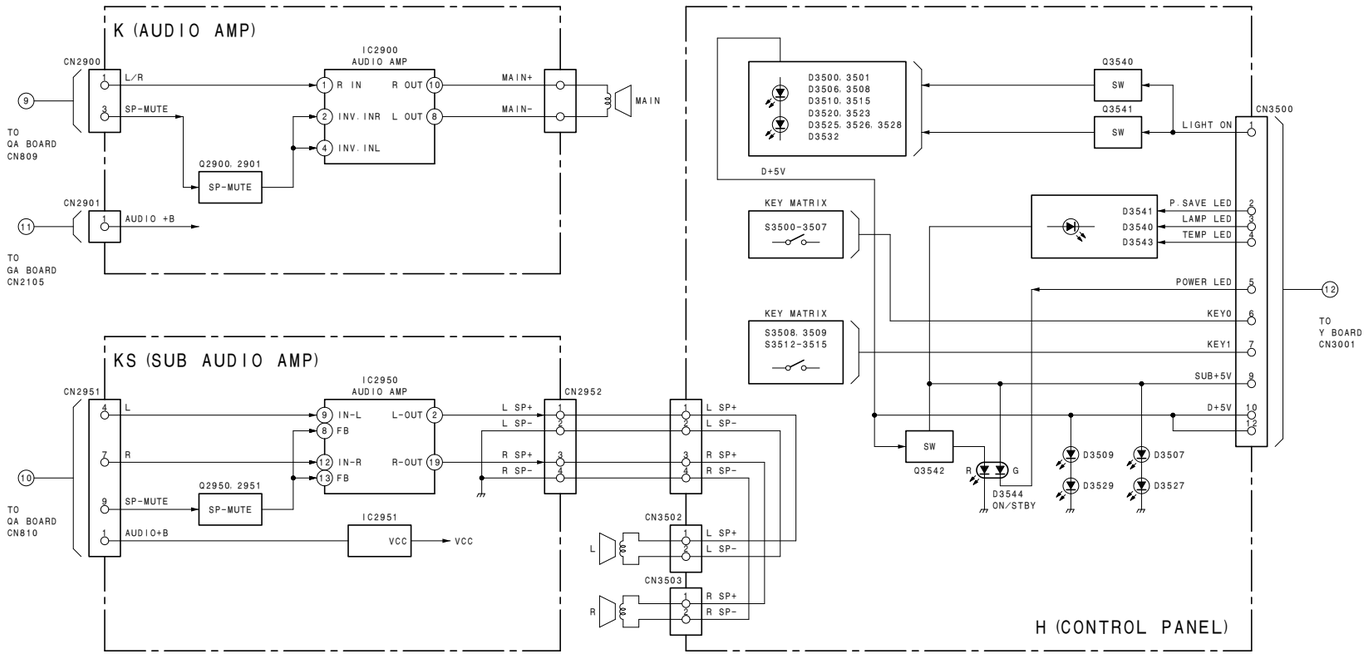
VPL-PX20/PX30

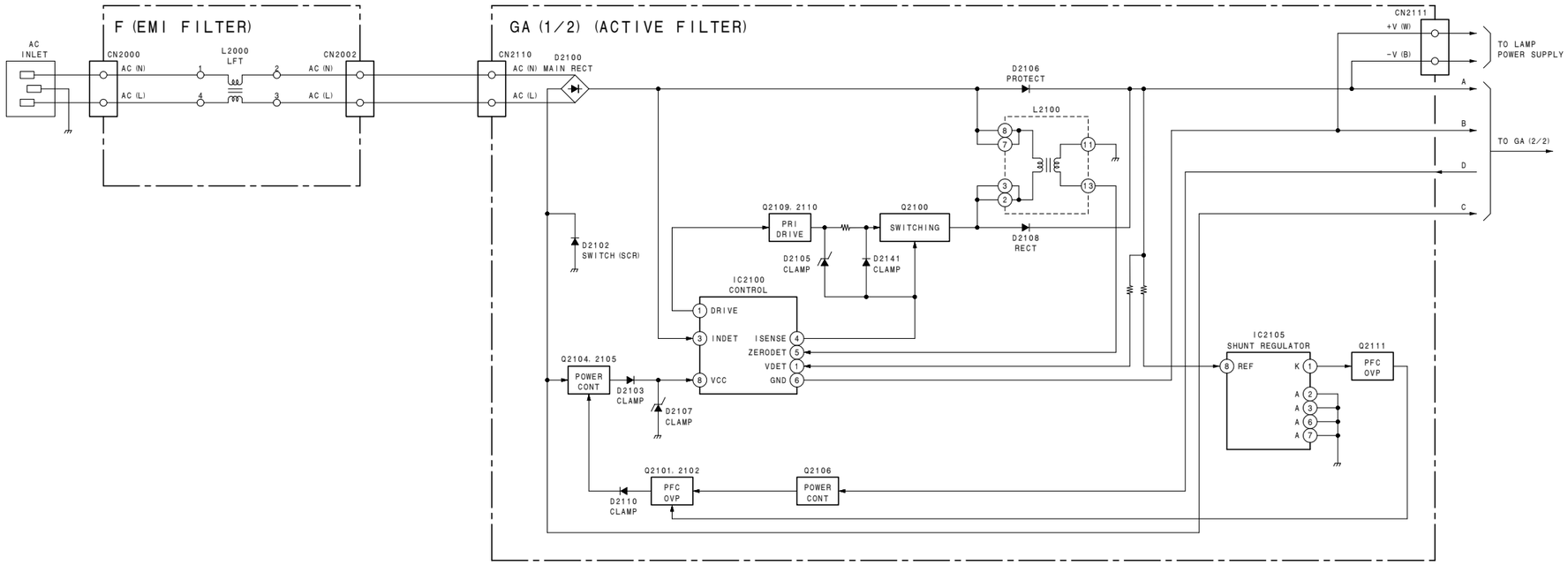

CN605
IC600
EVEN R/G/B AMP
EVENR
EVENG
EVENB
CLP
ODDR
ODDG
ODDB
R IN
G IN
G IN
D/A I
MAIN BR/GHTNESS
SCLD
SDA
R OUT
G OUT
B OUT
CLP
SCLO
SDA100K
IC615 (1/8)
Q606-608
R/G/B BUFF
TP610
TP611
TP612
Q612
SW
IC624
SID
POSCONT1
POSCONT2
INVCNT
FRP
HST
VCK
VST
PRG
PCG
ENB
RGT
DWN
HCK2
BLK
HCK1
ECLK
SCL100K
SDA100K
PANEL TEMP
TH600
SID-OUT
POS-CON1
POS-CON2
INV-CNT
FRP
HST
VCK
VST
PRG
PCG
ENB
ENB1
RGT
PB DIR
DWN
HCK2
BLK1
HCK1
MCLK
SCL
SCLO
SDA100K
IC625
PECLDRV
IC626 (6/6) IC626 (5/6)
IC626 (1/6)
IC626 (2/6)
IC614 (4/8)
IC615 (3/8)
IC614 (8/8)
IC615 (2/8)
IC615 (6/8)
IC614 (1/8)
IC615 (4/8)
IC614 (6/8)
IC614 (5/8)
IC614 (2/8)
IC614 (3/8)
IC614 (7/8)
IC615 (7/8)
IC615 (5/8)
TO BC BOARD CN501
TO GA BOARD CN2104
CN600
6V
17V
IC605
A+5V REG
IC606
D5V REG
IC608
+15.5V REG
A+5V
D5V-2
+15.5V
IC602
DAC
SCEN
DLY-CON
V33
SCL
SDA
IC613
+12V REG
+17V
+12V
IC611
R LCD DRIVER
IC612
R LCD DRIVER
R VCOM
SCEN
DRY-CON
V33
FRP
SID-OUT
POS-CON1
POS-CON2
INV-CNT
PRG
ENB
MCLK
VIDEO IN
INV-OUT
SH-IN
VCOM OFST
SIG CEN
DLY-CNT
SID-OFST
OFFSET
SID-IN
PDS-CON1
SH-OUT1
SH-OUT2
SH-OUT3
SH-OUT4
SH-OUT5
SH-OUT6
VID1
VID2
VID3
VID4
VID5
VID6
VID7
VID8
VID9
VID10
VID11
VID12
VCOM OUT
DIR-CNT
CLK-OUT
CLK-IN
NEXT-OUT
NEXT-IN
Q601. 604
R-SID BUFF
PB DIR
G
G VCOM
B
B VCOM
IC603. 604
G LCD DRIVER
(SAME AS R PROCESS)
IC609. 610
B LCD DRIVER
(SAME AS R PROCESS)
VID1-VID6
VID7-VID12
Q600. 603
G-SID BUFF
Q602. 605
B-SID BUFF
RGT
+15. 5V
CN603
CN601
CN602
HVDD
VVDD
PS2G
VSIG1
VSIG2
VSIG3
VSIG4
VSIG5
VSIG6
VSIG7
VSIG8
VSIG9
VSIG10
VSIG11
VSIG12
COM
HST
HCK2
HCK1
ENB
VCK
VST
PCG
RGT
DWN
BLK
HB
VB
LCD PANEL (R)
LCD PANEL (G)
LCD PANEL (B)
C (LCD DRIVER)

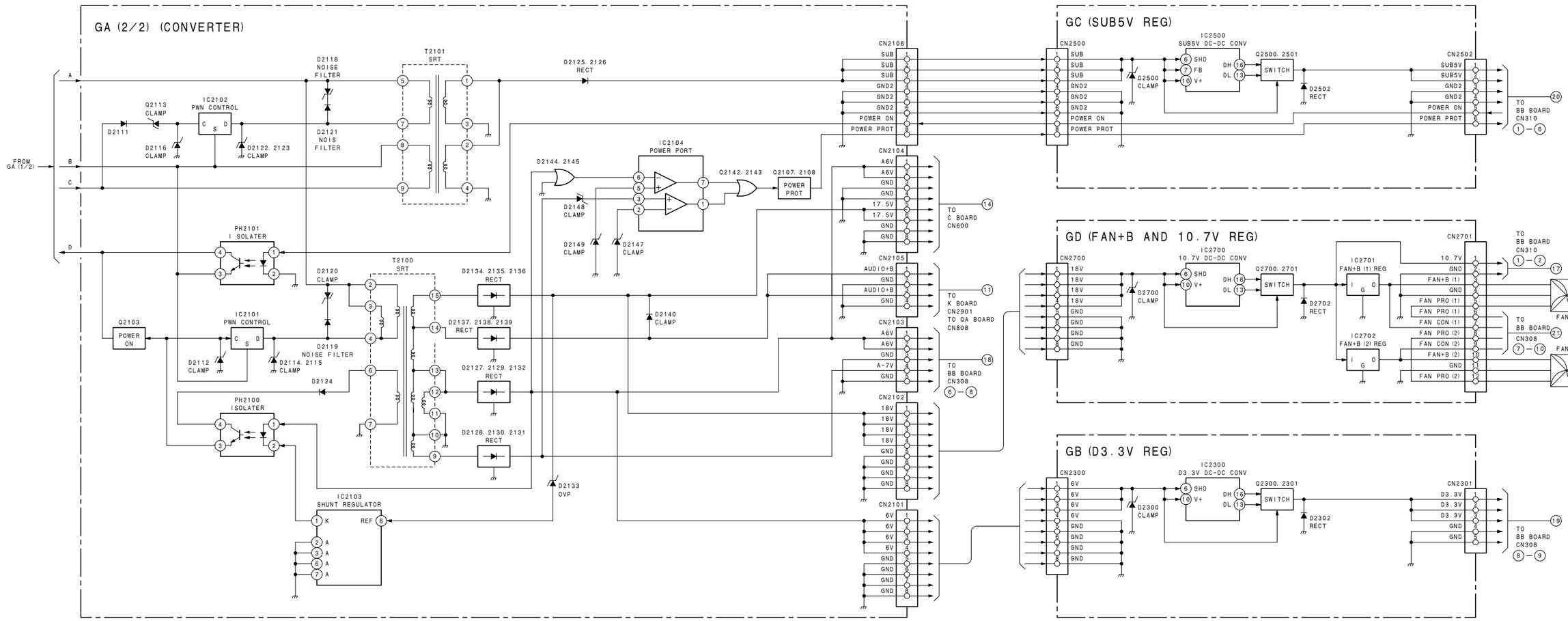
C BLOCK



Y, S, NF, NR BLOCK


K (AUDIO AMP)
CN2900
L/R
SP-MUTE
IC2900
AUDIO AMP
R IN
R OUT
INV. INR
L OUT
INV. INL
MAIN+
MAIN-
MAIN
Q2900, 2901
SP-MUTE
CN2901
AUDIO +B
TO
QA BOARD
CN809
TO
GA BOARD
CN2105
KS (SUB AUDIO AMP)
CN2951
L
R
SP-MUTE
AUDIO+B
IC2950
AUDIO AMP
IN-L
FB
IN-R
FB
L-OUT
R-OUT
Q2950, 2951
SP-MUTE
IC2951
VCC
VCC
CN2952
L SP+
L SP-
R SP+
R SP-
TO
QA BOARD
CN810
CN3502
CN3503
H (CONTROL PANEL)
D3500, 3501
D3506, 3508
D3510, 3515
D3520, 3523
D3525, 3526, 3528
D3532
Q3540
SW
Q3541
SW
LIGHT ON
CN3500
D+5V
KEY MATRIX
S3500-3507
KEY MATRIX
S3508, 3509
S3512-3515
D3541
D3540
D3543
P.SAVE LED
LAMP LED
TEMP LED
POWER LED
KEY0
KEY1
SUB+5V
D+5V
TO
Y BOARD
CN3001
SW
Q3542
R
G
D3544
ON/STBY
D3509
D3507
D3529
D3527

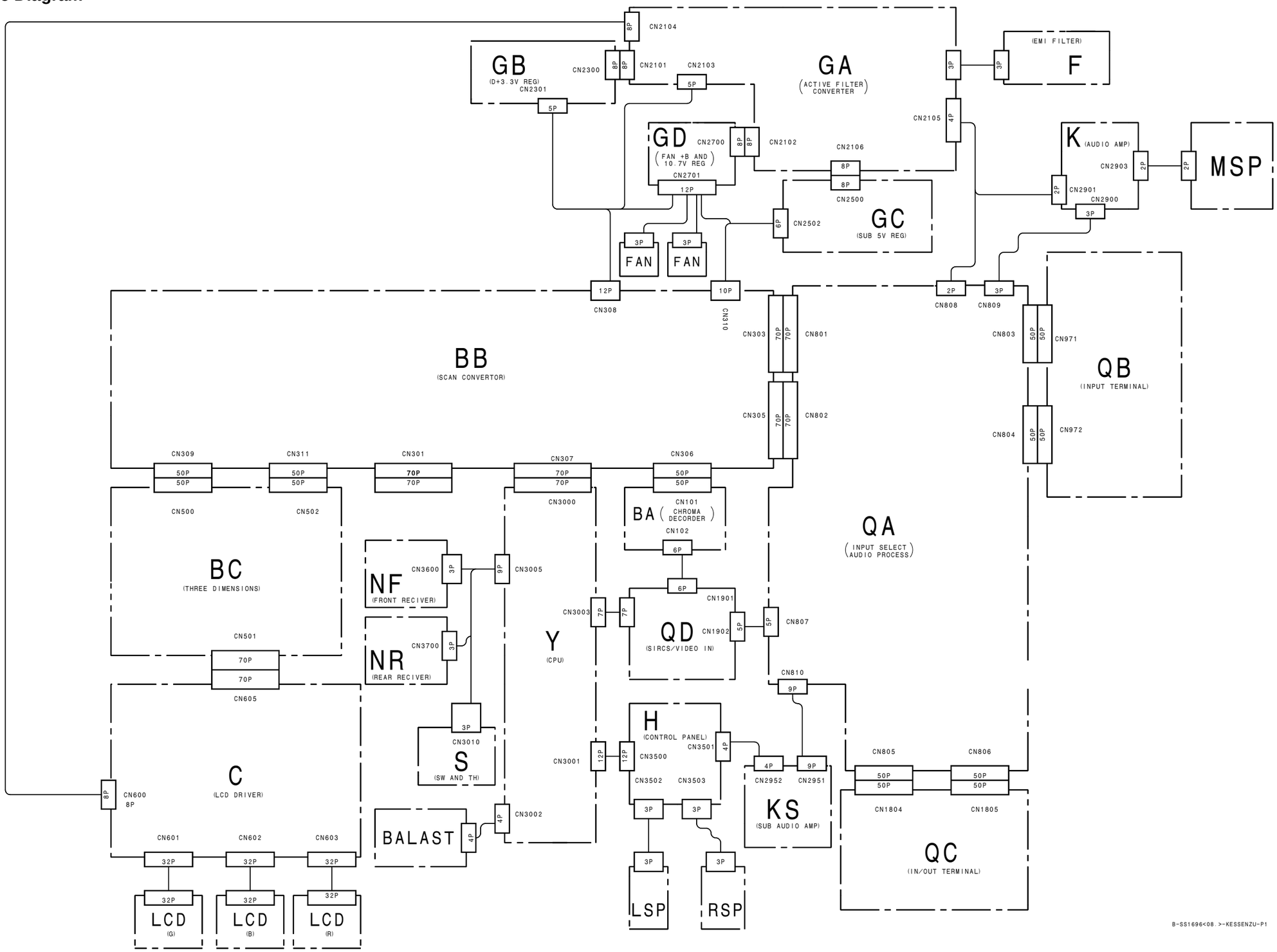

F (EMI FILTER)
AC INLET
CN2000
AC (N)
AC (L)
L2000 LFT
CN2002
GA (1/2) (ACTIVE FILTER)
CN2110
D2100 MAIN RECT
D2106 PROTECT
L2100
CN2111
+V (W)
-V (B)
TO LAMP POWER SUPPLY
TO GA (2/2)
A
B
D
C
Q2109, 2110
PRI DRIVE
Q2100
SWITCHING
D2108 RECT
D2102 SWITCH (SCR)
D2105 CLAMP
D2141 CLAMP
IC2100 CONTROL
DRIVE
INDET
VCC
ISENSE
ZERODET
VDET
GND
Q2104, 2105
POWER CONT
D2103 CLAMP
D2107 CLAMP
IC2105 SHUNT REGULATOR
REF
Q2111
PFC OVP
Q2101, 2102
PFC OVP
D2110 CLAMP
Q2106
POWER CONT



GA BLOCK (2/2)
GB, GC, GD BLOCK

Section 9
Diagrams

9-1. Frame Schematic Diagram



FRAME (2/3)

FRAME (2/3)

BB

CN307 70P

A1	GND	B1	GND
A2	US+	B2	US-
A3	GND	B3	GND
A4	DS1+	B4	DS1-
A5	GND	B5	GND
A6	DS2+	B6	DS2-
A7	GND	B7	GND
A8	USBP.ENA	B8	USBP.FLG
A9	S/C RES	B9	MSP.ENA
A10	SDA400K	B10	SCL400K
A11	GND	B11	GND
A12	TXDS/C	B12	RXDS/C
A13	GND	B13	GND
A14	HD	B14	US VBUS
A15	VD	B15	VSO
A16	GND	B16	GND
A17	OSD_CS	B17	PW-OSD_ENA
A18	DISP	B18	BUSY
A19	OSD_RES	B19	PANEL LINK
A20	GND	B20	INTERLACE
A21	PIC MUTE	B21	SDAT
A22	SCLK	B22	GND
A23	AUDIO CE	B23	AUDIO MUTE
A24	PANEL TEMP	B24	IRDA
A25	IRDB	B25	FILTER COVER
A26	POWER ON	B26	FAN PROT1
A27	FAN CONT1	B27	FAN PROT2
A28	FAN CONT2	B28	POWER PROT
A29	GND	B29	GND
A30	SDA100K	B30	SCL100K
A31	GND	B31	GND
A32	+6V	B32	+6V
A33	+6V	B33	+6V
A34	SUB+5V	B34	SUB+5V
A35	SUB+5V	B35	SUB+5V

CN305 70P

A1	IRDA	B1	IRDB
A2	GND	B2	GND
A3	DS2+	B3	DS2+
A4	DS2-	B4	DS2-
A5	YC/OTHER	B5	CV/OTHER
A6	GND	B6	GND
A7	R/R-Y	B7	R/R-Y
A8	GND	B8	GND
A9	G/Y	B9	G/Y
A10	GND	B10	GND
A11	B/B-Y	B11	B/B-Y
A12	GND	B12	GND
A13	H	B13	H
A14	GND	B14	GND
A15	V	B15	V
A16	GND	B16	GND
A17	RGBSYNC	B17	RGBSYNC
A18	GND	B18	GND
A19	V-R	B19	V-R
A20	GND	B20	GND
A21	V-G	B21	V-G
A22	GND	B22	GND
A23	V-B	B23	V-B
A24	GND	B24	GND
A25	V-HD	B25	V-HD
A26	V-VD	B26	V-VD
A27	GND	B27	GND
A28	V-CLP	B28	V-CLP
A29	GND	B29	GND
A30	SDA100K	B30	SCL100K
A31	GND	B31	GND
A32	+6V	B32	+6V
A33	+6V	B33	+6V
A34	10V	B34	-7V
A35	10V	B35	-7V

CN300 20P

1	TXO-	2	TXO+
3	SHLD0	4	SHLD2
5	TX2-	6	TX2+
7	DDC_CLK	8	DDC_DAT
9	RESERVED	10	RESERVED
11	TXC-	12	TXC+
13	SHLDC	14	SHLD1
15	TX1-	16	TX1+
17	RESERVED	18	HPD
19	+5V	20	GND

CN302 3P :SMD

1	VCC	2	IRRCVR
3	GND		

CN312 7P :SMD

1	VCC	2	RXD
3	TXD	4	GND
5	EXTSW	6	WDTEN
7	GND		

CN308 12P

1	10V	2	GND
3	6V	4	6V
5	GND	6	-7V
7	GND	8	D3.3V
9	D3.3V	10	D3.3V
11	GND	12	GND

CN310 10P

1	SUB 5V	2	SUB 5V
3	GND	4	GND
5	POWER ON	6	POWER PROT
7	FANPROT1	8	FANCONT1
9	FANPROT2	10	FANCONT2

CN309 50P

A1	DRE0	B1	GND
A2	DRE1	B2	GND
A3	DRE2	B3	D3.3V
A4	DRE3	B4	D3.3V
A5	DRE4	B5	D3.3V
A6	DRE5	B6	D3.3V
A7	DRE6	B7	GND
A8	DRE7	B8	GND
A9	DGE0	B9	DVS
A10	DGE1	B10	DVS
A11	DGE2	B11	GND
A12	DGE3	B12	GND
A13	DGE4	B13	DHS
A14	DGE5	B14	DHS
A15	DGE6	B15	GND
A16	DGE7	B16	GND
A17	DBE0	B17	DRO0
A18	DBE1	B18	DRO1
A19	DBE2	B19	DRO2
A20	DBE3	B20	DRO3
A21	DBE4	B21	DRO4
A22	DBE5	B22	DRO5
A23	DBE6	B23	DRO6
A24	DBE7	B24	DRO7
A25	GND	B25	GND

CN311 50P

A1	DCLK	B1	GND
A2	DCLK	B2	GND
A3	GND	B3	GND
A4	DGO0	B4	DBO0
A5	DGO1	B5	DBO1
A6	DGO2	B6	DBO2
A7	DGO3	B7	DBO3
A8	DGO4	B8	DBO4
A9	DGO5	B9	DBO5
A10	DGO6	B10	DBO6
A11	DGO7	B11	DBO7
A12	GND	B12	GND
A13	D3.3V	B13	RESET
A14	D3.3V	B14	RESET
A15	GND	B15	GND
A16	OSD_CS	B16	NC
A17	NC	B17	PW OSD ENA
A18	DISP	B18	BUSY
A19	OSD_RES	B19	PANEL TEMP
A20	GND	B20	GND
A21	NC	B21	NC
A22	GND	B22	GND
A23	SCL400K	B23	SCL100K
A24	SDA400K	B24	SDA100K
A25	GND	B25	GND

CN301 70P

A1	GND	B1	A19
A2	GND	B2	A18
A3	GND	B3	A17
A4	GND	B4	A16
A5	A15	B5	A14
A6	A13	B6	A12
A7	A11	B7	A10
A8	A9	B8	A8
A9	A7	B9	A6
A10	A5	B10	A4
A11	A3	B11	A2
A12	A1	B12	A0
A13	GND	B13	BHENN
A14	GND	B14	ROMOEN
A15	GND	B15	ROMOEN
A16	3.3V	B16	ROMWEN
A17	3.3V	B17	ROMWEN
A18	3.3V	B18	CS2
A19	3.3V	B19	CS3
A20	GND	B20	RESETN
A21	GND	B21	NMI
A22	GND	B22	FCEN
A23	GND	B23	BOOTWE
A24	GND	B24	VPPEN
A25	D15	B25	D14
A26	D13	B26	D12
A27	D11	B27	D10
A28	D9	B28	D8
A29	D7	B29	D6
A30	D5	B30	D4
A31	D3	B31	D2
A32	D1	B32	D0
A33	NC	B33	NC
A34	6V	B34	6V
A35	6V	B35	6V

CN303 70P

A1	CLP	B1	CLP
A2	GND	B2	GND
A3	A3.3V	B3	A3.3V
A4	V	B4	V
A5	GND	B5	GND
A6	H	B6	H
A7	GND	B7	GND
A8	B	B8	B
A9	GND	B9	GND
A10	G	B10	G
A11	GND	B11	GND
A12	R	B12	R
A13	GND	B13	GND
A14	AUDIO MUTE	B14	SCLK
A15	SDAT	B15	AUDIO CE
A16	GND	B16	GND
A17	US+	B17	US+
A18	US-	B18	US-
A19	GND	B19	USBP.FLG
A20	DS1+	B20	DS1-
A21	MSP.ENA	B21	US VBUS
A22	GND	B22	USBP.ENA
A23	SUB 5V	B23	SUB 5V
A24	SUB 5V	B24	SUB 5V
A25	SUB 5V	B25	SUB 5V
A26	GND	B26	GND
A27	BNC V	B27	BNC V
A28	GND	B28	GND
A29	BNC H	B29	BNC H
A30	GND	B30	GND
A31	BNC B	B31	BNC B
A32	GND	B32	GND
A33	BNC G	B33	BNC G
A34	GND	B34	GND
A35	BNC R	B35	BNC R

CN306 50P

A1	R/R-Y	B1	R/R-Y
A2	GND	B2	GND
A3	G/Y	B3	G/Y
A4	GND	B4	GND
A5	B/B-Y	B5	B/B-Y
A6	GND	B6	H
A7	GND	B7	V
A8	GND	B8	RGBSYNC
A9	GND	B9	V-CLP
A10	GND	B10	Y/C OTHER
A11	V-R	B11	V-R
A12	GND	B12	GND
A13	V-G	B13	V-G
A14	GND	B14	GND
A15	V-B	B15	V-B
A16	GND	B16	CV/OTHER
A17	GND	B17	V-HD
A18	GND	B18	V-VD
A19	GND	B19	GND
A20	SDA100K	B20	SCL100K
A21	GND	B21	GND
A22	+6V	B22	+6V
A23	+6V	B23	+6V
A24	+10V	B24	GND
A25	+10V	B25	GND

BC

CN502 50P

A1	DCLK	B1	GND
A2	DCLK	B2	GND
A3	GND	B3	GND
A4	DGO0	B4	DBO0
A5	DGO1	B5	DBO1
A6	DGO2	B6	DBO2
A7	DGO3	B7	DBO3
A8	DGO4	B8	DBO4
A9	DGO5	B9	DBO5
A10	DGO6	B10	DBO6
A11	DGO7	B11	DBO7
A12	GND	B12	GND
A13	D3.3V	B13	RESET
A14	D3.3V	B14	RESET
A15	GND	B15	GND
A16	OSD_CSO	B16	NC
A17	NC	B17	PW OSD ENA
A18	DISP	B18	BUSY
A19	OSD_RES	B19	PANEL TEMP
A20	GND	B20	GND
A21	NC	B21	NC
A22	GND	B22	GND
A23	SCL400K	B23	SCL100K
A24	SDA400K	B24	SDA100K
A25	GND	B25	GND

CN500 50P

A1	DRE0	B1	GND
A2	DRE1	B2	GND
A3	DRE2	B3	D3.3V
A4	DRE3	B4	D3.3V
A5	DRE4	B5	D3.3V
A6	DRE5	B6	D3.3V
A7	DRE6	B7	GND
A8	DRE7	B8	GND
A9	DGE0	B9	DVS
A10	DGE1	B10	DVS
A11	DGE2	B11	GND
A12	DGE3	B12	GND
A13	DGE4	B13	DHS
A14	DGE5	B14	DHS
A15	DGE6	B15	GND
A16	DGE7	B16	GND
A17	DBE0	B17	DRO0
A18	DBE1	B18	DRO1
A19	DBE2	B19	DRO2
A20	DBE3	B20	DRO3
A21	DBE4	B21	DRO4
A22	DBE5	B22	DRO5
A23	DBE6	B23	DRO6
A24	DBE7	B24	DRO7
A25	GND	B25	GND

CN501 70P

A1	PANEL TEMP	B1	GND
A2	SDA100K	B2	SCL100K
A3	GND	B3	GND
A4	ECLK	B4	HCK1
A5	ECLK	B5	HCK1
A6	GND	B6	HCK2
A7	BLK	B7	HCK2
A8	DWN	B8	RGT
A9	ENB	B9	PCG
A10	ENB	B10	PCG
A11	GND	B11	GND
A12	CLP	B12	PRG
A13	CLP	B13	PRG
A14	VST	B14	VCK
A15	VST	B15	VCK
A16	HST	B16	FRP
A17	HST	B17	FRP
A18	GND	B18	GND
A19	POSCONT2	B19	INVCNT
A20	POSCONT2	B20	INVCNT
A21	POSCONT1	B21	SID
A22	POSCONT1	B22	SID
A23	GND	B23	GND
A24	A5V	B24	A5V
A25	A5V	B25	A5V
A26	GND	B26	GND
A27	EVENB	B27	EVENG
A28	EVENB	B28	EVENG
A29	GND	B29	GND
A30	EVENR	B30	ODDB
A31	EVENR	B31	ODDB
A32	GND	B32	GND
A33	ODDG	B33	ODDR
A34	ODDG	B34	ODDR
A35	GND	B35	GND

CN503 8P WHT :SMD

8	VCC		
7	SDO		
6	SDI		
5	TSPEN		
4	PLUG		
3	MODE		
2	GND		
1	SCLK		

C

CN601 32P FPC

1	PS2G	2	VSSGR
3	VSIG1	4	VSIG2
5	VSIG3	6	VSIG4
7	VSIG5	8	VSIG6
9	VSIG7	10	VSIG8
11	VSIG9	12	VSIG10
13	VSIG11	14	VSIG12
15	HVDD	16	RGT
17	HST	18	HCK2
19	HCK1	20	VSS
21	VSSGL	22	BLK
23	ENB	24	VCK
25	VST	26	DWN
27	HB	28	VB
29	PCG	30	VVDD
31	COM	32	SOUT

CN603 32P FPC

1	PS2G	2	VSSGR
3	VSIG1	4	VSIG2
5	VSIG3	6	VSIG4
7	VSIG5	8	VSIG6
9	VSIG7	10	VSIG8
11	VSIG9	12	VSIG10
13	VSIG11	14	VSIG12
15	HVDD	16	RGT
17	HST	18	HCK2
19	HCK1	20	VSS
21	VSSGL	22	BLK
23	ENB	24	VCK
25	VST	26	DWN
27	HB	28	VB
29	PCG	30	VVDD
31	COM	32	SOUT

CN605 70P TO BC CN501

A1	PANEL TEMP	B1	GND
A2	SDA100K	B2	SCL100K
A3	GND	B3	GND
A4	ECLK	B4	HCK1
A5	ECLK	B5	HCK1
A6	GND	B6	HCK2
A7	BLK	B7	HCK2
A8	DWN	B8	RGT
A9	ENB	B9	PCG
A10	PCG	B10	ENB
A11	GND	B11	GND
A12	CLP	B12	PRG
A13	PRG	B13	CLP
A14	VCK	B14	VST
A15	VCK	B15	VST
A16	FRP	B16	HST
A17	FRP	B17	HST
A18	GND	B18	GND
A19	POSCONT2	B19	INVCNT
A20	POSCONT2	B20	INVCNT
A21	POSCONT1	B21	SID
A22	POSCONT1	B22	SID
A23	GND	B23	GND
A24	A5V	B24	A5V
A25	A5V	B25	A5V
A26	GND	B26	GND
A27	EVENB	B27	EVENG
A28	EVENB	B28	EVENG
A29	GND	B29	GND
A30	ODDB	B30	ODDR
A31	ODDB	B31	ODDR
A32	GND	B32	GND
A33	ODDG	B33	ODDR
A34	ODDG	B34	ODDR
A35	GND	B35	GND

CN602 32P FPC

1	PS2G	2	VSSGR
3	VSIG1	4	VSIG2
5	VSIG3	6	VSIG4
7	VSIG5	8	VSIG6
9	VSIG7	10	VSIG8
11	VSIG9	12	VSIG10
13	VSIG11	14	VSIG12
15	HVDD	16	RGT
17	HST	18	HCK2
19	HCK1	20	VSS
21	VSSGL	22	BLK
23	ENB	24	VCK
25	VST	26	DWN
27	HB	28	VB
29	PCG	30	VVDD
31	COM	32	SOUT

CN600 8P :SMD

1	6V	2	6V
3	GND	4	GND
5	17V	6	17V
7	GND	8	GND

GA

CN2106 8P :B-TO-B TO GC

1	SUB	2	SUB
3	SUB	4	GND 2
5	GND 2	6	GND 2
7	POWER ON	8	POWER PROT

CN2105 4P RED :S-MICRO TO K

1	AUDIO+B	2	GND
3	AUDIO+B	4	GND

CN2104 8P WHT :S-MICRO TO C

1	A6V	2	A6V
3	GND	4	GND
5	17.5V	6	17.5V
7	GND	8	GND

CN2103 5P BLK :S-MICRO

1	A6V	2	A6V
3	GND	4	A-7V
5	GND		

CN2102 8P :B-TO-B TO BB

1	18V	2	18V
3	18V	4	18V
5	GND	6	GND
7	GND	8	GND

CN2101 8P :B-TO-B TO GD

1	6V	2	6V
3	6V	4	6V
5	GND	6	GND
7	GND	8	GND

GB

CN2300 8P :B-TO-B

6V	1	6V	2
6V	3	6V	4
GND	5	GND	6
GND	7	GND	8

CN2301 5P WHT :S-MICRO TO BB

1	D3.3V	2	D3.3V
3	D3.3V	4	GND
5	GND		

GD

CN2701 12P WHT

1	10.7V	2	GND
3	FAN+B (1)	4	GND
5	FAN PRO (1)	6	FAN PRO (1)
7	FAN CON (1)	8	FAN PRO (2)
9	FAN CON (2)	10	FAN+B (2)
11	GND	12	FAN PRO (2)

CN2700 8P :B-TO-B

18V	1	18V	2
18V	3	18V	4
GND	5	GND	6
GND	7	GND	8

QA

CN803 50P WHT

IRD A	A1
IRD A	B1
MS5V	A2
MS5V	B2
DS2-	A3
DS2-	B3
DS2+	A4
DS2+	B4
GND	A5
GND	B5
AUDIO AL	A6
AUDIO AL	B6
GND	A7
GND	B7
GND	A8
GND	B8
AUDIO AR	A9
AUDIO AR	B9
GND	A10
GND	B10
GND	A11
GND	B11
AR	A12
AR	B12
AR	A13
AR	B13
GND	A14
GND	B14
GND	A15
GND	B15
AG	A16
AG	B16
AG	A17
AG	B17
GND	A18
GND	B18
GND	A19
GND	B19
AB	A20
AB	B20
AB	A21
AB	B21
GND	A22
GND	B22
AH	A23
AH	B23
GND	A24
GND	B24
AV	A25
AV	B25

CN805 50P WHT

IRD B	A1
IRD B	B1
SUB5V	A2
SUB5V	B2
GND	A3
GND	B3
GND	A4
GND	B4
GND	A5
GND	B5
AUDIO BL	A6
AUDIO BL	B6
GND	A7
GND	B7
GND	A8
GND	B8
AUDIO BR	A9
AUDIO BR	B9
GND	A10
GND	B10
GND	A11
GND	B11
BR	A12
BR	B12
BR	A13
BR	B13
GND	A14
GND	B14
GND	A15
GND	B15
BG	A16
BG	B16
BG	A17
BG	B17
GND	A18
GND	B18
GND	A19
GND	B19
BB	A20
BB	B20
BB	A21
BB	B21
GND	A22
GND	B22
BH	A23
BH	B23
GND	A24
GND	B24
BV	A25
BV	B25

CN801 70P

CLP	A1
CLP	B1
GND	A2
GND	B2
A3.3V	A3
A3.3V	B3
V	A4
V	B4
GND	A5
GND	B5
H	A6
H	B6
GND	A7
GND	B7
B	A8
B	B8
GND	A9
GND	B9
G	A10
G	B10
GND	A11
GND	B11
R	A12
R	B12
GND	A13
GND	B13
AUDIO MUTE	A14
SCLK	B14
SDAT	A15
AUDIO CE	B15
GND	A16
GND	B16
US+	A17
US+	B17
US-	A18
US-	B18
GND	A19
USB P.FLG	B19
DS1+	A20
DS1-	B20
MS P.ENA	A21
US VBUS	B21
GND	A22
USB P.ENA	B22
SUB 5V	A23
SUB 5V	B23
SUB 5V	A24
SUB 5V	B24
SUB 5V	A25
SUB 5V	B25
GND	A26
GND	B26
BNC V	A27
BNC V	B27
GND	A28
GND	B28
BNC H	A29
BNC H	B29
GND	A30
GND	B30
BNC B	A31
BNC B	B31
GND	A32
GND	B32
BNC G	A33
BNC G	B33
GND	A34
GND	B34
BNC R	A35
BNC R	B35

CN801 TO BB

CN802 70P

IRD A	A1
IRD B	B1
GND	A2
GND	B2
DS2+	A3
DS2+	B3
DS2-	A4
DS2-	B4
YC/OTHER	A5
CV/OTHER	B5
GND	A6
GND	B6
R/R-Y	A7
R/R-Y	B7
GND	A8
GND	B8
G/Y	A9
G/Y	B9
GND	A10
GND	B10
B/B-Y	A11
B/B-Y	B11
GND	A12
GND	B12
H	A13
H	B13
GND	A14
GND	B14
V	A15
V	B15
GND	A16
GND	B16
RGBSYNC	A17
RGBSYNC	B17
GND	A18
GND	B18
V-R	A19
V-R	B19
GND	A20
GND	B20
V-G	A21
V-G	B21
GND	A22
GND	B22
V-B	A23
V-B	B23
GND	A24
GND	B24
V-HD	A25
V-HD	B25
V-VD	A26
V-VD	B26
GND	A27
GND	B27
V-CLP	A28
V-CLP	B28
GND	A29
GND	B29
SDA100K	A30
SCL100K	B30
GND	A31
GND	B31
+6V	A32
+6V	B32
+6V	A33
+6V	B33
+10V	A34
-6V	B34
+10V	A35
-6V	B35

CN806 50P WHT

AUDIO OL	A1
AUDIO OL	B1
AUDIO OL	A2
AUDIO OL	B2
GND	A3
GND	B3
GND	A4
GND	B4
AUDIO OR	A5
AUDIO OR	B5
AUDIO OR	A6
AUDIO OR	B6
GND	A7
GND	B7
GND	A8
GND	B8
OUT R	A9
OUT R	B9
OUT R	A10
OUT R	B10
GND	A11
GND	B11
GND	A12
GND	B12
OUT G	A13
OUT G	B13
OUT G	A14
OUT G	B14
GND	A15
GND	B15
GND	A16
GND	B16
OUT B	A17
OUT B	B17
OUT B	A18
OUT B	B18
GND	A19
GND	B19
OUT H	A20
OUT H	B20
OUT H	A21
OUT H	B21
OUT H	A22
OUT H	B22
GND	A23
GND	B23
OUT V	A24
OUT V	B24
OUT V	A25
OUT V	B25

CN804 50P WHT

INPUTA SW1	A1
GND	B1
INPUTA SW2	A2
GND	B2
GND	A3
GND	B3
USB DS+	A4
USB DS+	B4
USB DS+	A5
USB DS+	B5
GND	A6
GND	B6
GND	A7
GND	B7
USB DS-	A8
USB DS-	B8
USB DS-	A9
USB DS-	B9
GND	A10
GND	B10
GND	A11
GND	B11
USB 5V	A12
USB 5V	B12
USB 5V	A13
USB 5V	B13
USB 5V	A14
USB 5V	B14
SUB 5V	A15
USB 5V	B15
GND	A16
GND	B16
US VBUS	A17
US VBUS	B17
GND	A18
GND	B18
GND	A19
GND	B19
USB US+	A20
USB US+	B20
USB US+	A21
USB US+	B21
GND	A22
GND	B22
GND	A23
GND	B23
USB US-	A24
USB US-	B24
USB US-	A25
USB US-	B25

CN808 2P WHT-L :SMD

1	AUDIO+B
2	AU GND

CN809 3P WHT-L :SMD

1	L/R
2	GND
3	SP-MUTE

CN810 9P WHT-L

1	AUDIO+B
2	AU GND
3	NC
4	L
5	GND
6	NC
7	R
8	GND
9	SP-MUTE

CN807 4P WHT-L S-SEL

1	L-VIDEO
2	GND
3	R-VIDEO
4	GND

QB

CN1203 50P WHT

IRD A	A1
IRD A	B1
MS5V	A2
MS5V	B2
DS2-	A3
DS2-	B3
DS2+	A4
DS2+	B4
GND	A5
GND	B5
AUDIO AL	A6
AUDIO AL	B6
GND	A7
GND	B7
GND	A8
GND	B8
AUDIO AR	A9
AUDIO AR	B9
GND	A10
GND	B10
GND	A11
GND	B11
AR	A12
AR	B12
AR	A13
AR	B13
GND	A14
GND	B14
GND	A15
GND	B15
AG	A16
AG	B16
AG	A17
AG	B17
GND	A18
GND	B18
GND	A19
GND	B19
AB	A20
AB	B20
AB	A21
AB	B21
GND	A22
GND	B22
AH	A23
AH	B23
GND	A24
GND	B24
AV	A25
AV	B25

CN1204 50P WHT

INPUTA SW1	A1
GND	B1
INPUTA SW2	A2
GND	B2
GND	A3
GND	B3
USBD D+	A4
USBD D+	B4
USBD D+	A5
USBD D+	B5
GND	A6
GND	B6
GND	A7
GND	B7
USBD D-	A8
USBD D-	B8
USBD D-	A9
USBD D-	B9
GND	A10
GND	B10
GND	A11
GND	B11
USB 5V	A12
USB 5V	B12
USB 5V	A13
USB 5V	B13
USB 5V	A14
USB 5V	B14
SUB 5V	A15
USB 5V	B15
GND	A16
GND	B16
IN 5V	A17
IN 5V	B17
GND	A18
GND	B18
GND	A19
GND	B19
USBU D+	A20
USBU D+	B20
USBU D+	A21
USBU D+	B21
GND	A22
GND	B22
GND	A23
GND	B23
USBU D-	A24
USBU D-	B24
USBU D-	A25
USBU D-	B25

CN2900 3P WHT-L :SMD

L/R	1
GND	2
SP-MUTE	3

CN2903 2P WHT-L :SMD

1	MAIN+
2	MAIN-

CN2901 2P RED-L :SMD

1	AUDIO+B
2	AUD GND

KS

QC

CN1804 50P WHT

IRD B	A1
IRD B	B1
SUB5V	A2
SUB5V	B2
GND	A3
GND	B3
GND	A4
GND	B4
GND	A5
GND	B5
AUDIO BL	A6
AUDIO BL	B6
GND	A7
GND	B7
GND	A8
GND	B8
AUDIO BR	A9
AUDIO BR	B9
GND	A10
GND	B10
GND	A11
GND	B11
BR	A12
BR	B12
BR	A13
BR	B13
GND	A14
GND	B14
GND	A15
GND	B15
BG	A16
BG	B16
BG	A17
BG	B17
GND	A18
GND	B18
GND	A19
GND	B19
BB	A20
BB	B20
BB	A21
BB	B21
GND	A22
GND	B22
BH	A23
BH	B23
GND	A24
GND	B24
BV	A25
BV	B25

CN1805 50P WHT

AUDIO OL	A1
AUDIO OL	B1
AUDIO OL	A2
AUDIO OL	B2
GND	A3
GND	B3
GND	A4
GND	B4
AUDIO OR	A5
AUDIO OR	B5
AUDIO OR	A6
AUDIO OR	B6
GND	A7
GND	B7
GND	A8
GND	B8
OUT R	A9
OUT R	B9
OUT R	A10
OUT R	B10
GND	A11
GND	B11
GND	A12
GND	B12
OUT G	A13
OUT G	B13
OUT G	A14
OUT G	B14
GND	A15
GND	B15
GND	A16
GND	B16
OUT B	A17
OUT B	B17
OUT B	A18
OUT B	B18
GND	A19
GND	B19
GND	A20
GND	B20
OUT H	A21
OUT H	B21
OUT H	A22
OUT H	B22
GND	A23
GND	B23
OUT V	A24
OUT V	B24
OUT V	A25
OUT V	B25

CN3600 3P WHT-L :SMD

1	SUB+5V
2	SIRCS-NF
3	GND

NF

CN3700 3P RED :SMD

1	SUB+5V
2	SIRCS-NF
3	GND

NR

CN2020 3P :SMD

LAMP COVER	1
GND	2
LAMP TEMP	3

S

CN1991 3P

1	SW COVER
2	GND
3	ECO /NOR

U

CN1901 6P

1	C-VIDEO
2	GND
3	
4	GND
5	
6	GND

CN1902 4P S-SEL

1	L-VIDEO
2	GND
3	R-VIDEO
4	GND

CN1903 7P WHT

1	TXD_RD
2	RXD_RS
3	GND
4	SUB+5V
5	SIRCS
6	SIRCS_S
7	GND

QD

CN3001 12P WHT :SMD

12	D+5V
11	GND
10	D+5V
9	SUB+5V
8	GND
7	KEY1
6	KEY0
5	POWER LED
4	TEMP LED
3	LAMP LED
2	P.SAVE LED
1	LIGHT ON

CN3003 7P WHT :SMD

7	GND
6	SIRCS-S
5	SIRCS
4	SUB+5V
3	GND
2	RXD_RS
1	TXD_RS

CN3002 4P WHT :SMD

4	LAMP MODE
3	LAMP PROT
2	GND
1	LAMP ON

CN3010 8P WHT :SMD

GND	1
TXD	2
RXD	3
RES	4
VIN	5
FWR	6
MD1	7
MD2	8

CN3005 3P WHT :SMD TO NF (CN3600)

3	GND
2	SIRCS-NF
1	SUB+5V

CN3006 3P RED :SMD TO NR (CN3700)

3	GND
2	SIRCS-NR
1	SUB+5V

CN3007 3P WHT :SMD

3	LAMP TEMP
2	GND
1	LAMP COVER

CN3000 70P

A1	GND
B1	GND
A2	US+
B2	US-
A3	GND
B3	GND
A4	DS1+
B4	DS1-
A5	GND
B5	GND
A6	DS2+
B6	DS2-
A7	GND
B7	GND
A8	USB P.ENA
B8	USB P.FLG
A9	S/C RES
B9	MS P.ENA
A10	SDA400K
B10	SCL400K
A11	GND
B11	GND
A12	TXD S/C
B12	RXD S/C
A13	GND
B13	GND
A14	HD
B14	US VBUS
A15	VD
B15	VSO
A16	GND
B16	GND
A17	OSDC CS
B17	PW-OSD ENA
A18	P96
B18	P97
A19	P94
B19	PANEL LINK
A20	GND
B20	INTERLACE
A21	PIC MUTE
B21	SDAT
A22	SCLK
B22	GND
A23	AUDIO CE
B23	AUDIO MUTE
A24	PANEL TEMP
B24	IRDA
A25	IRDB
B25	FIL. COVER
A26	POWER ON
B26	FAN PROT1
A27	FAN CONT1
B27	FAN PROT2
A28	FAN CONT2
B28	POWER PROT
A29	GND
B29	GND
A30	SDA100K
B30	SCL100K
A31	GND
B31	GND
A32	+6V
B32	+6V
A33	+6V
B33	+6V
A34	SUB+5V
B34	SUB+5V
A35	SUB+5V
B35	SUB+5V

Y

BA

CN102 6P :SMD

CV	1
GND	2
Y (SVIDEO)	3
GND	4
C (SVIDEO)	5
GND	6

CN101 50P

R/R-Y	A1
R/R-Y	B1
GND	A2
GND	B2
G/Y	A3
G/Y	B3
GND	A4
GND	B4
B/B-Y	A5
B/B-Y	B5
GND	A6
H	B6
GND	A7
V	B7
GND	A8
RGBSYNC	B8
GND	A9
V-CLP	B9
GND	A10
YC/OTHER	B10
VR	A11
VR	B11
GND	A12
GND	B12
VG	A13
VG	B13
GND	A14
GND	B14
VB	A15
VB	B15
GND	A16
CV/OTHER	B16
GND	A17
V-HD	B17
GND	A18
V-VD	B18
GND	A19
GND	B19
SDA	A20
SCL	B20
GND	A21
GND	B21
+6V	A22
+6V	B22
+6V	A23
+6V	B23
+10V	A24
GND	B24
+10V	A25
GND	B25

CN2500 6P :B-TO-B TO GA

SUB	1
SUB	2
SUB	3
GND	4
GND	5
GND	6
POWER ON	7
POWER PROT	8

CN2502 6P WHT :S-MICRO TO BB

1	SUB5V
2	SUB5V
3	GND 2
4	GND 2
5	POWER ON
6	POWER PROT

GC

H

CN3500 12P WHT :SMD TO Y CN3001

12	D+5V
11	GND
10	D+5V
9	SUB+5V
8	GND
7	KEY1
6	KEY0
5	POWER LED
4	TEMP LED
3	LAMP LED
2	P.SAVE LED
1	LIGHT ON

TO SP

CN3502 2P WHT-L :SMD

1	2
L SP+	L SP-

CN3503 2P WHT-L :SMD

1	2
R SP+	R SP-

CN3501 4P WHT :SMD TO KS CN2952

4	R SP-
3	R SP+
2	L SP-
1	L SP+

9-2. Schematic Diagrams and Printed Wiring Boards

Note:

- Parts marked " * " differ according to the model/destination. Refer to the mount table for each function.
- The parts marked " # " on schematic diagrams are not mounted.
- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics.
- All electrolytics are in 50 V unless otherwise specified.
- : fusible resistor
- : nonflammable resistor
- : panel designation and adjustment for repair
- Caution when replacing chip parts
  New parts must be attached after removal of the chip.
  Be careful not to heat the minus side of a tantalum capacitor, because it is easily damaged by the heat.

Reference information

RESISTOR	RN	: METAL FILM
	RC	: SOLID
	FPRD	: NONFLAMMABLE CARBON
	FUSE	: NONFLAMMABLE FUSIBLE
	RS	: NONFLAMMABLE METAL OXIDE
	RB	: NONFLAMMABLE CEMENT
	RW	: NONFLAMMABLE WIREWOUND
	↗	: ADJUSTMENT RESISTOR
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

[Measuring conditions, voltage and waveform]

- A voltage value is the reference value between the measurement point and the earth, when the NTSC color bar signal is received from the color bar generator (digital multi-meter used: 10 M ohms/V DC).
- A voltage value is the reference value between the measurement point and the earth, when the NTSC color bar signal and RGB color bar signal are received from the color bar generator (digital multi-meter used: 10 M ohms/V DC).
- Unit of voltage is V (volt).
- : B+line
  : B– line
- Voltage variations may occur due to normal production tolerances.
- No mark : NTSC (3.58 MHz) color bar signal.
- [ ] : RGB color bar signal is received.
- ★ : Measurement disabled.
- Circled numbers indicate the reference waveform.
- : Signal path.

The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

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

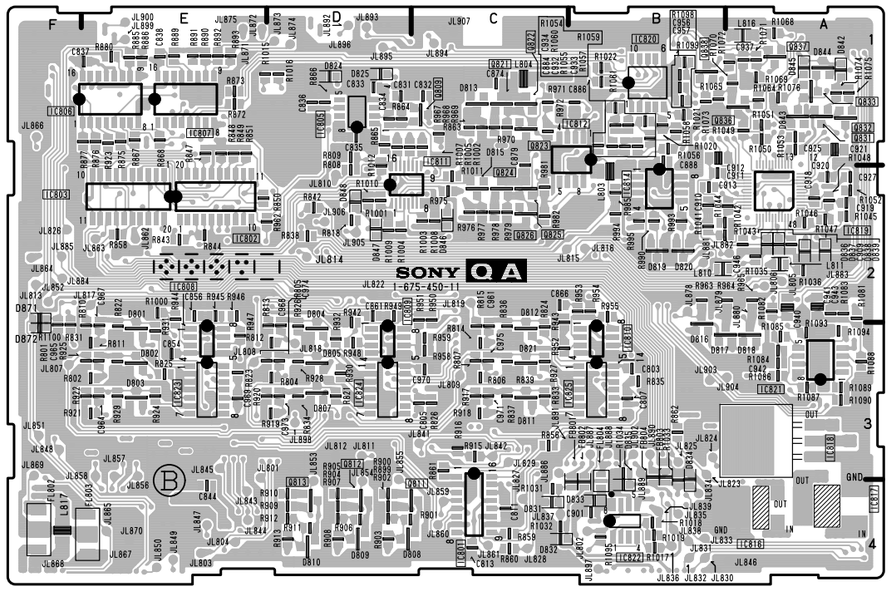
9-4

—
QA
—
1-675-450-11

IC801 *C-4
IC802 *E-2
IC803 *F-2
IC804 E-2
IC805 *D-1
IC806 *F-1
IC807 *E-1
IC808 *E-2
IC809 *D-2
IC810 *B-3
IC811 *C-2
IC812 *B-1
IC813 B-1
IC814 *B-2
IC816 *A-4
IC817 *A-4
IC818 *A-3
IC819 *A-2
IC820 *B-1
IC821 *A-3
IC822 *B-4
IC823 *E-3
IC824 *D-3
IC825 *B-3

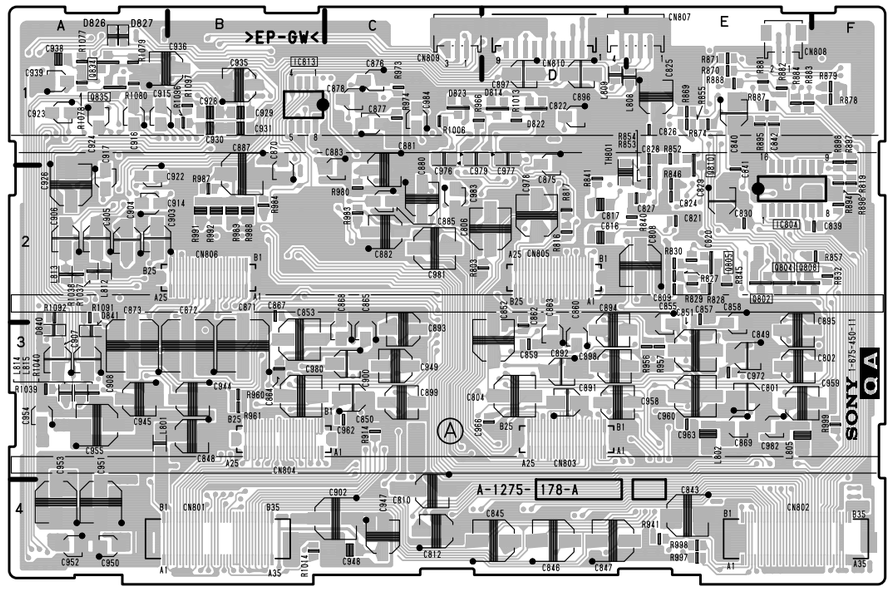
Q802 E-2
Q804 E-2
Q805 E-2
Q808 E-2
Q809 *C-1
Q810 E-2
Q811 *C-4
Q812 *D-3
Q813 *D-4
Q821 *C-1
Q822 *C-1
Q823 *C-1
Q824 *C-2
Q825 *C-2
Q826 *C-2
Q831 *A-1
Q832 *A-1
Q833 *A-1
Q834 A-1
Q835 A-1
Q836 *B-1
Q837 *A-1
Q838 *B-1

*:B Side mount



QA – B SIDE –

SUFFIX ; -11

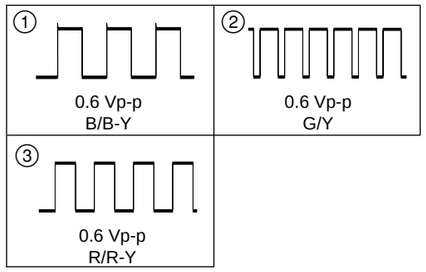


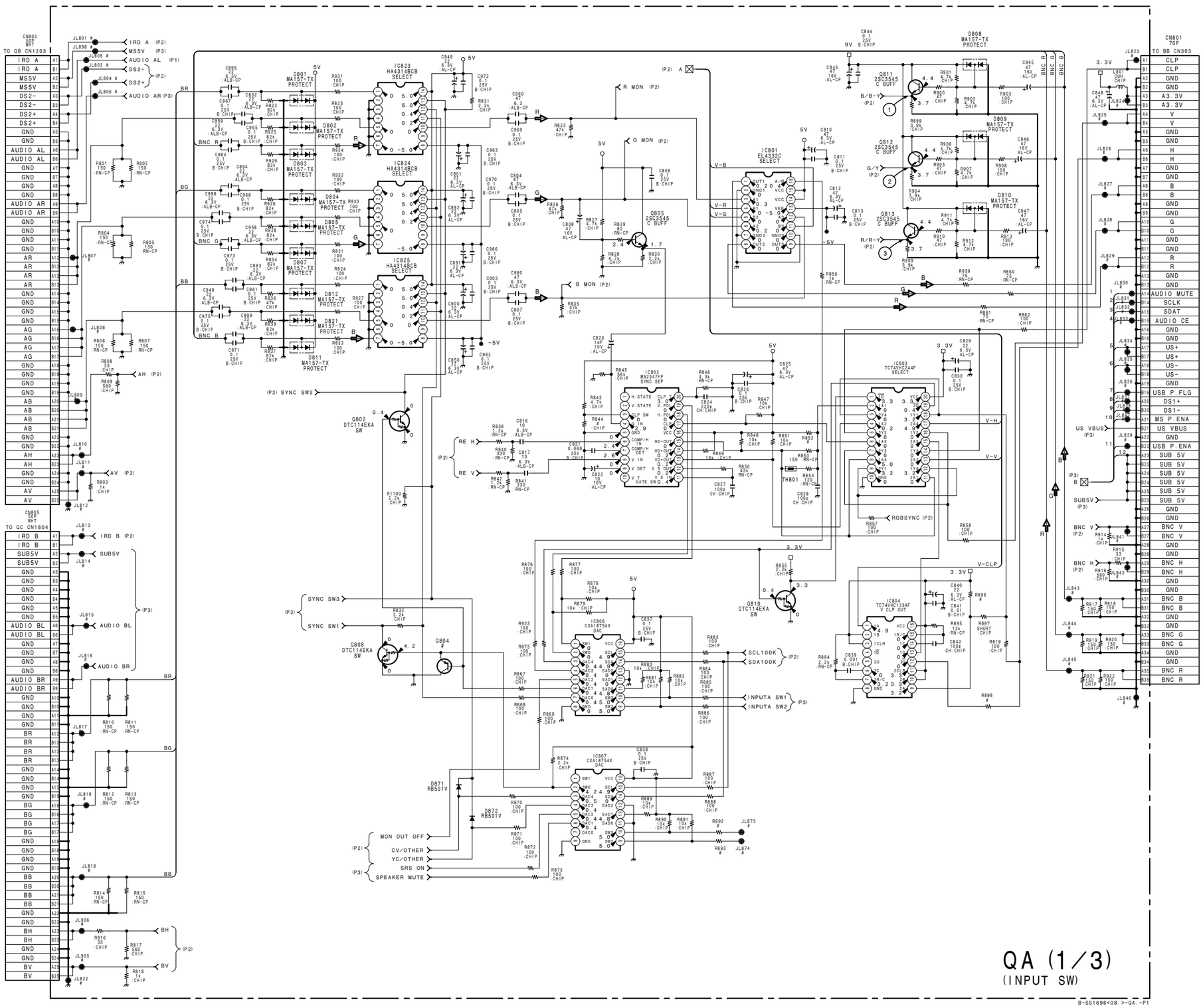
QA – A SIDE –

SUFFIX ; -11

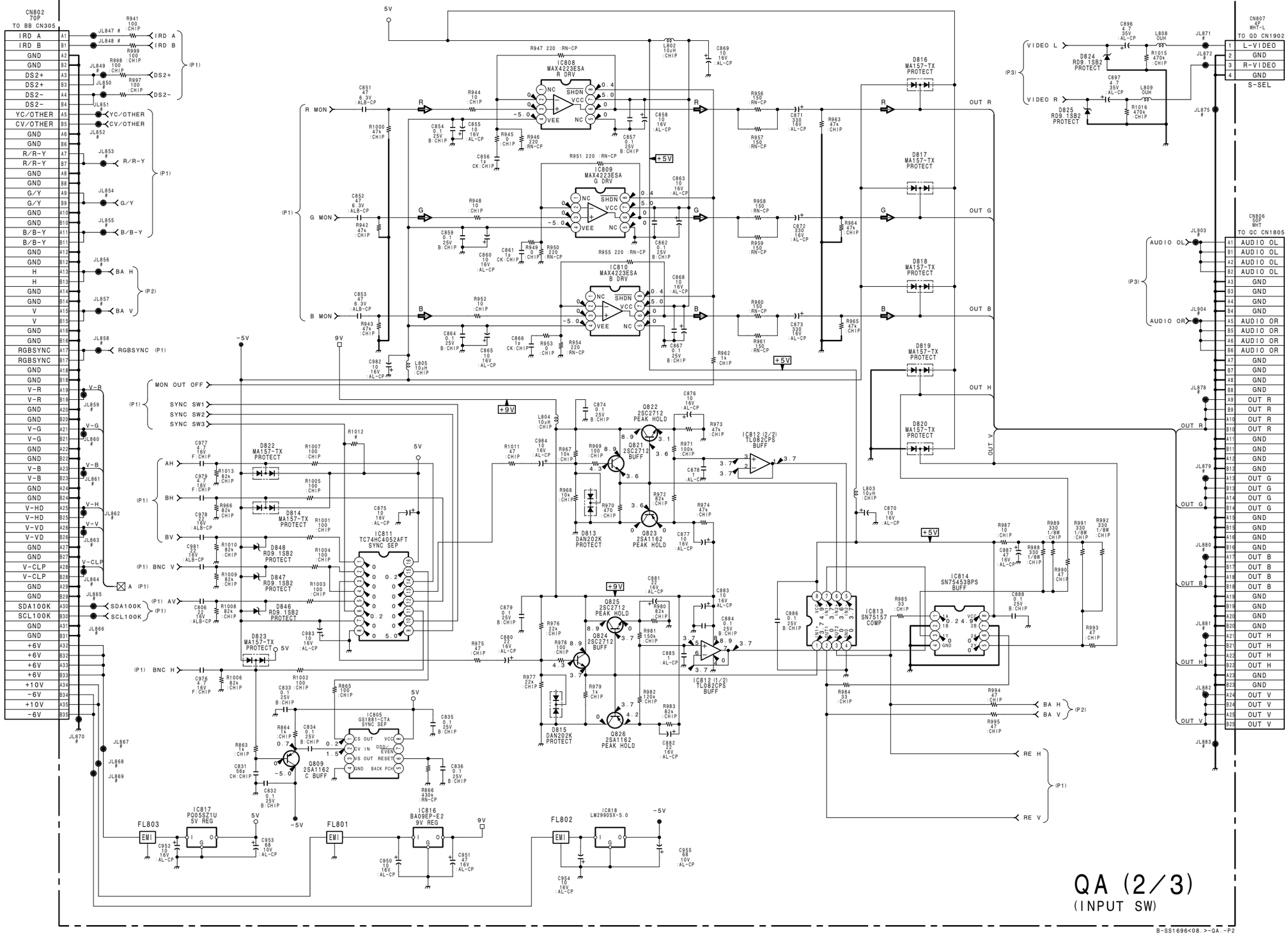
- Refer to page 9-5 for Printed Wiring Board
- Refer to page 9-9 for IC Block Diagrams

QA Board Waveforms

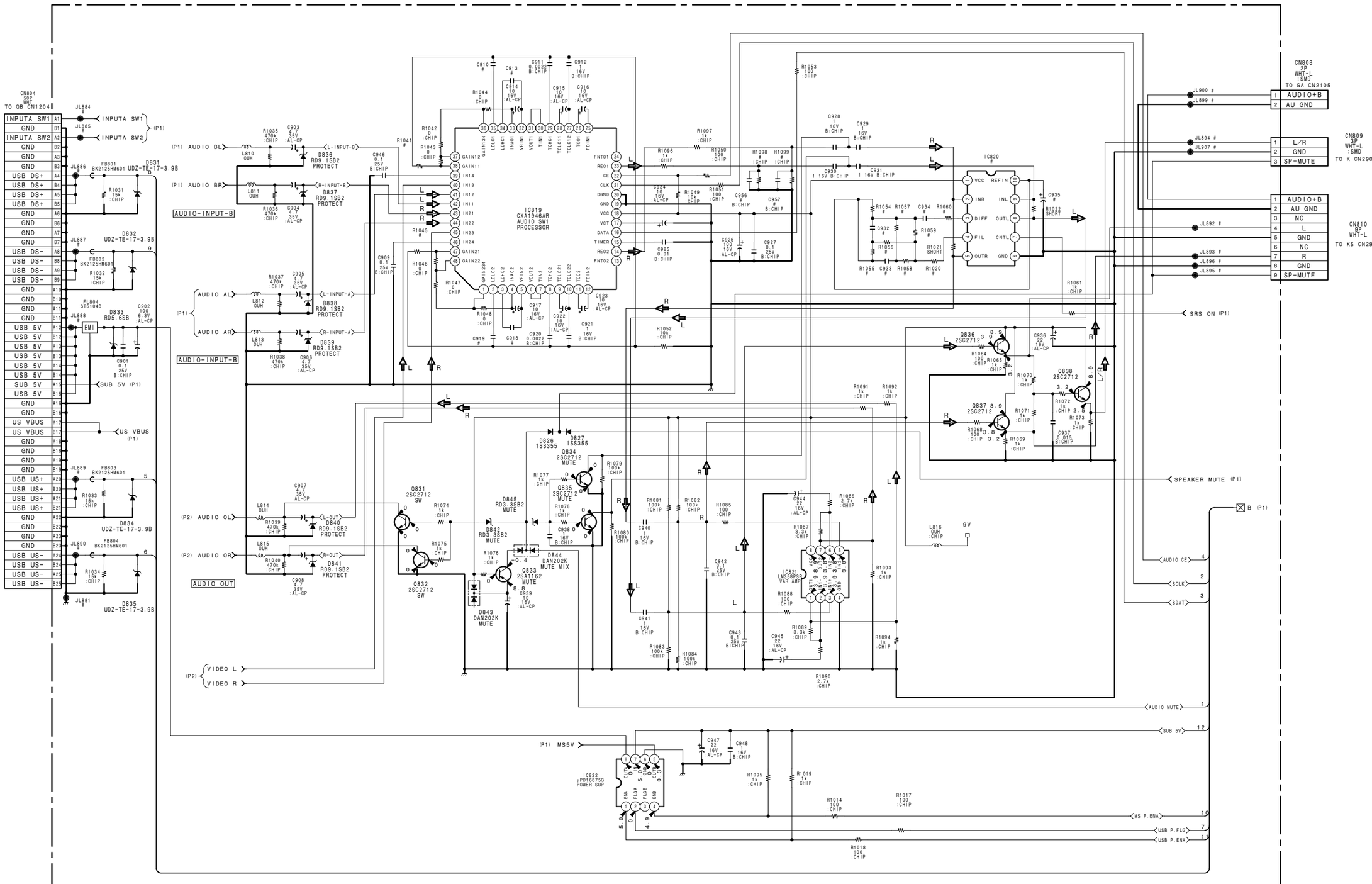




- Refer to page 9-5 for Printed Wiring Board
- Refer to page 9-9 for IC Block Diagrams

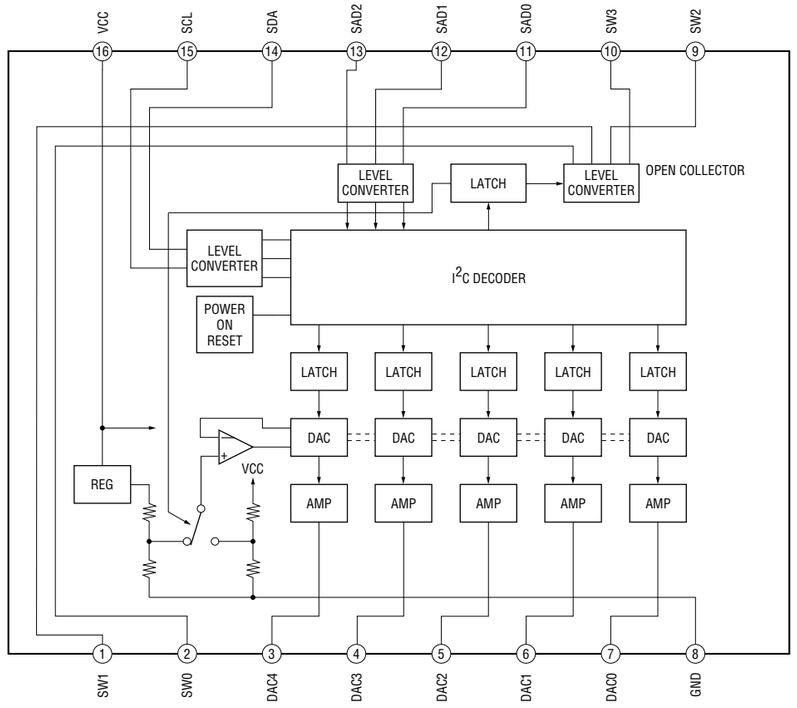


- Refer to page 9-5 for Printed Wiring Board
- Refer to page 9-9 for IC Block Diagrams

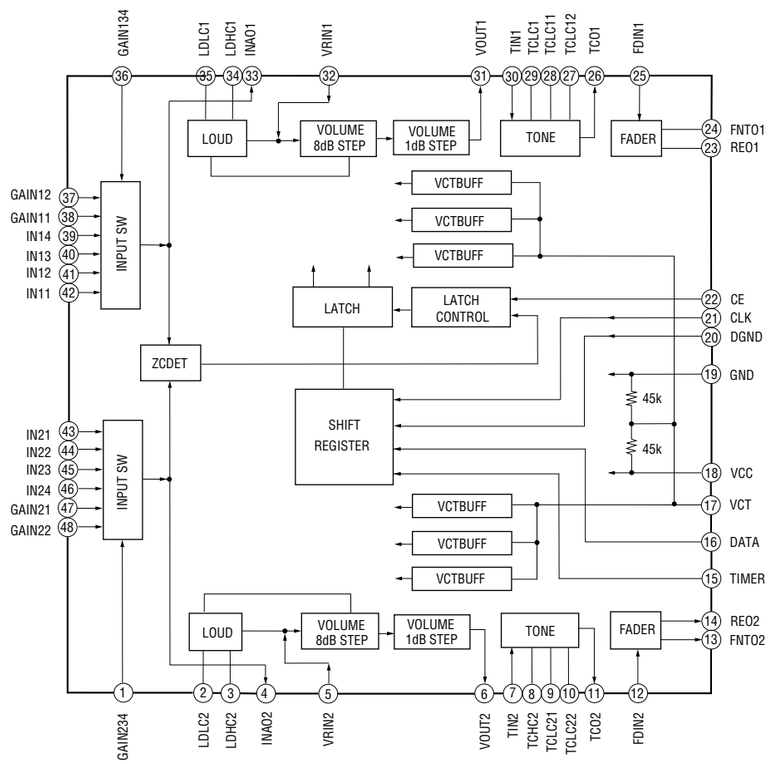


QA (3/3)
(INPUT SW)

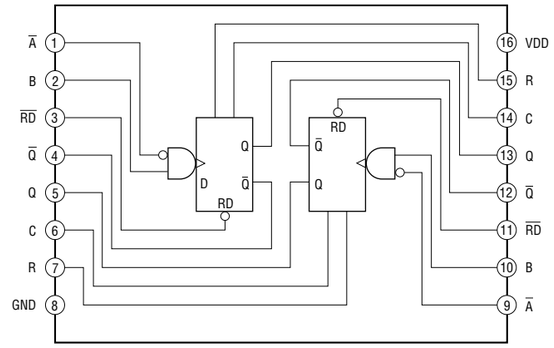
CXA1875AM-T4 (IC806, IC807)



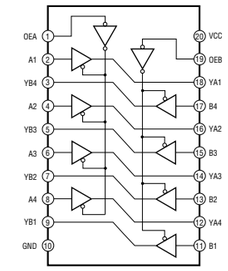
CXA1946AR (IC819)



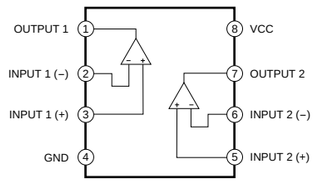
TC74VHC123AF (EL) (IC804)



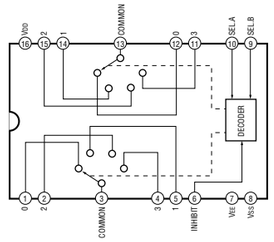
TC74VHC244F (EL) (IC803)



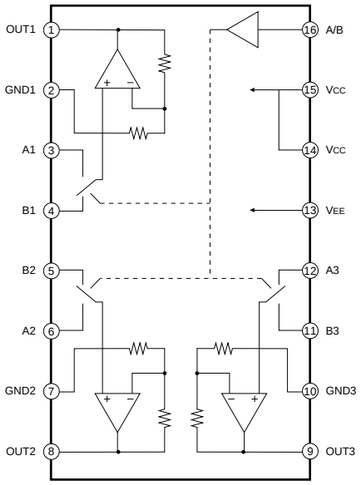
LM358PSR (IC821)



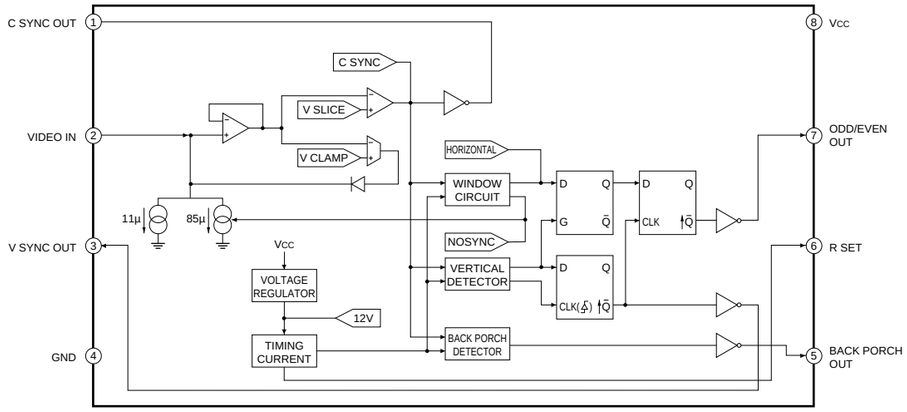
MC75HC4052AFT (EL) (IC811)



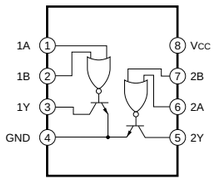
EL4332CS-TE2 (IC801)



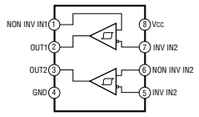
GS1881-CTA (IC805)

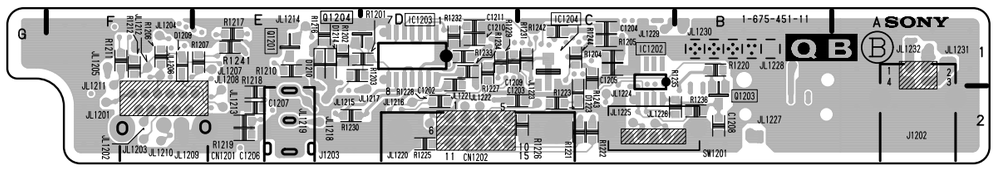


SN75453BPSR (IC814)



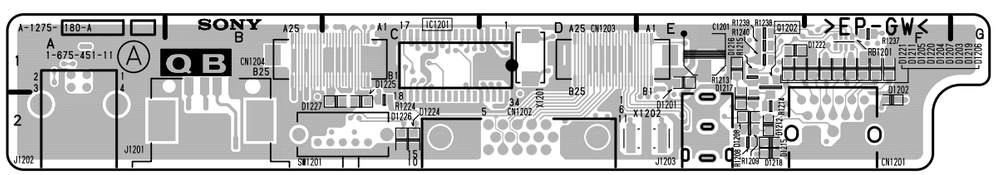
SN75157PS-ELL2000 (IC813)





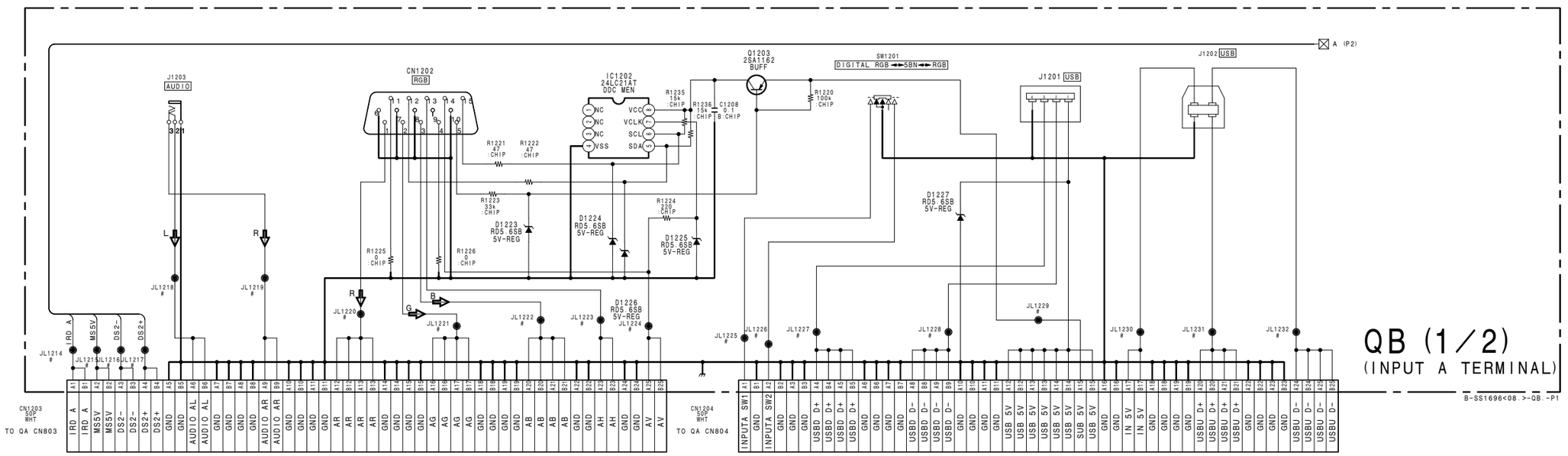
QB – B SIDE –

SUFFIX ; -11

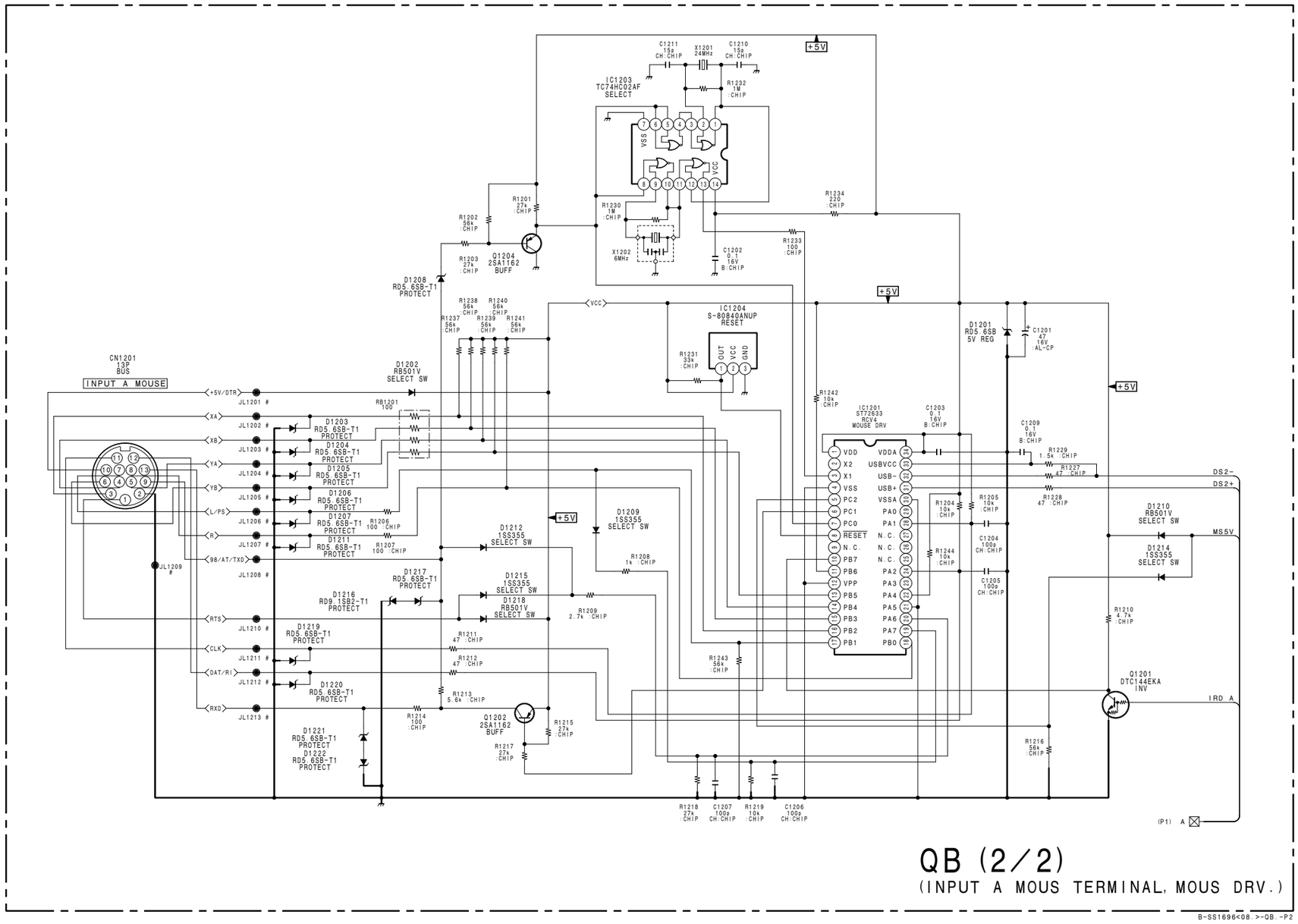


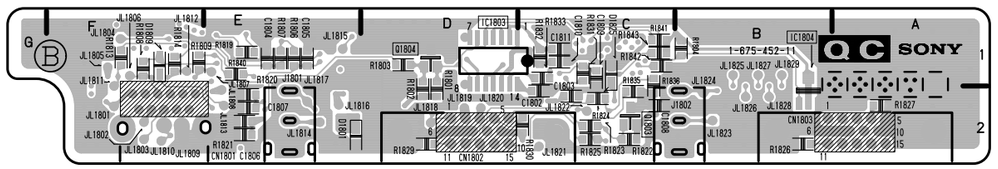
QB – A SIDE –

SUFFIX ; -11



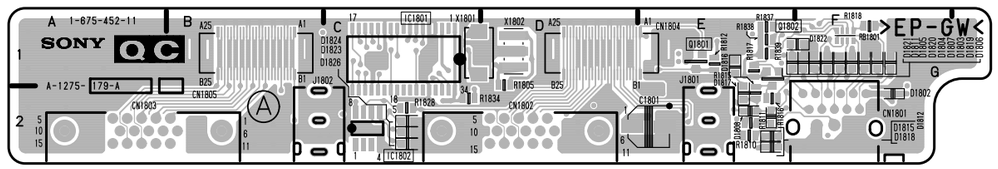
• Refer to page 9-10 for Printed Wiring Board





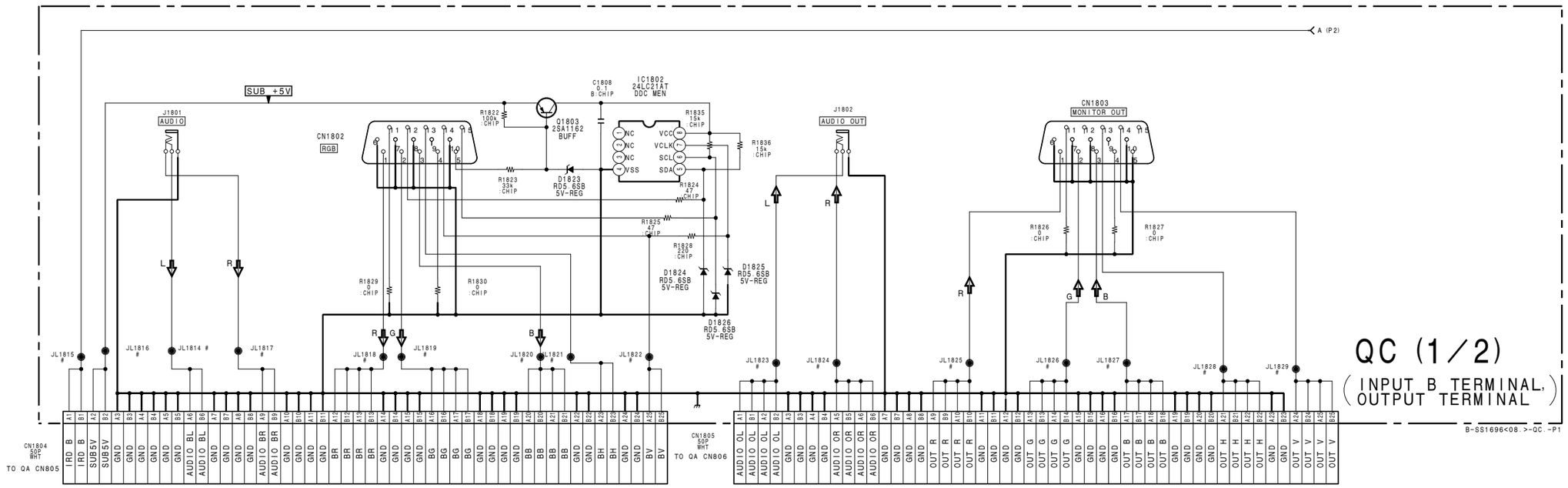
QC – B SIDE –

SUFFIX ; -11



QC – A SIDE –

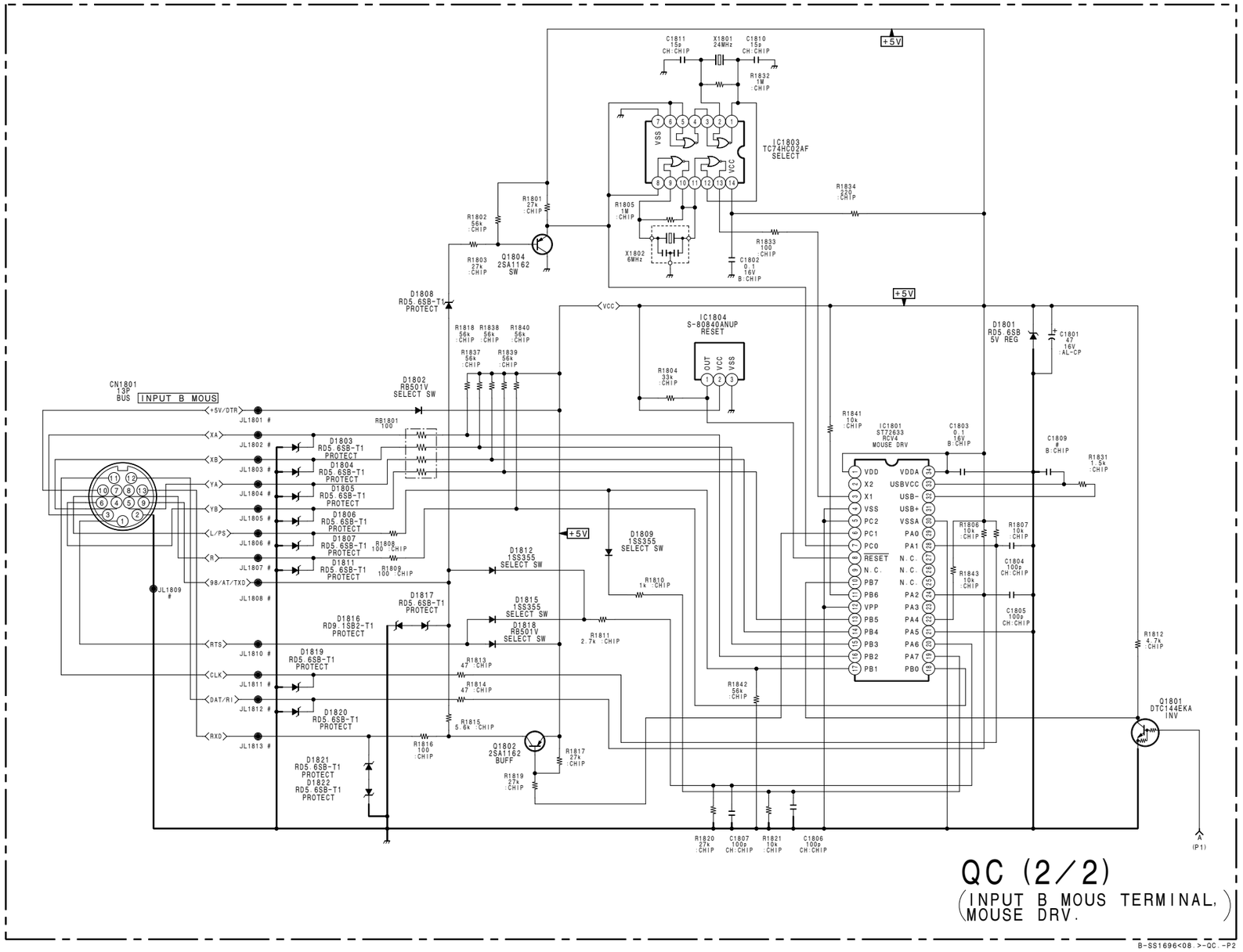
SUFFIX ; -11



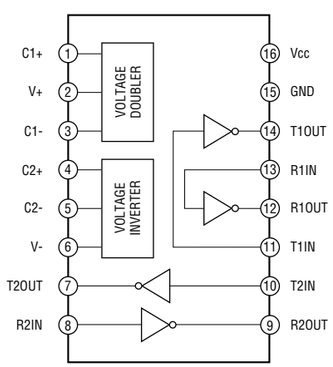
9-12 9-12

VPL-PX20/PX30

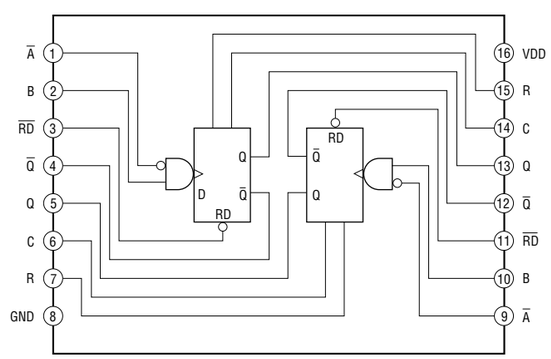
• Refer to page 9-12 for Printed Wiring Board

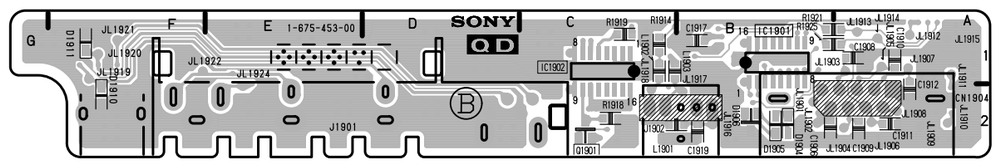


MAX202 (IC1901)



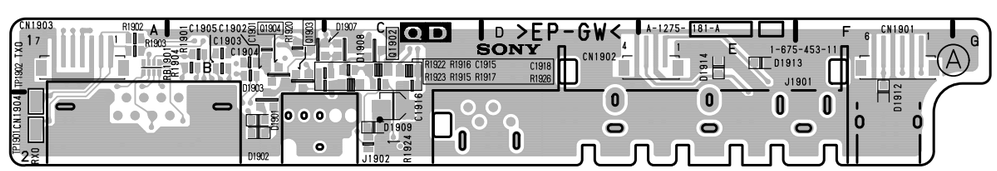
PC74HC123D (IC1902)





QD – B SIDE –

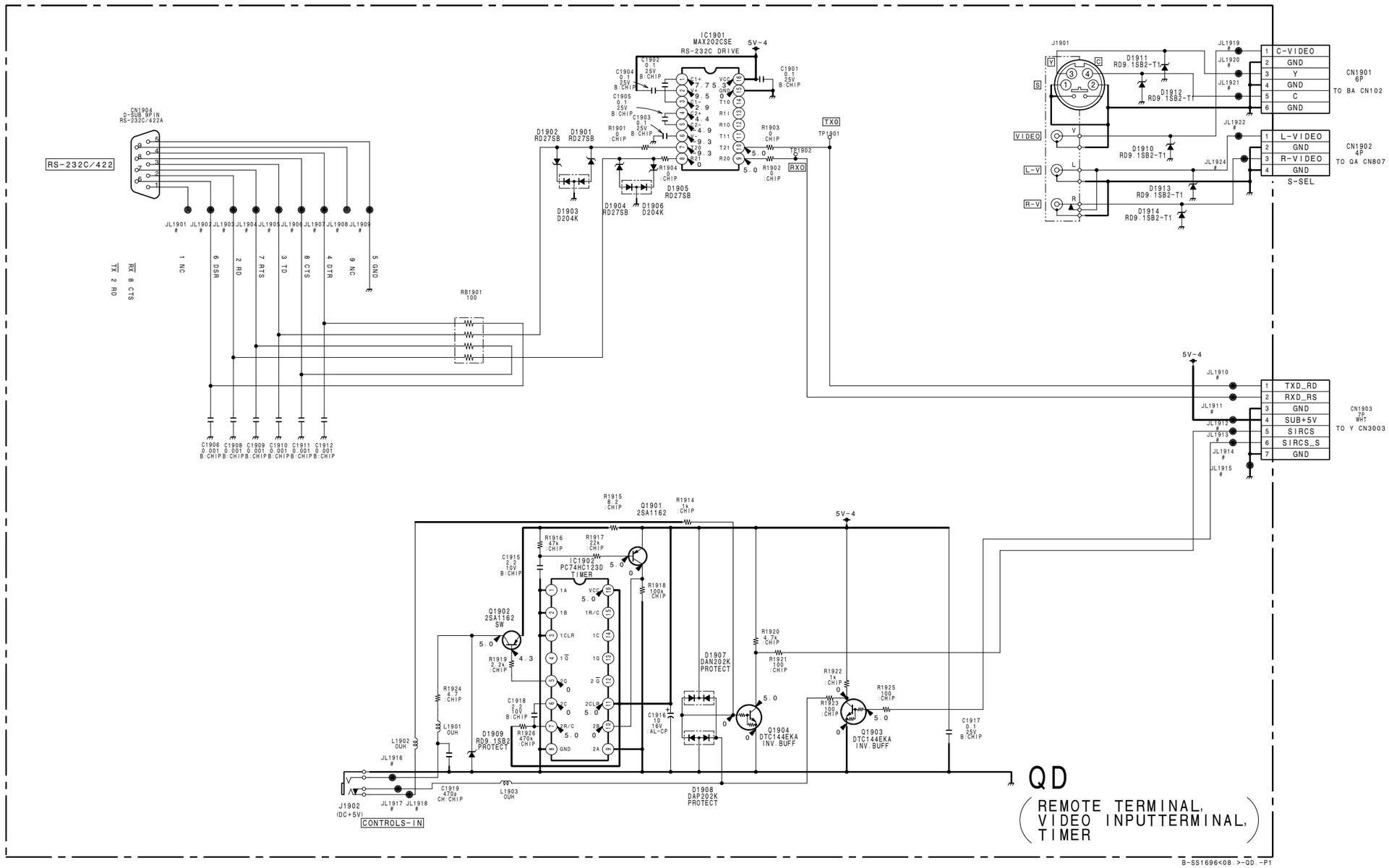
SUFFIX ; -11



QD – A SIDE –

SUFFIX ; -11

- Refer to page 9-14 for Printed Wiring Board
- Refer to page 9-14 for IC Block Diagrams



BA

1-675-454-11

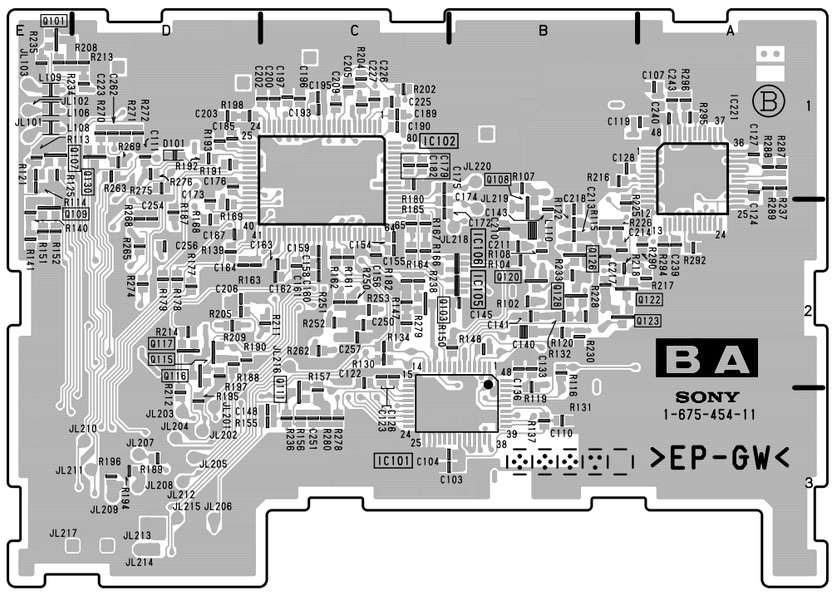
IC101 *C-3
IC102 *C-1
IC103 C-2
IC105 *B-2
IC106 *B-2
IC250 C-2
IC251 C-2
IC252 C-2
IC253 C-2
IC254 D-3
IC255 D-1
IC256 D-2
IC257 D-2
IC258 C-1
IC259 D-1

Q101 *E-1
Q103 *C-2
Q107 *D-1
Q108 *B-1
Q109 *E-2
Q110 D-3
Q111 *C-3
Q112 C-2
Q113 C-2
Q114 C-2
Q115 *D-2
Q116 *D-2
Q117 *D-2
Q118 C-2
Q119 C-2
Q120 *B-2
Q121 B-1
Q122 *A-2
Q123 *A-2
Q124 B-2
Q125 B-1
Q126 *B-2
Q127 B-2
Q128 *B-2
Q129 D-3
Q130 *D-1

R201 A-2
R215 A-2

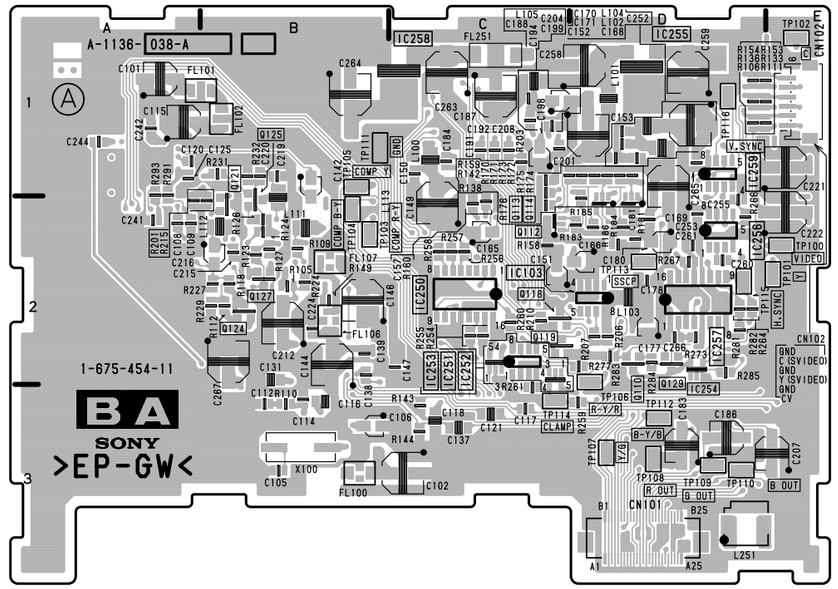
TP100 E-2
TP101 E-2
TP102 E-1
TP103 B-2
TP104 B-2
TP106 D-3
TP107 D-3
TP108 D-3
TP109 D-3
TP110 D-3
TP112 D-3
TP113 D-2
TP114 C-3
TP115 E-2

*:B Side mount



BA – B SIDE –

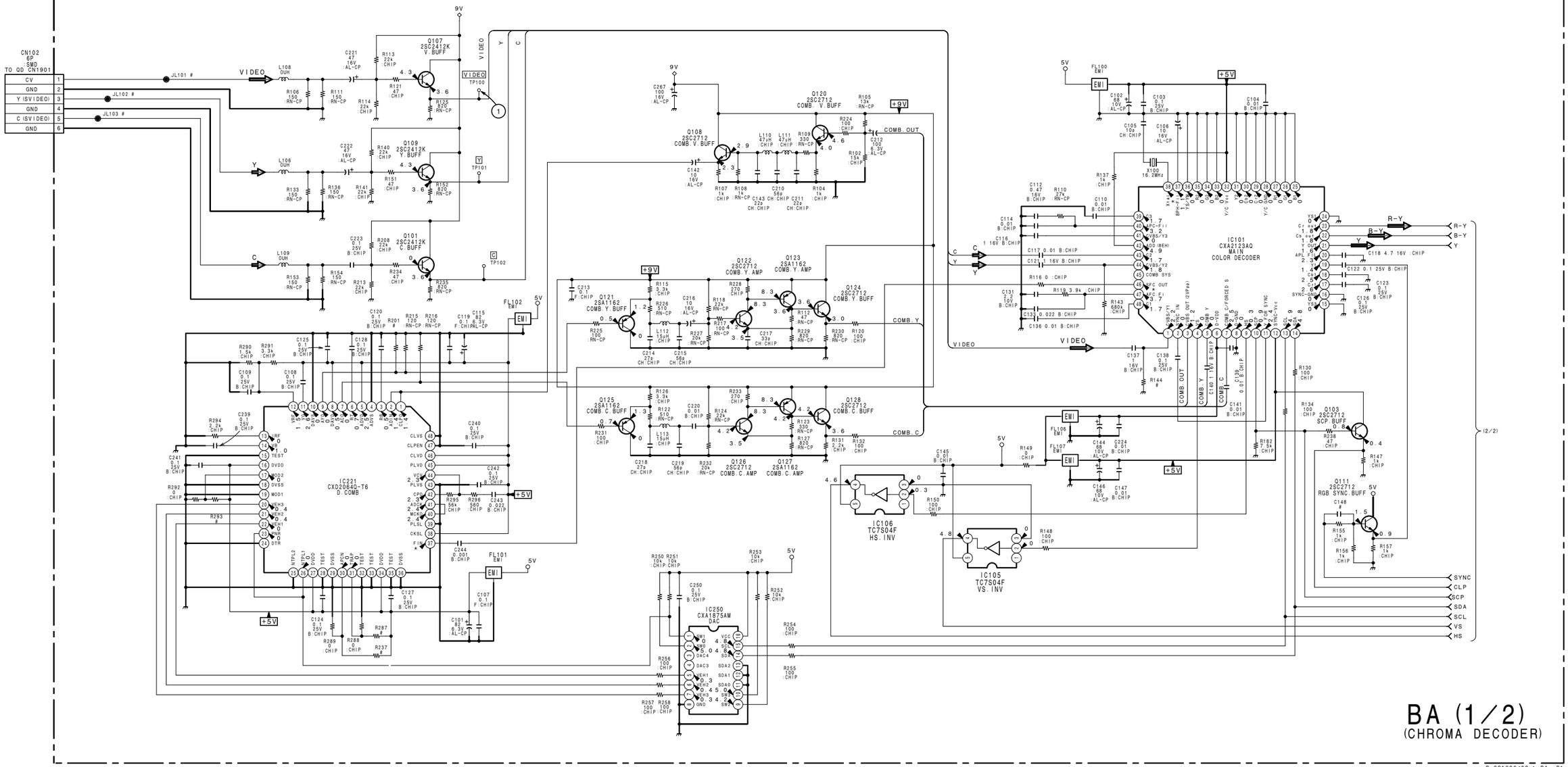
SUFFIX ; -11



BA – A SIDE –

SUFFIX ; -11

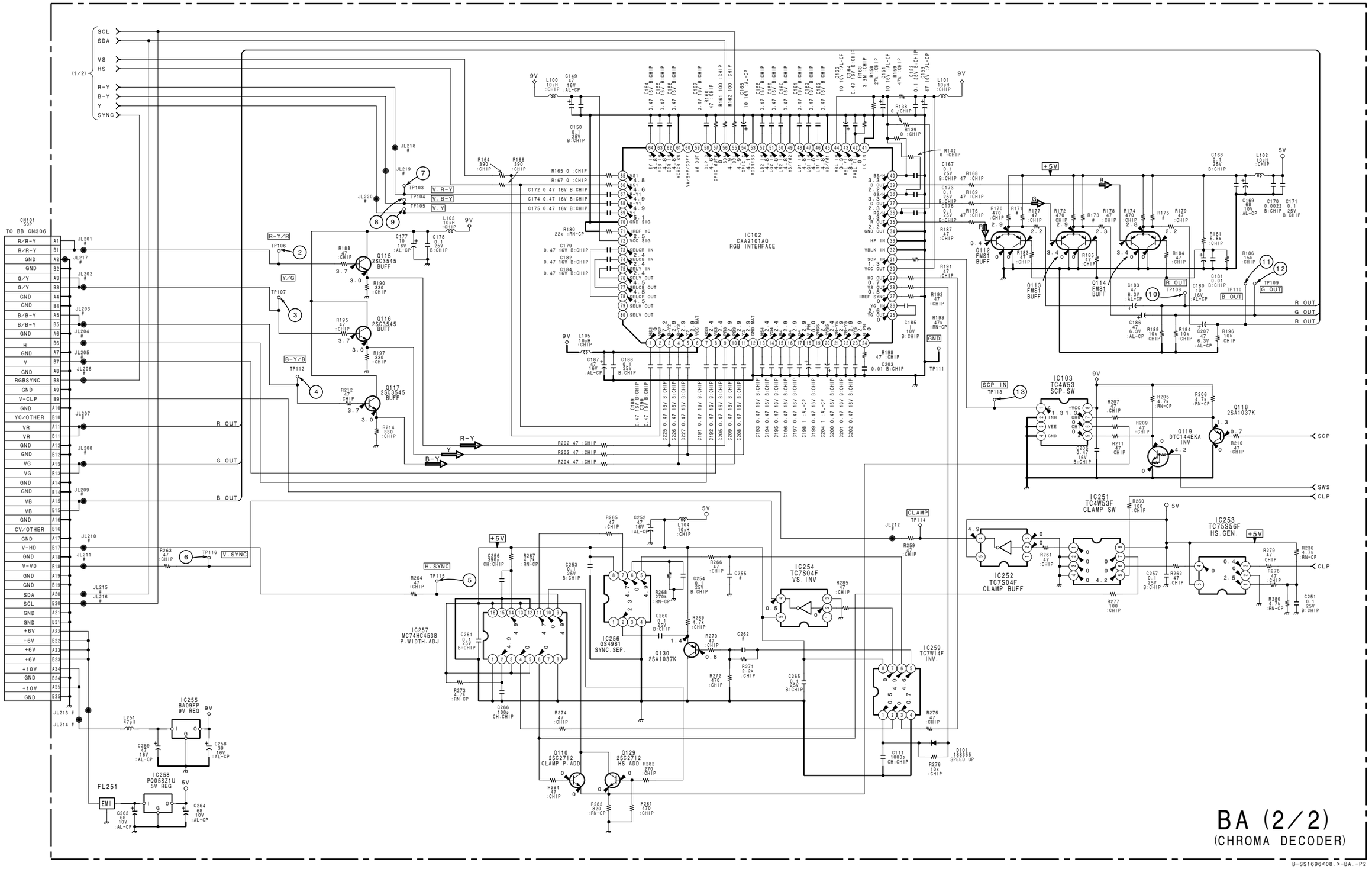
- Refer to page 9-16 for Printed Wiring Board
- Refer to page 9-19 for Waveforms
- Refer to page 9-19 for IC Block Diagrams



BA (1/2)
(CHROMA DECODER)

B-SS1696<08.>-BA.-P1

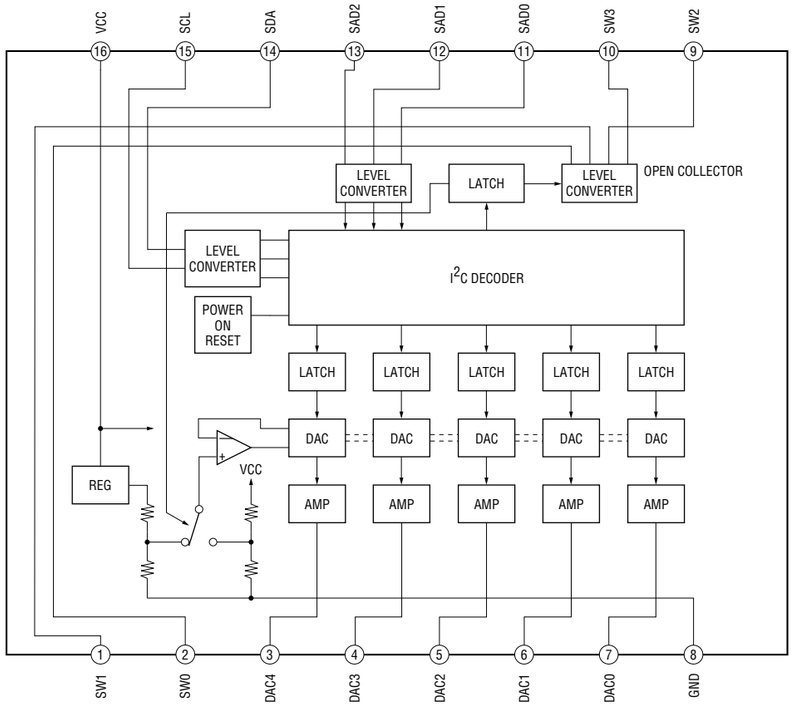
- Refer to page 9-16 for Printed Wiring Board
- Refer to page 9-19 for Waveforms
- Refer to page 9-19 for IC Block Diagrams



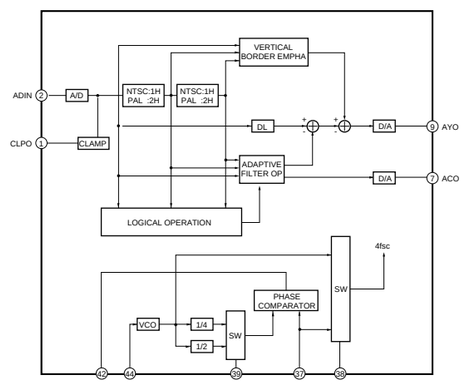
BA Board Waveforms

① 1.0 Vp-p TP100 VIDEO	② 0.7 Vp-p TP106 R-Y/R	③ 0.7 Vp-p TP107 Y/G	④ 0.7 Vp-p TP112 B-Y/B
⑤ 5.0 Vp-p TP115 H.SYNC	⑥ 3.8 Vp-p TP116 V.SYNC	⑦ 0.7 Vp-p TP103 R-Y	⑧ 0.7 Vp-p TP104 B-Y
⑨ 0.6 Vp-p TP105 Y	⑩ 0.6 Vp-p TP108 R OUT	⑪ 0.6 Vp-p TP110 B OUT	⑫ 0.6 Vp-p TP109 G OUT
⑬ 3.8 Vp-p TP113 SCP IN			

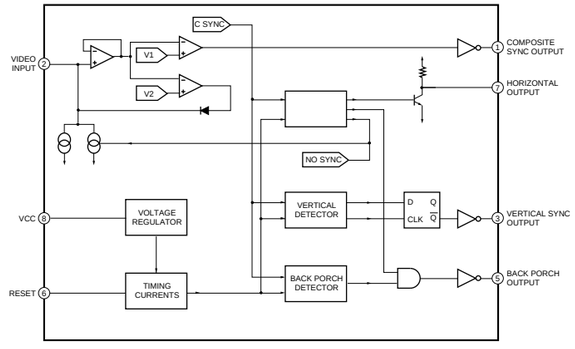
CXA1875AM-T4 (IC250)



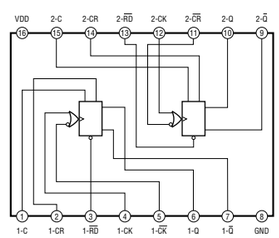
CXD2064Q-T6 (IC221)



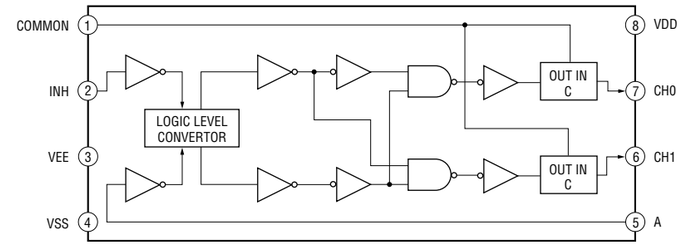
GS4981 (IC256)

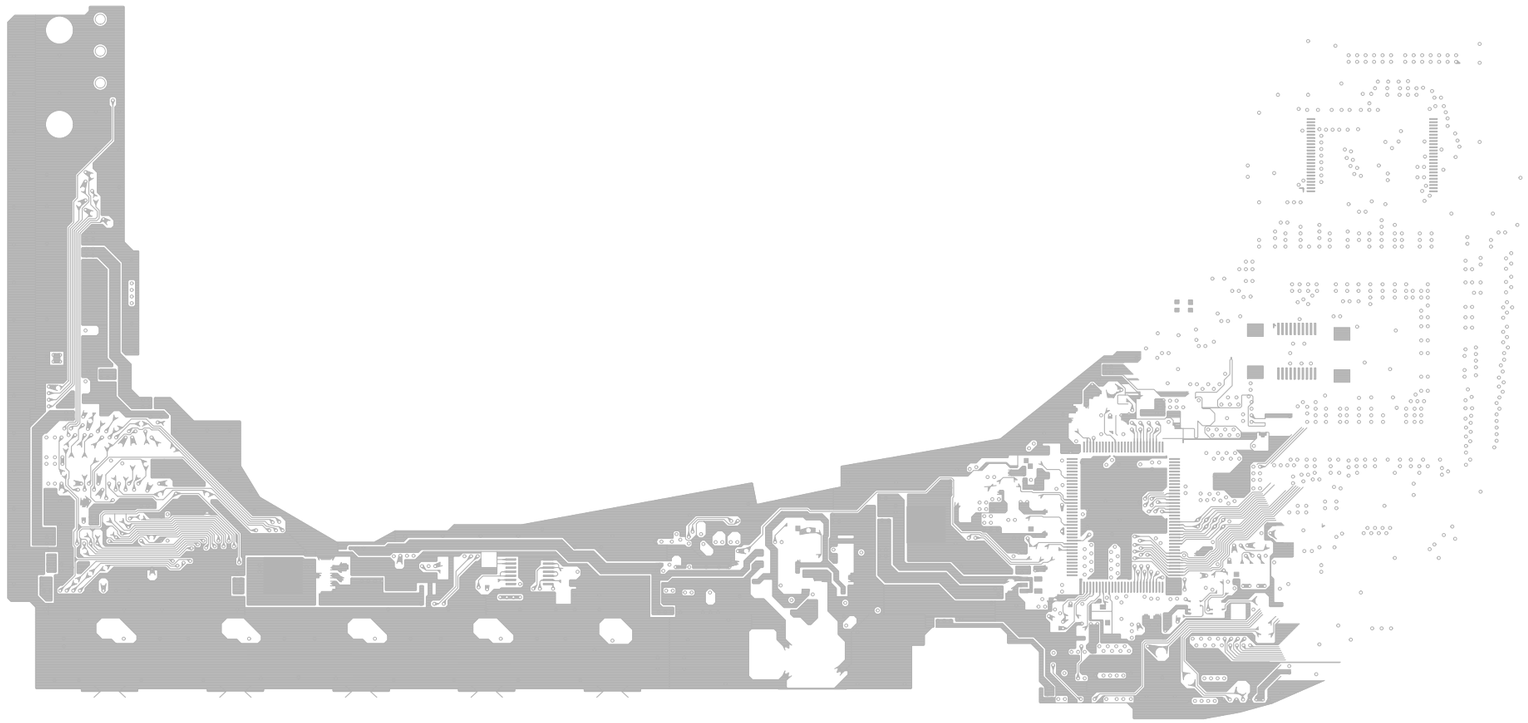


MC74HC4538AFEL (IC257)



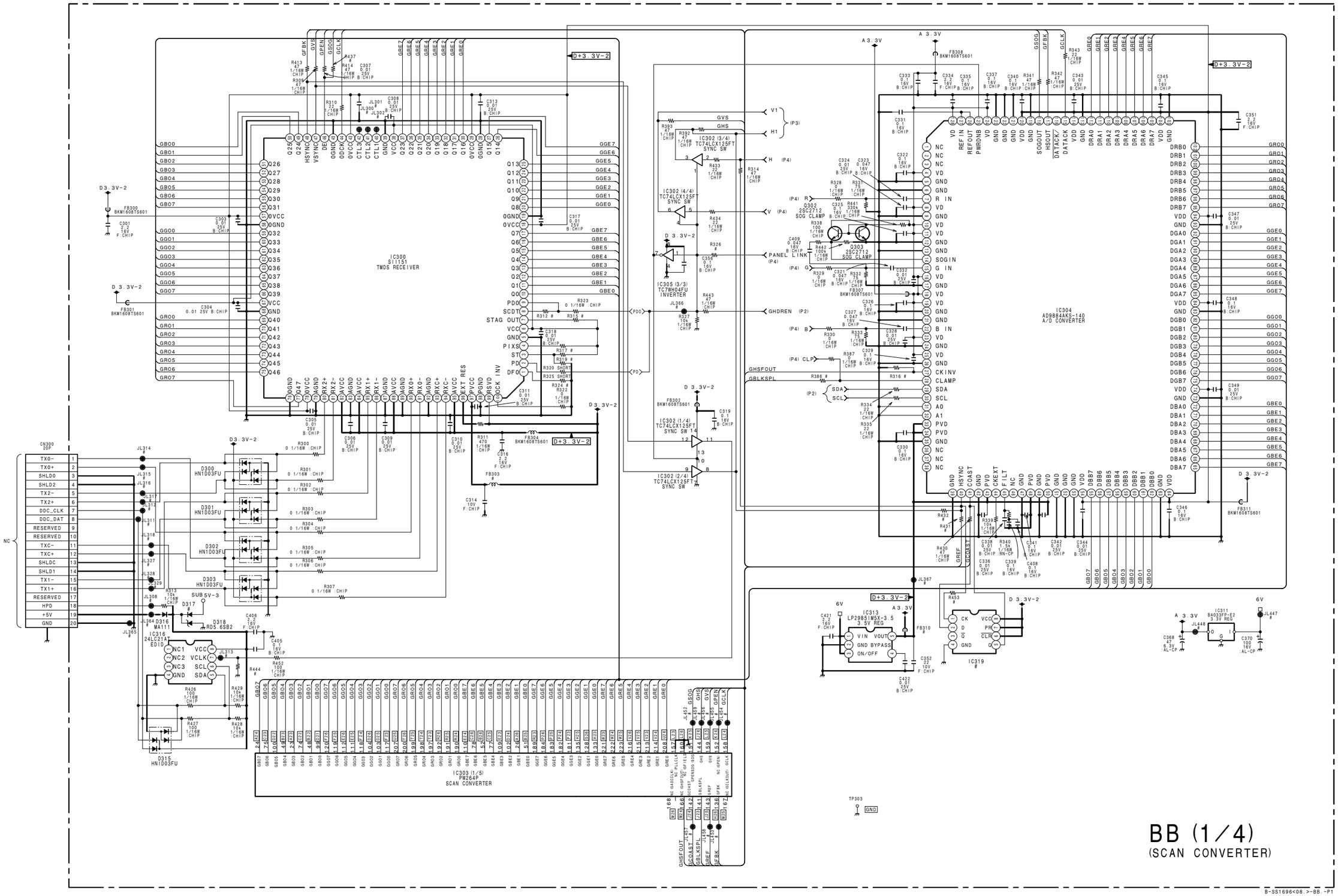
TC4W53F (TE12R) (IC251, 103)





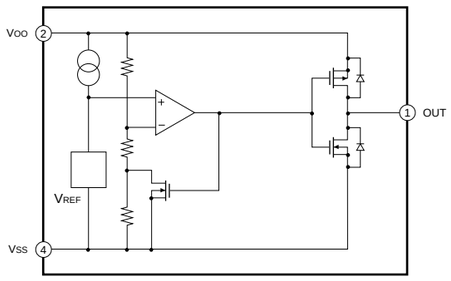
9-20

• Refer to page 9-20 for Printed Wiring Board



• Refer to page 9-20 for Printed Wiring Board

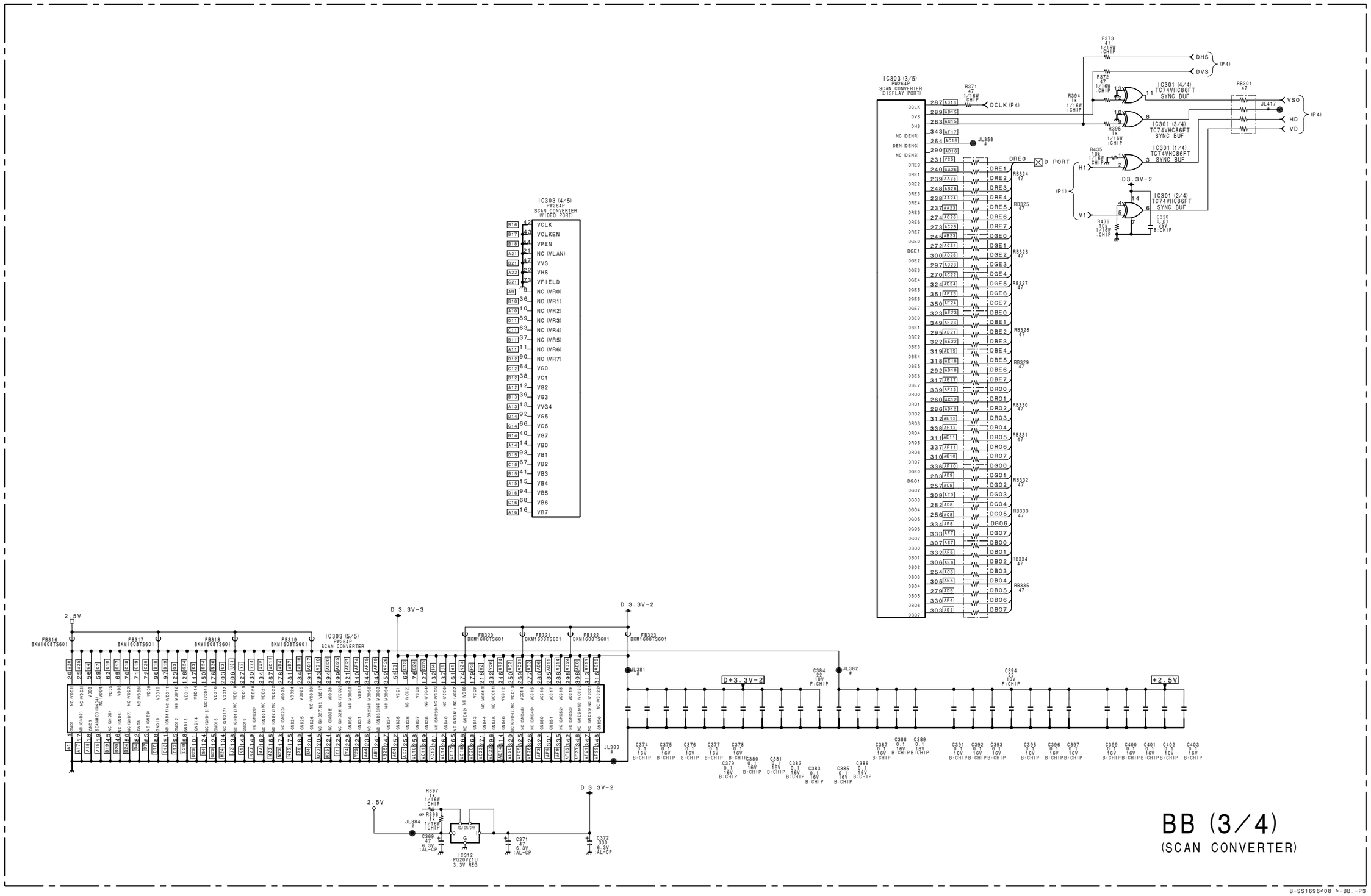
S-80828ANNP-ED4-T2 (IC306)



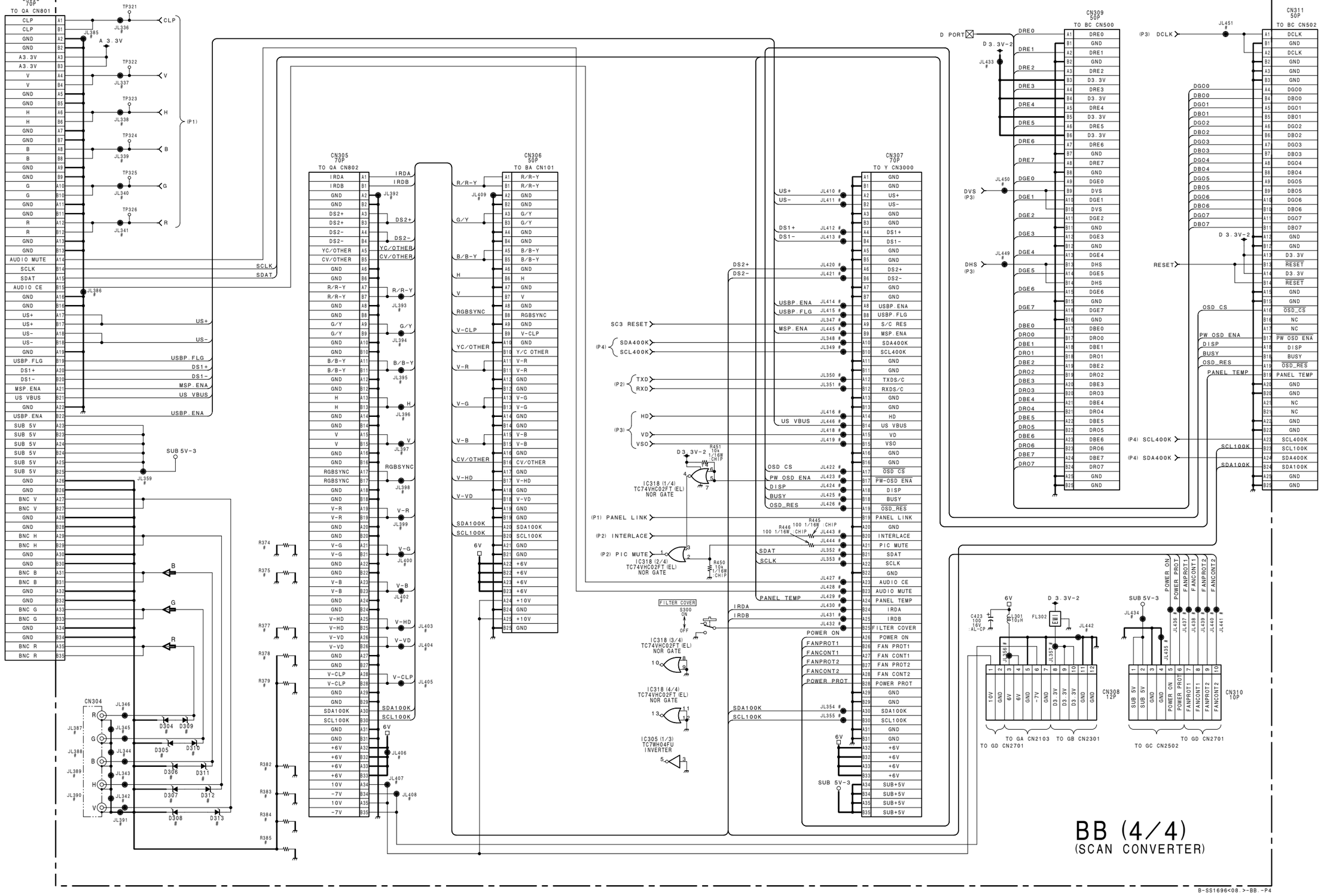
BB (2/4)
(SCAN CONVERTER)

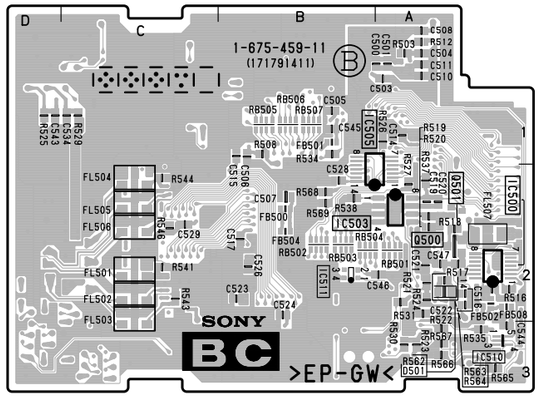
B-SS1696<08.>-BB.-P2

• Refer to page 9-20 for Printed Wiring Board



• Refer to page 9-20 for Printed Wiring Board





BC – B SIDE –

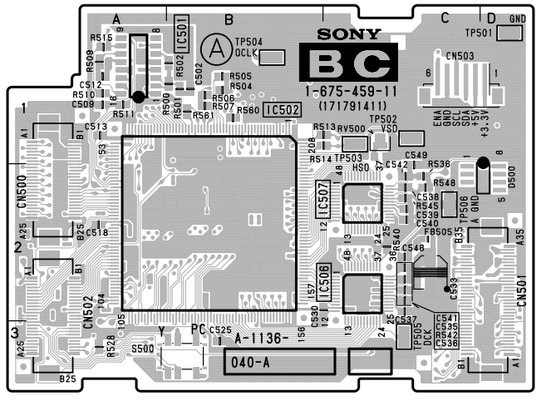
SUFFIX ; -11

BC

1-675-459-11

IC500	*	A-2
IC501		B-1
IC502		B-1
IC503	*	B-2
IC505	*	B-1
IC506		C-2
IC507		C-2
IC510	*	A-3
IC511	*	B-2
Q500	*	A-2
Q501	*	A-2
TP501		D-1
TP502		C-1
TP503		C-1
TP504		C-1
TP506		C-2
TP505		C-3

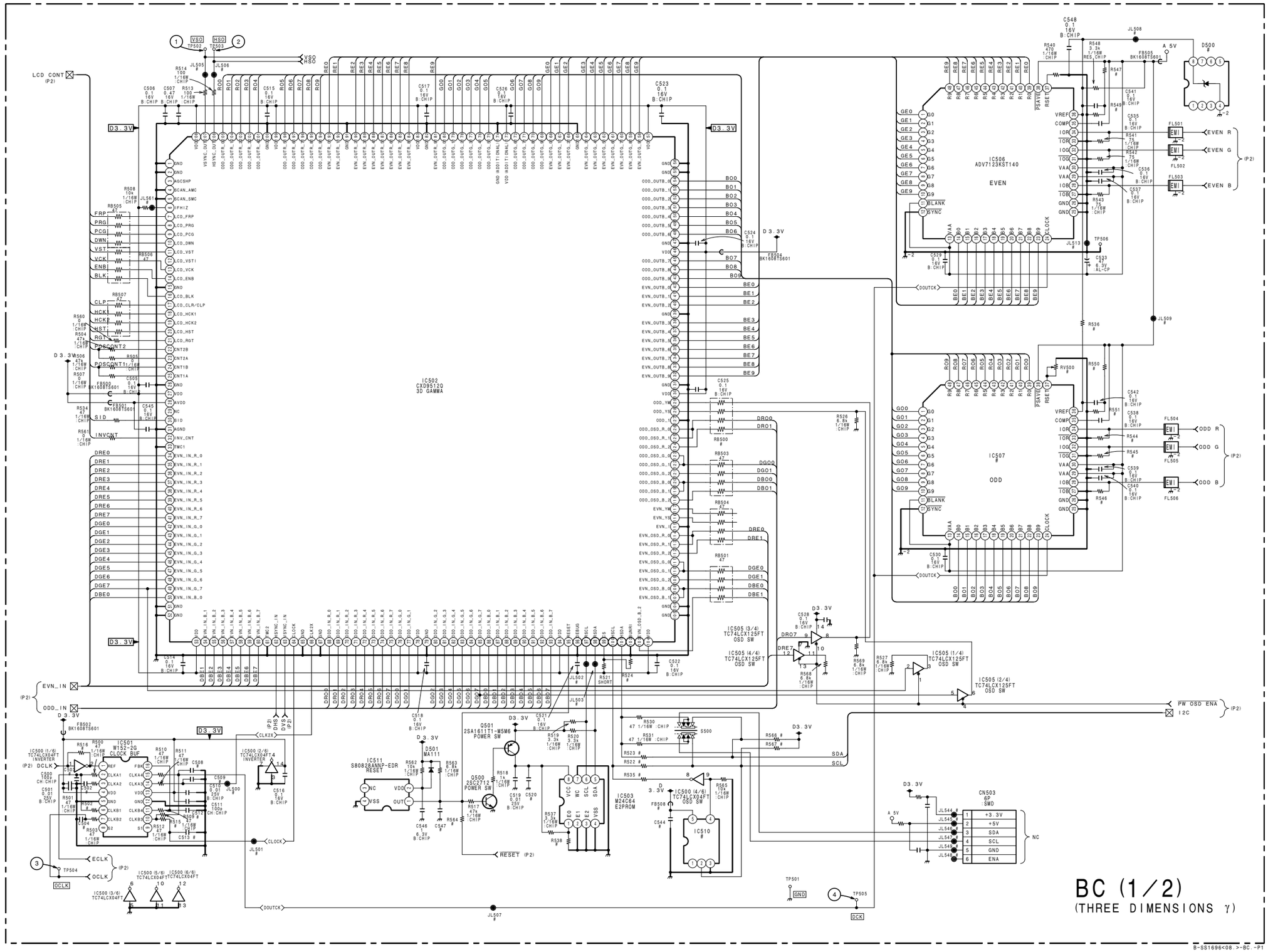
*:B Side mount



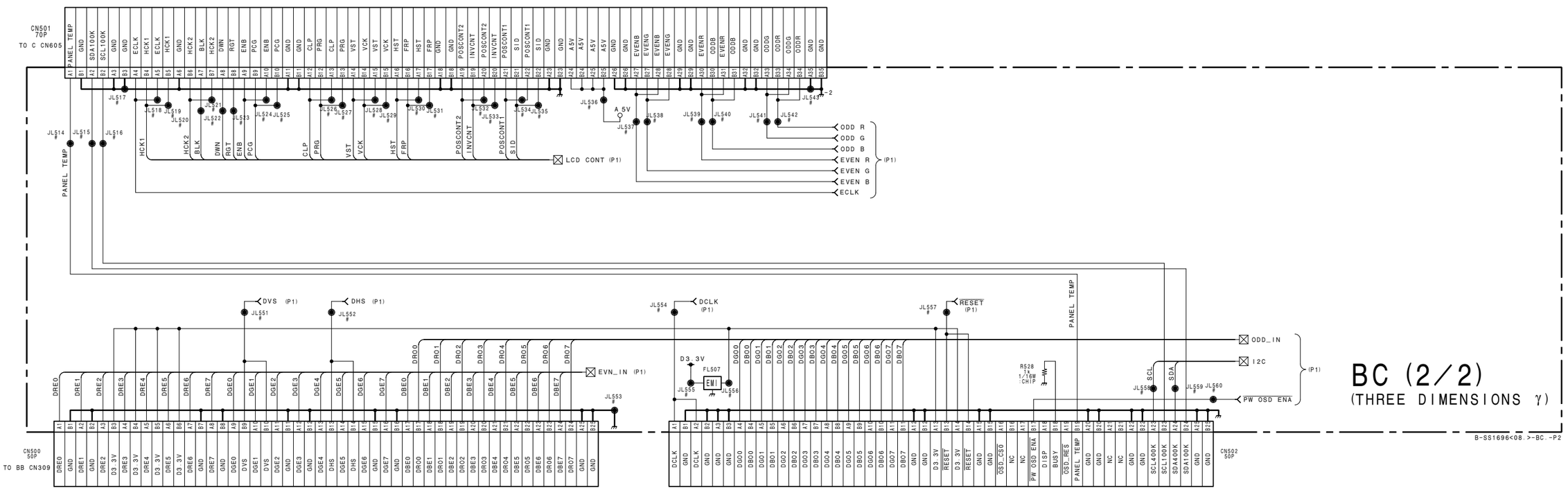
BC – A SIDE –

SUFFIX ; -11

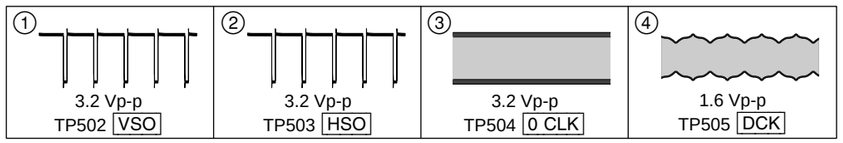
- Refer to page 9-25 for Printed Wiring Board
- Refer to page 9-27 for Waveforms

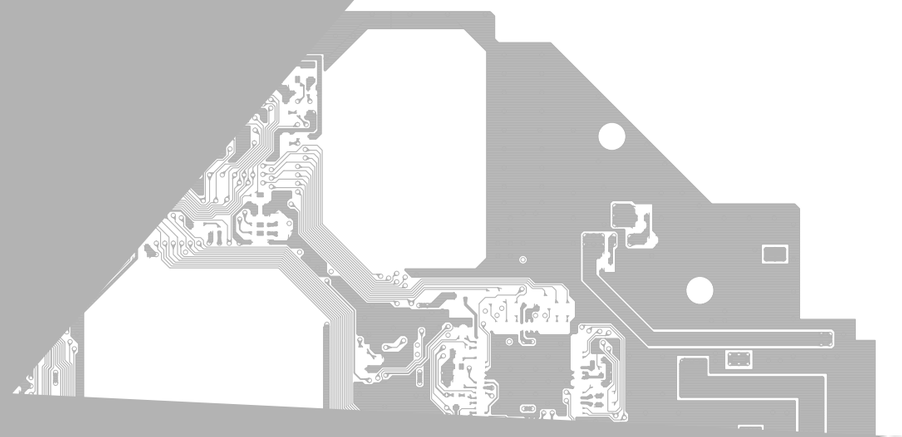


- Refer to page 9-25 for Printed Wiring Board
- Refer to page 9-27 for Waveforms

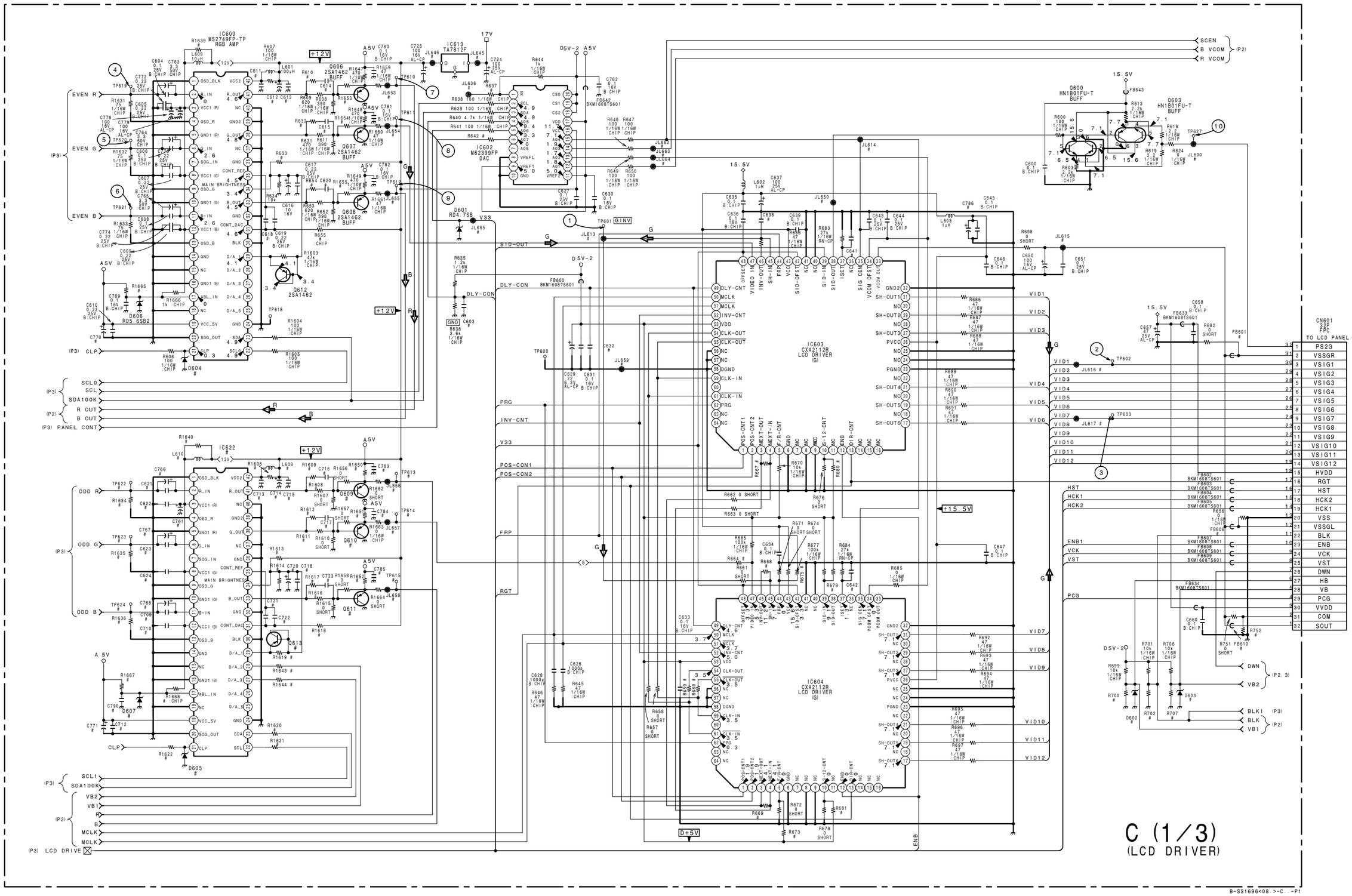


BC Board Waveforms

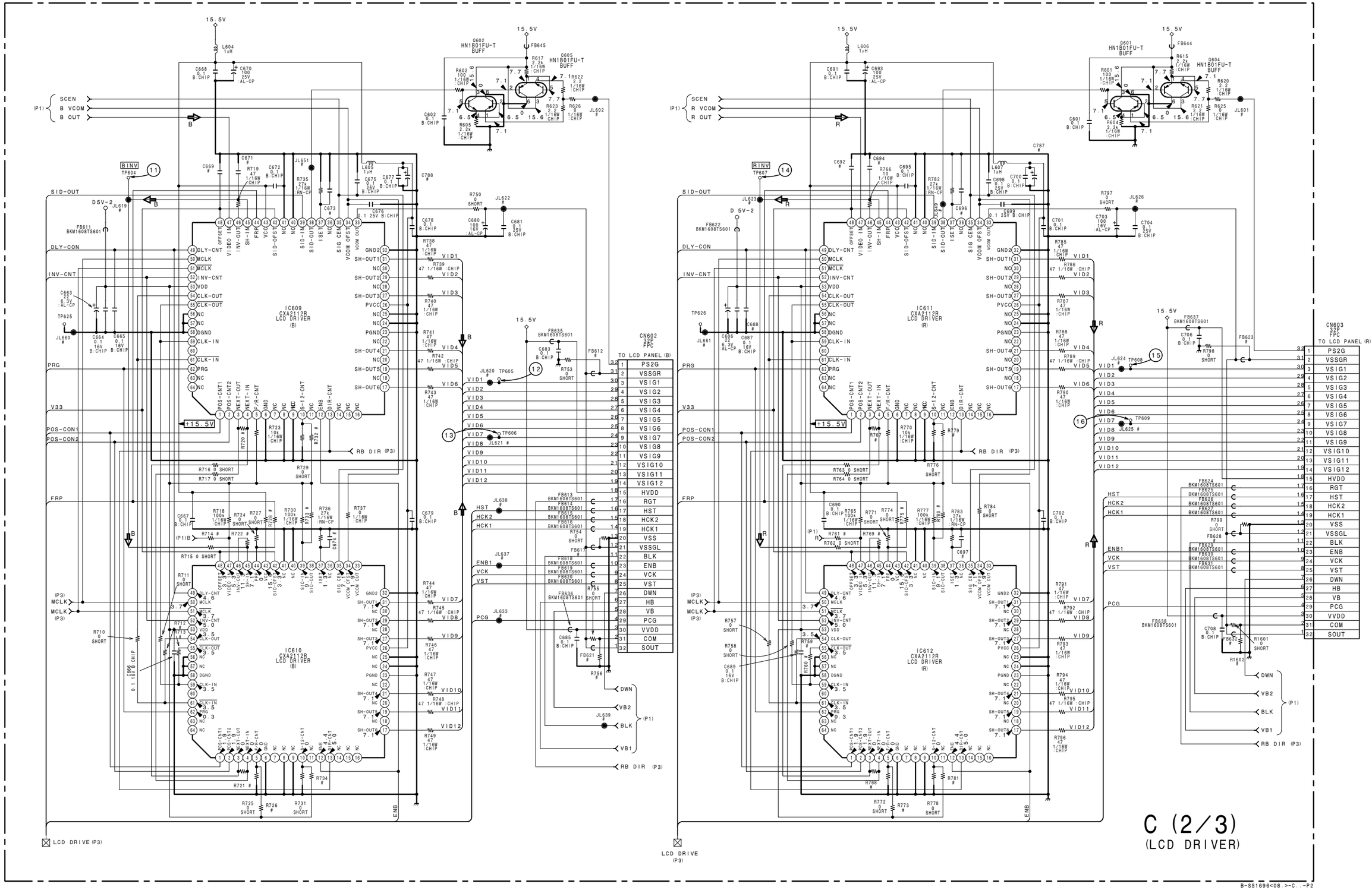




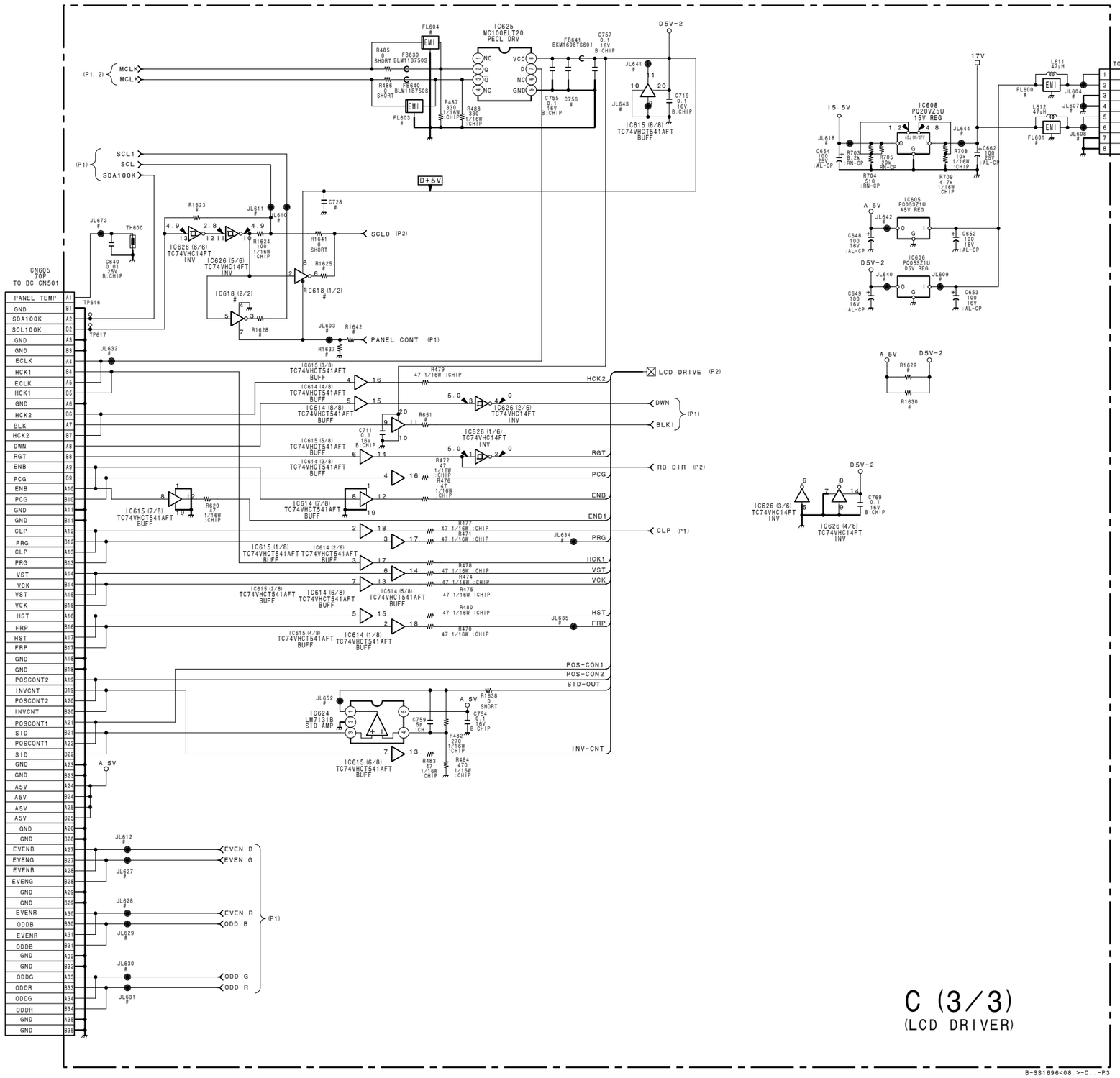
- Refer to page 9-28 for Printed Wiring Board
- Refer to page 9-28 for Waveforms
- Refer to page 9-31 for IC Block Diagrams



- Refer to page 9-28 for Printed Wiring Board
- Refer to page 9-28 for Waveforms
- Refer to page 9-31 for IC Block Diagrams



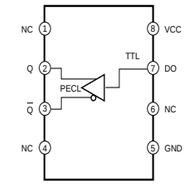
- Refer to page 9-28 for Printed Wiring Board
- Refer to page 9-28 for Waveforms
- Refer to page 9-31 for IC Block Diagrams



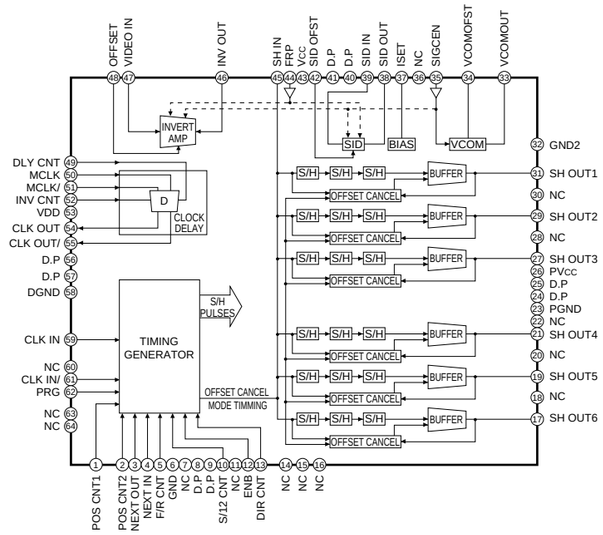
C (3/3)
(LCD DRIVER)

B-SS1696<08.>-C...-P3

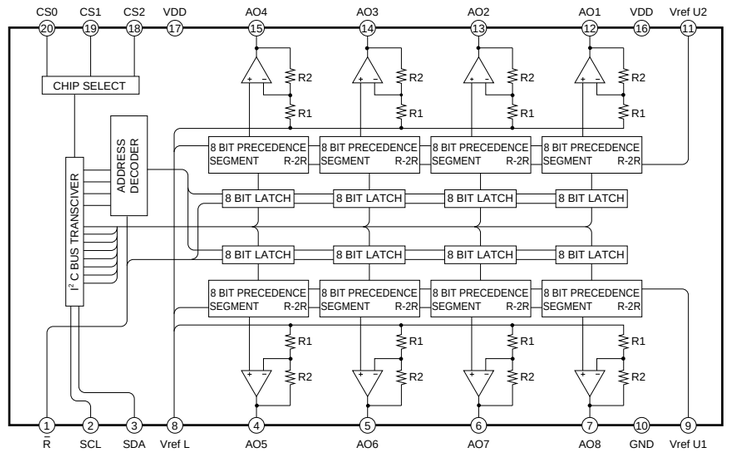
MC100ELT20 (IC625)

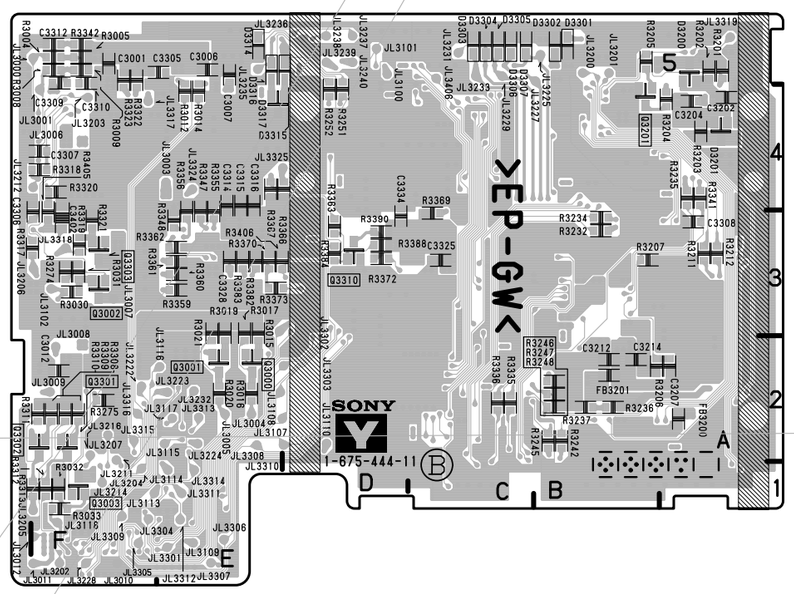


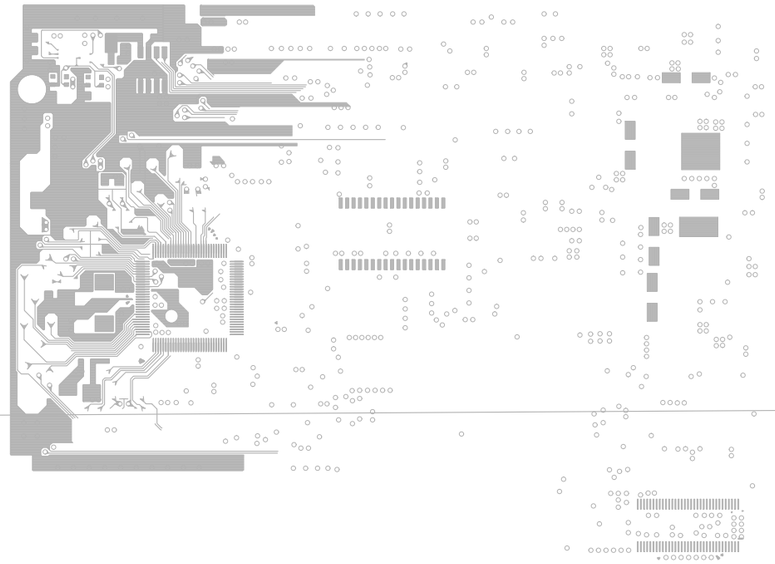
CXA2112R (IC603, 604, 609, 610, 611, 612)



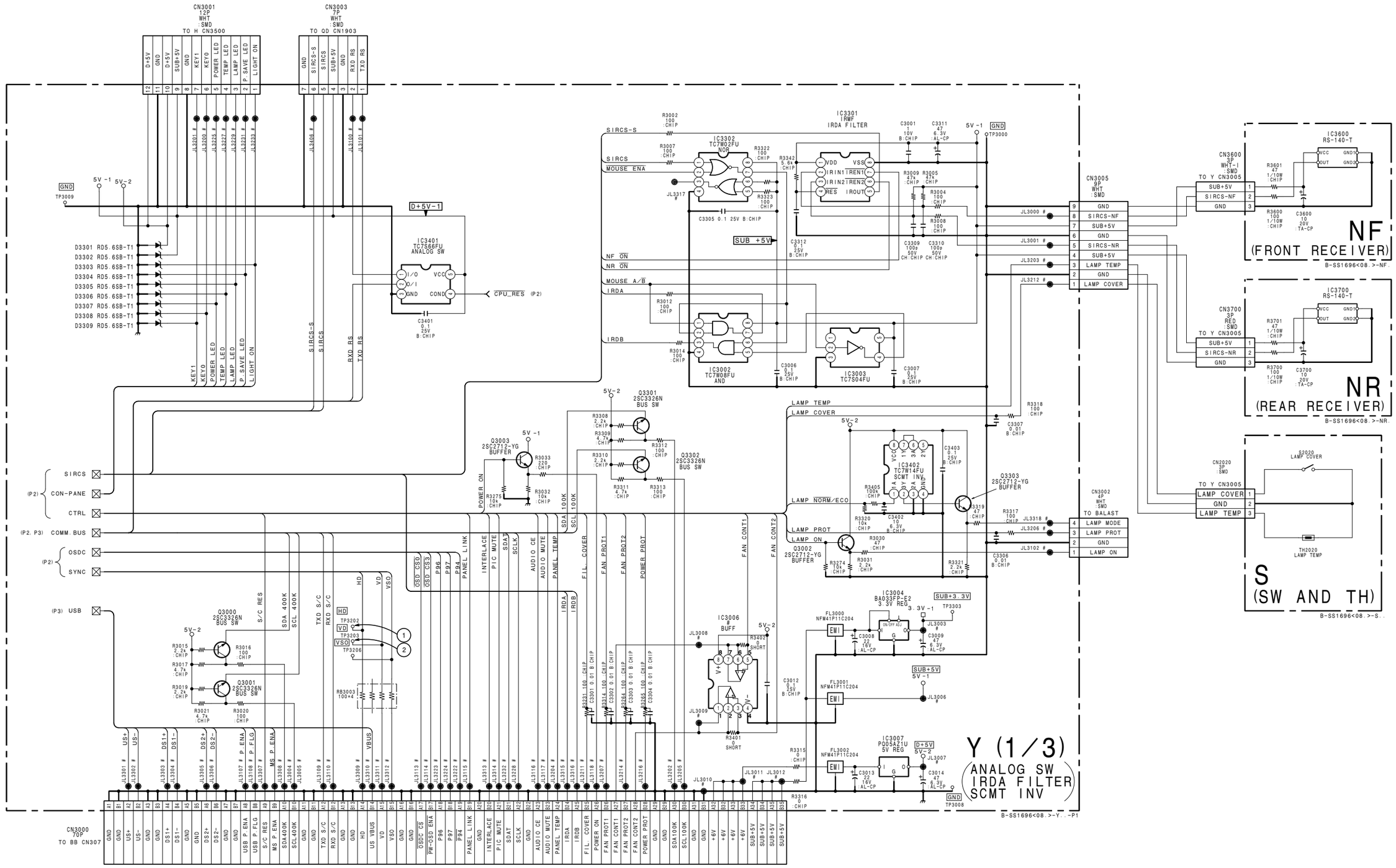
M62399FP (IC602)



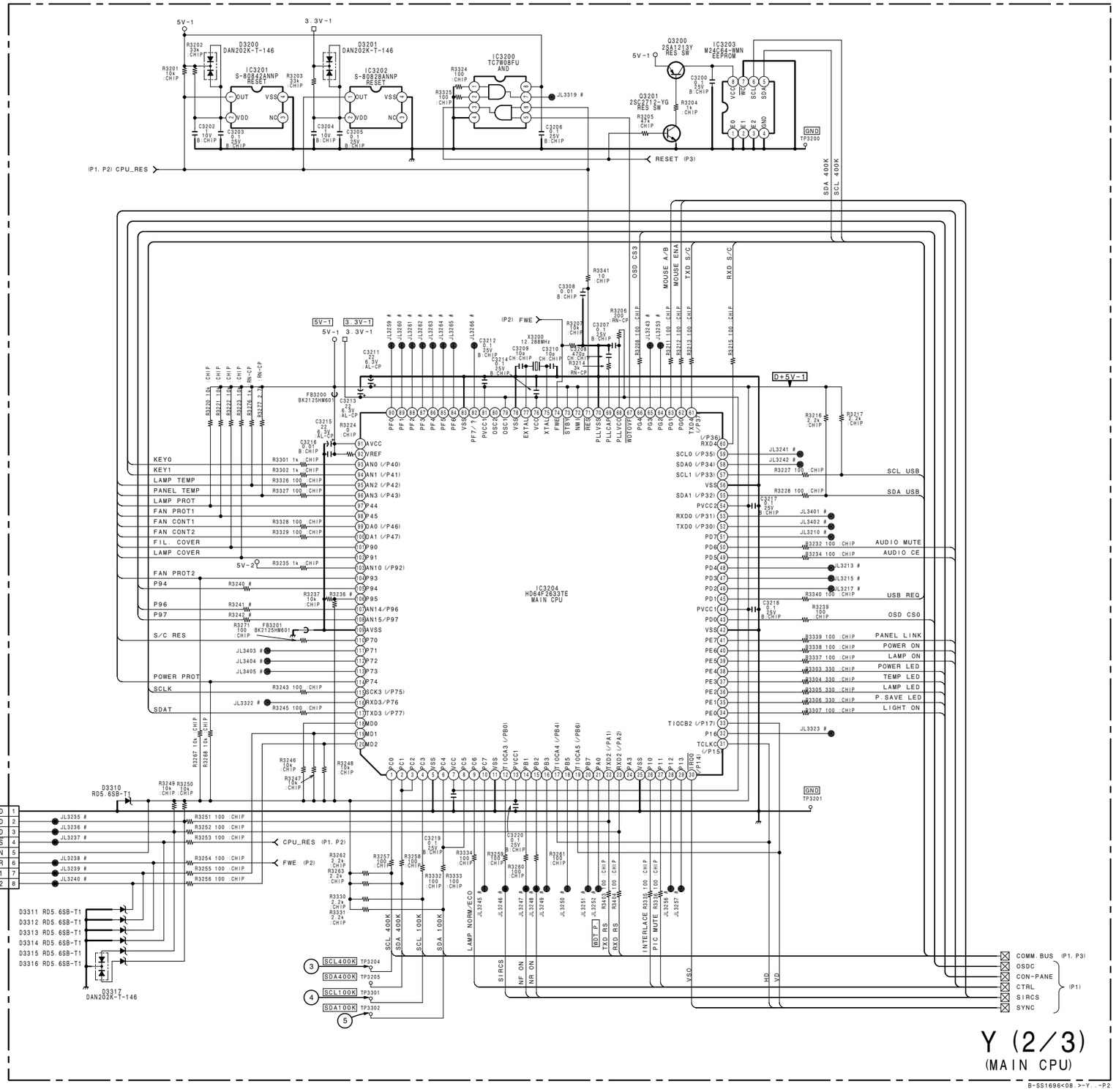

SONY
1-675-444-11
>EP-GW<



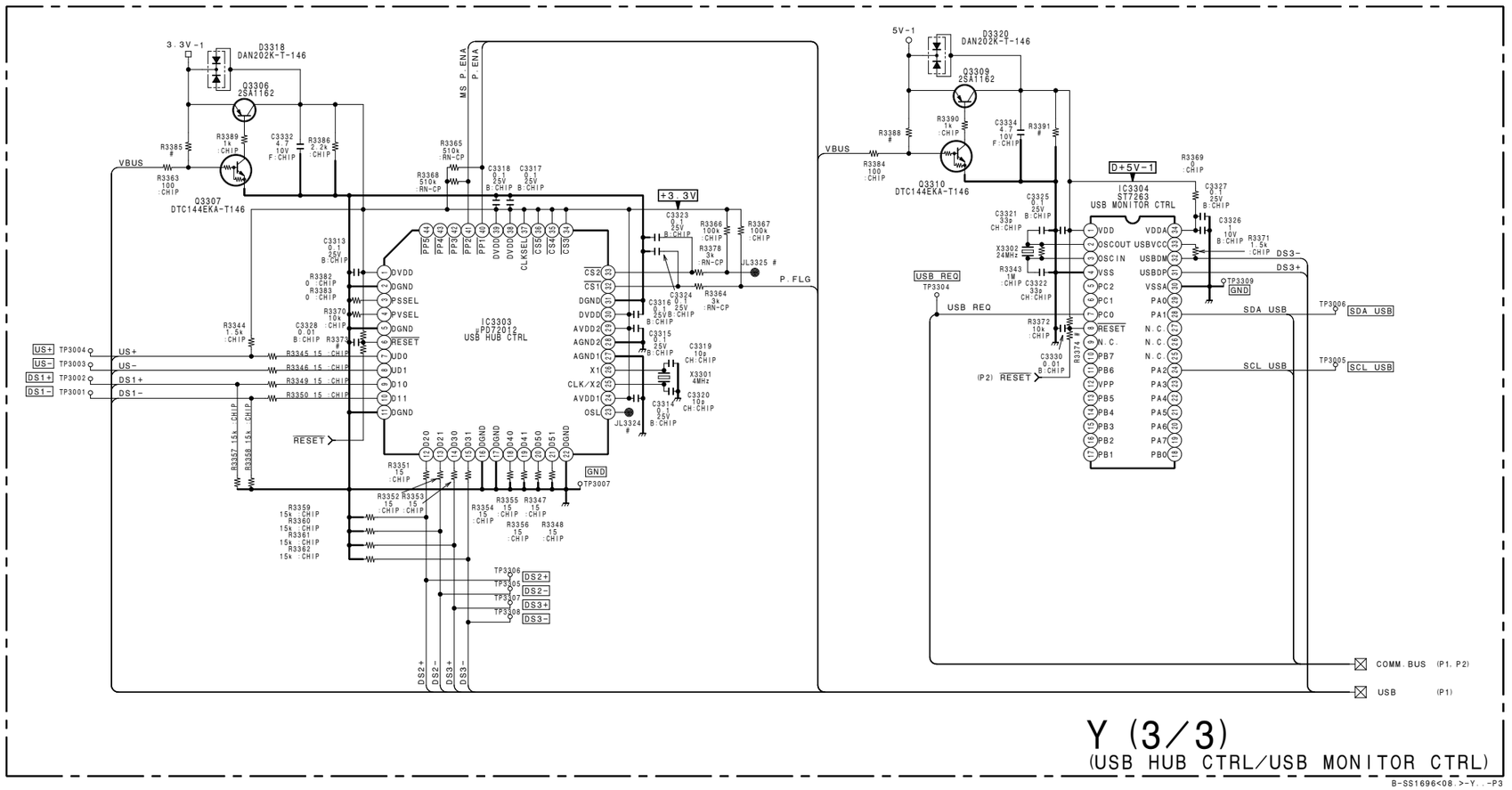
- Refer to page 9-32 for Printed Wiring Board
- Refer to page 9-35 for Waveforms
- Refer to page 9-35 for IC Block Diagrams



- Refer to page 9-32 for Printed Wiring Board
- Refer to page 9-35 for Waveforms
- Refer to page 9-35 for IC Block Diagrams



- Refer to page 9-32 for Printed Wiring Board
- Refer to page 9-35 for Waveforms
- Refer to page 9-35 for IC Block Diagrams

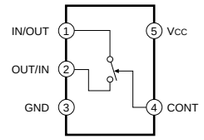


Y Board Waveforms

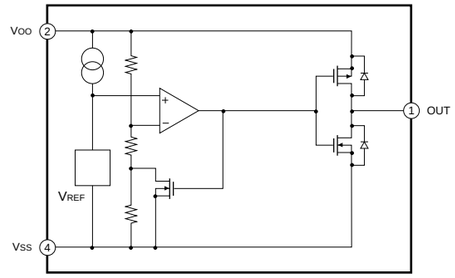
①	②	③	④
3.2 Vp-p TP3202 HD	3.2 Vp-p TP3203 VD	4.5 Vp-p TP3204 SCL400K	4.5 Vp-p TP3301 SCL100K

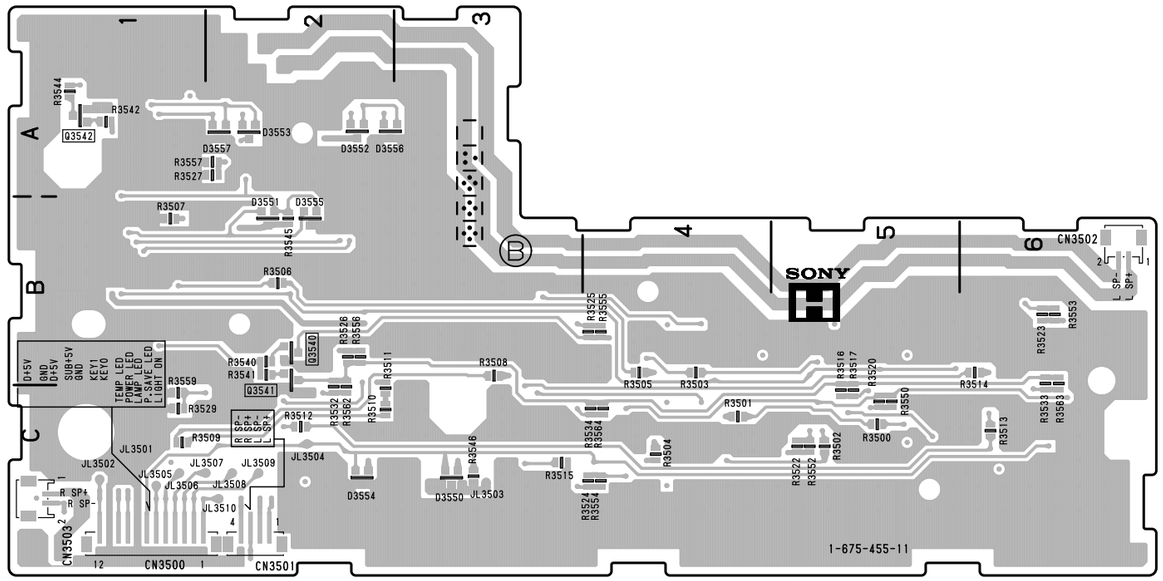
⑤ 4.5 Vp-p
TP3302 SDA100K

TC7S66FU (IC3401)



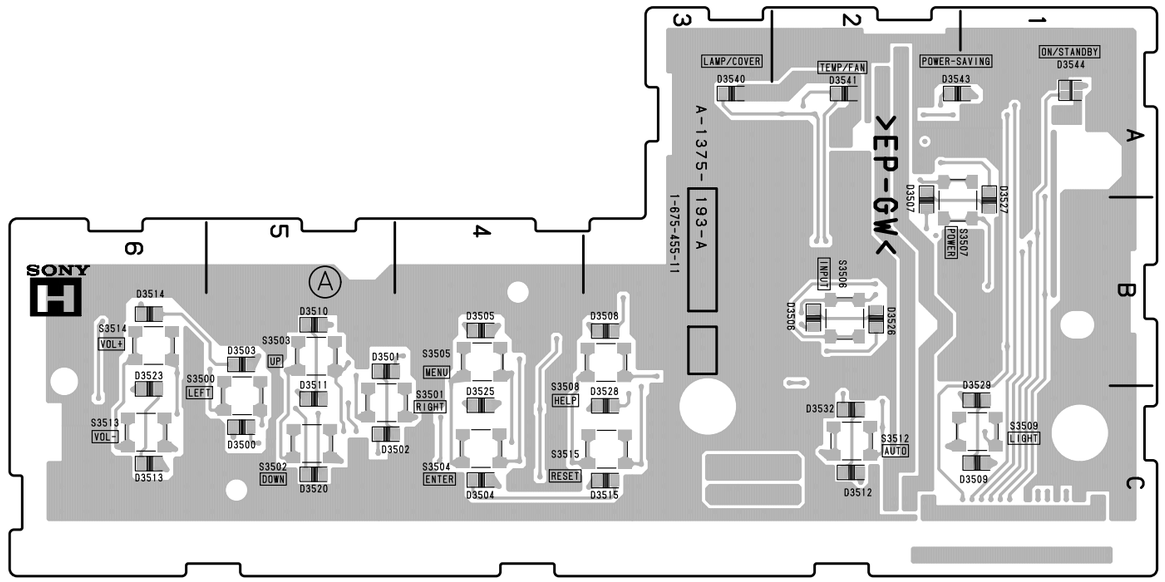
S-80842ANNP-ED4-T2 (IC3201)
S-80828ANNP-ED4-T2 (IC3202)





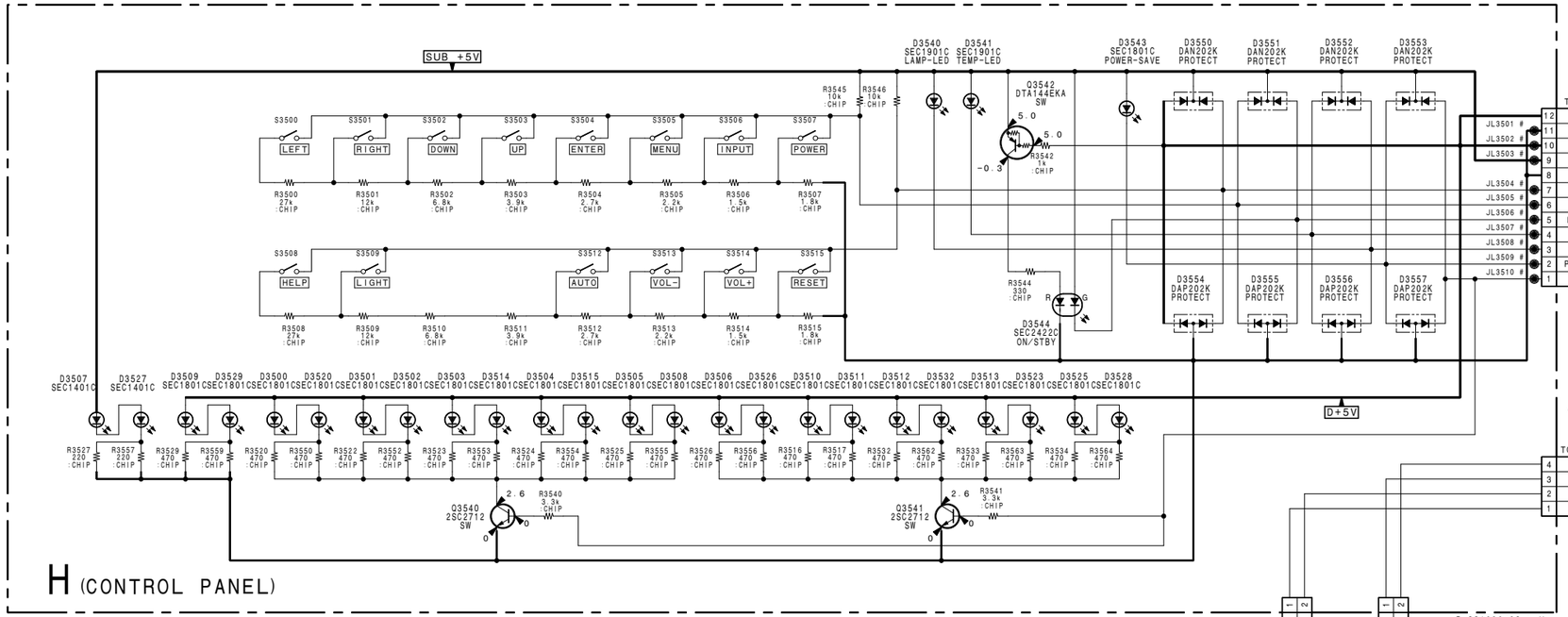
H – B SIDE –

SUFFIX ; -11



H – A SIDE –

SUFFIX ; -11



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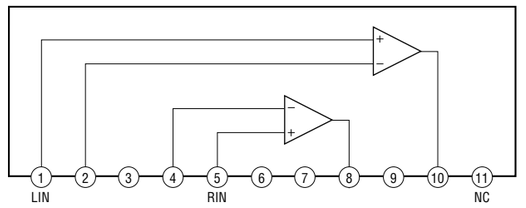
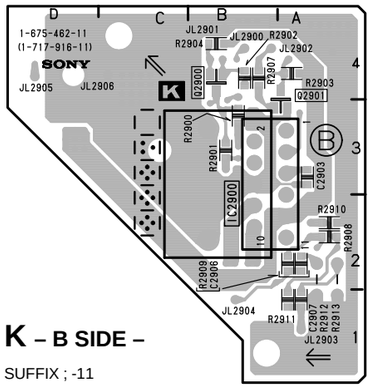
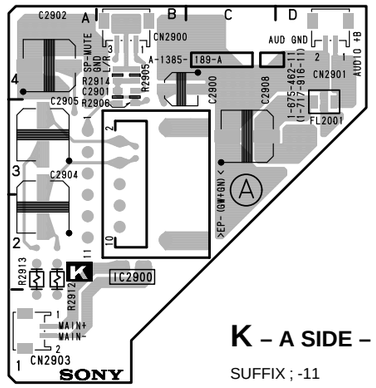




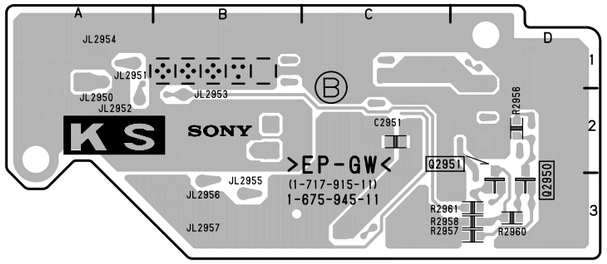
K – B SIDE –

SUFFIX ; -11



K – A SIDE –

SUFFIX ; -11



KS – B SIDE –

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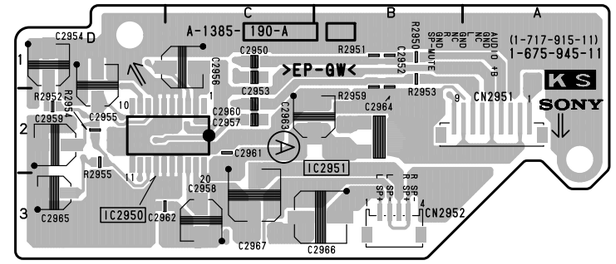
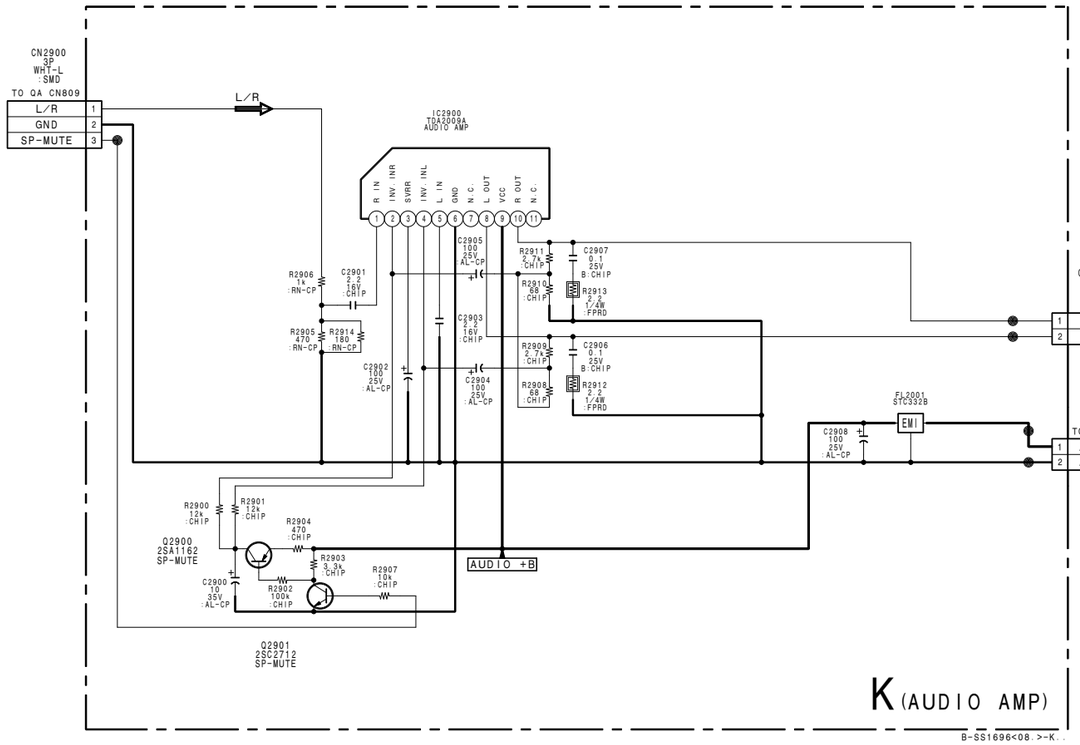


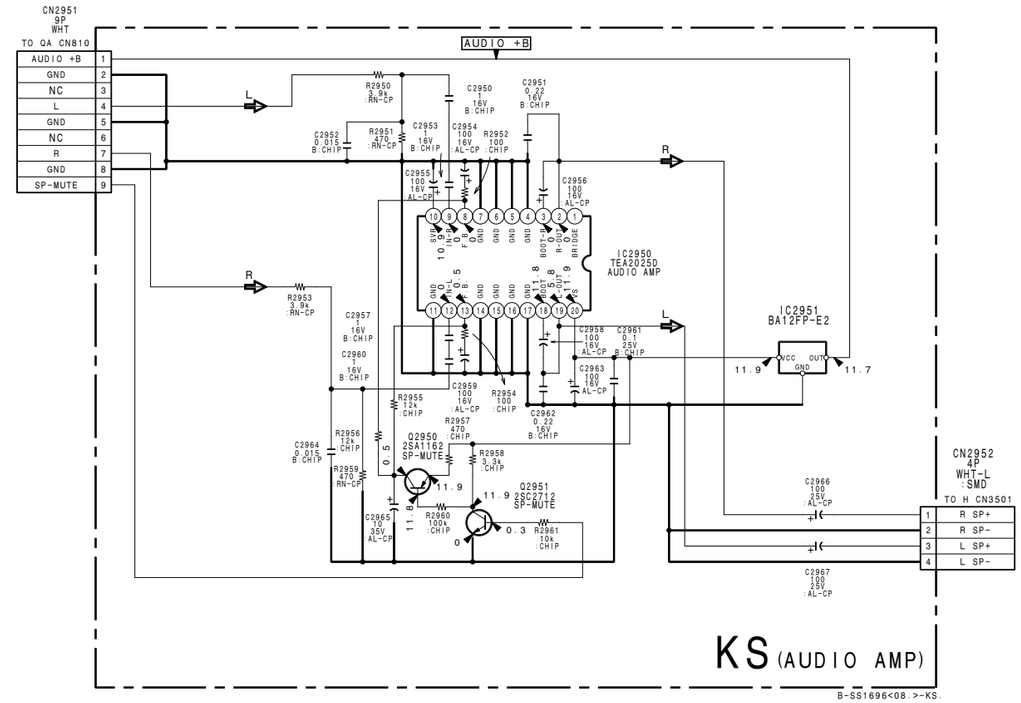
KS – A SIDE –

SUFFIX ; -11



K (AUDIO AMP)

B-SS1696<08.>-K..



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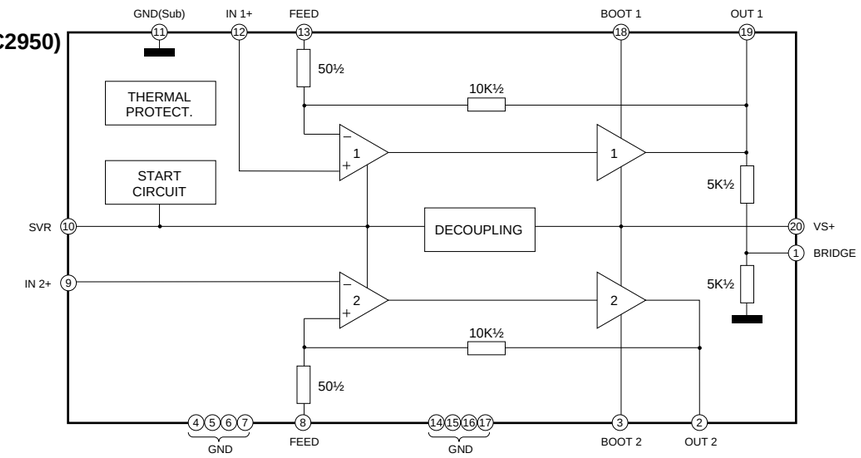
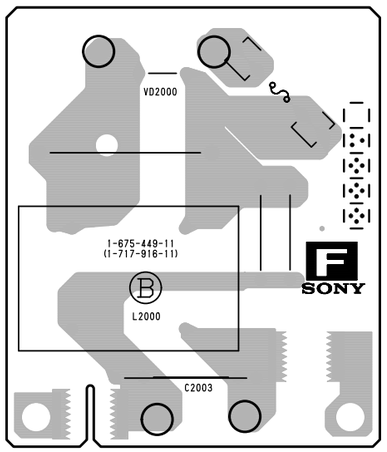
TEA2025D-013TR (IC2950)





F – B SIDE –

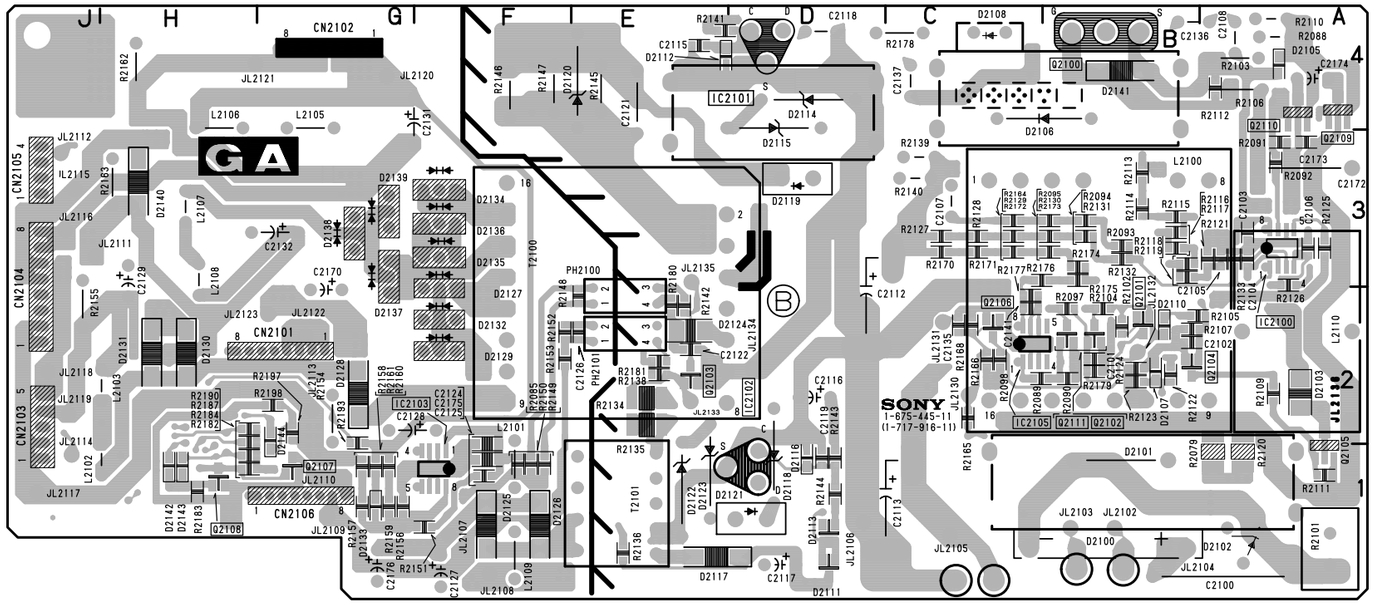
SUFFIX ; -11

GA

1-675-445-11

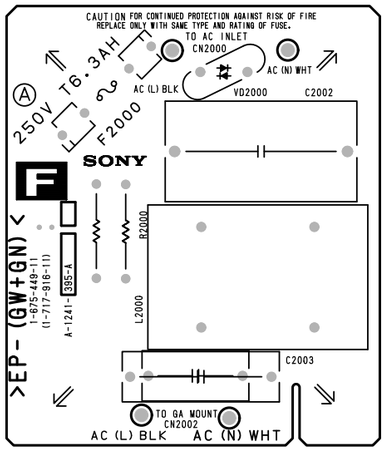
IC2100	*A-2
IC2101	*D-4
IC2102	D-4
IC2102	D-2
IC2102	*D-2
IC2103	*F-2
IC2104	H-1
IC2105	*C-2
Q2100	B-4
Q2100	*B-4
Q2101	*B-2
Q2102	*B-2
Q2103	*E-2
Q2104	*A-2
Q2106	*C-2
Q2107	*G-1
Q2108	*H-1
Q2109	*A-3
Q2110	*A-4
Q2111	*B-2

*:B Side mount



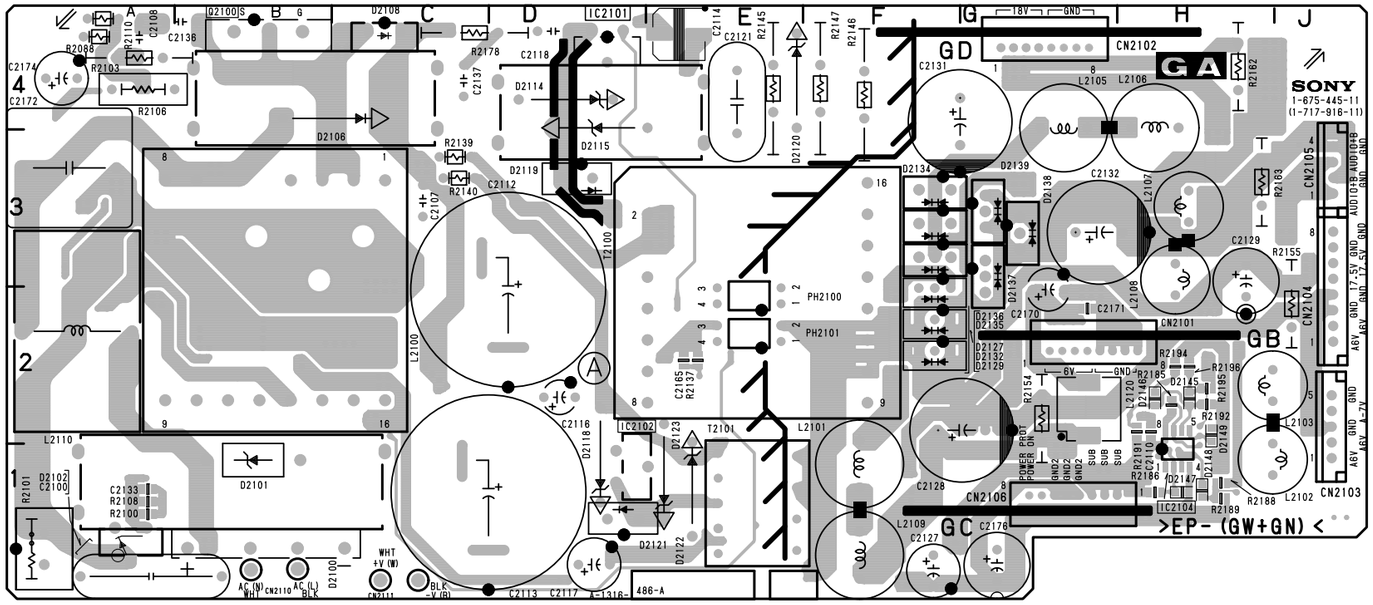
GA – B SIDE –

SUFFIX ; -11



F– A SIDE –

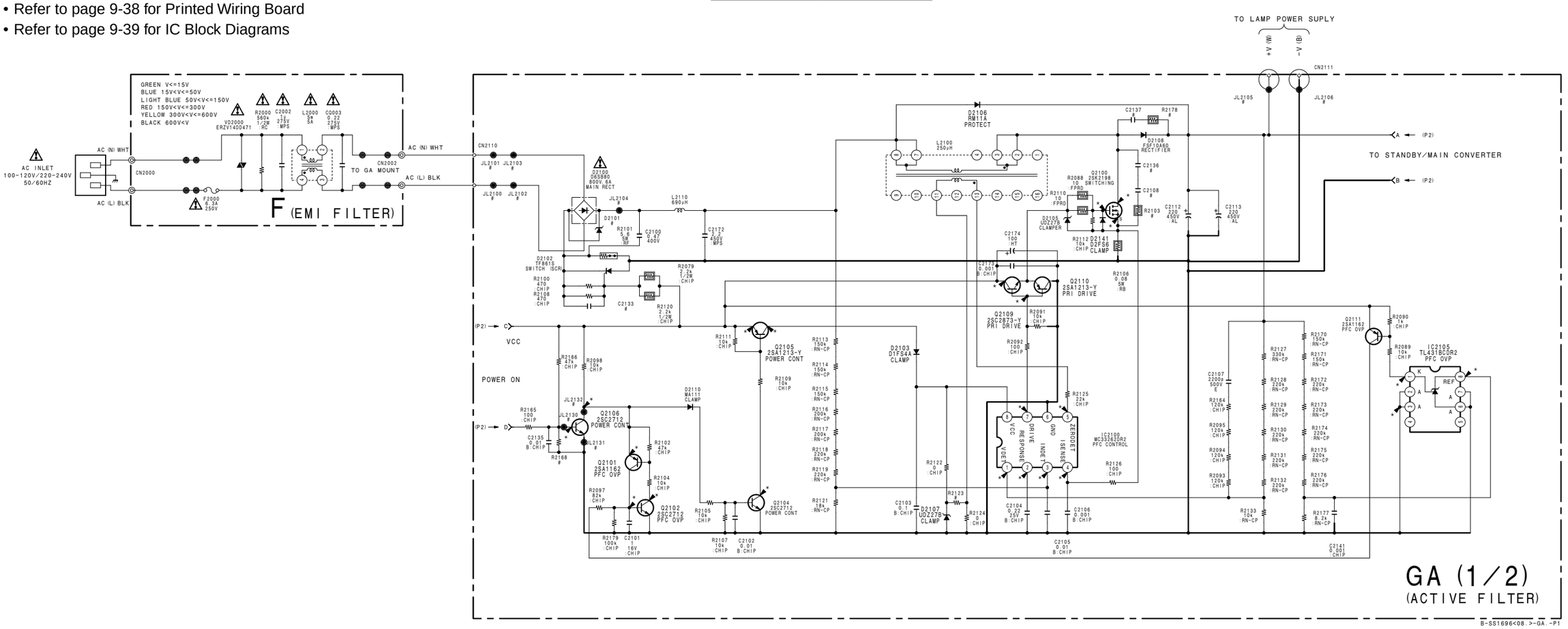
SUFFIX ; -11



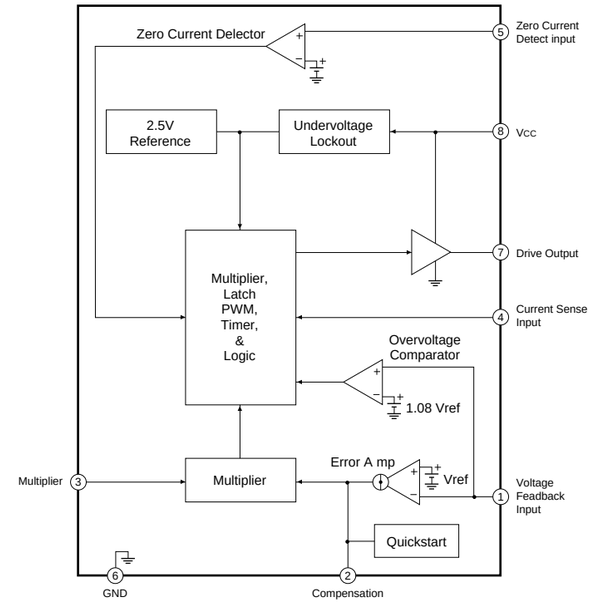
GA– A SIDE –

SUFFIX ; -11

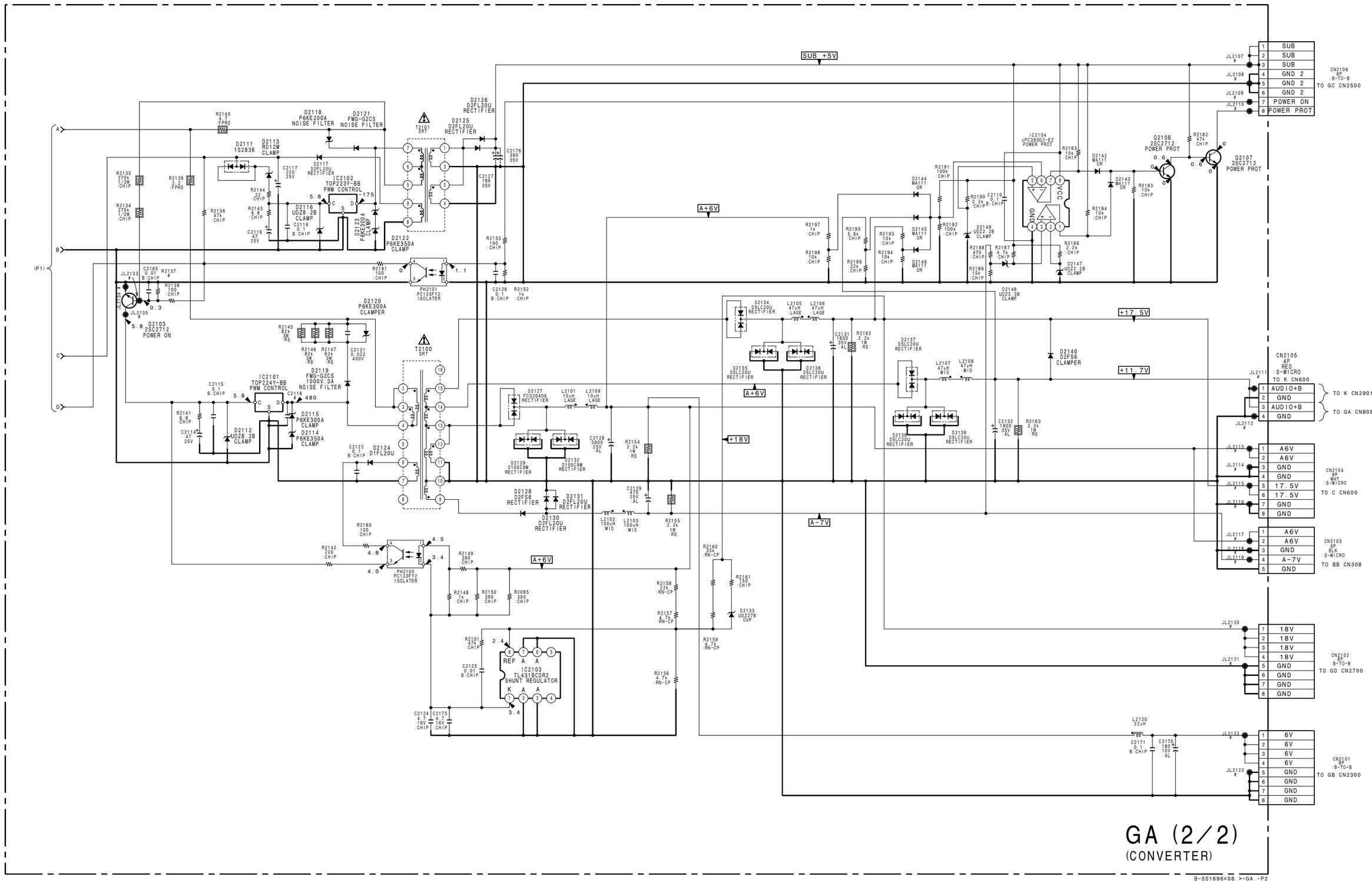
- Refer to page 9-38 for Printed Wiring Board
- Refer to page 9-39 for IC Block Diagrams



MC33262DR2 (IC2100)

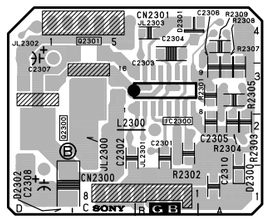


- Refer to page 9-38 for Printed Wiring Board
- Refer to page 9-39 for IC Block Diagrams



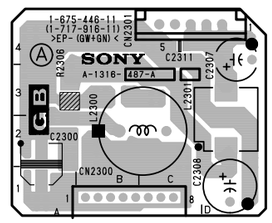
GA (2/2)
(CONVERTER)

B-SS1696<08.>-GA.-P2



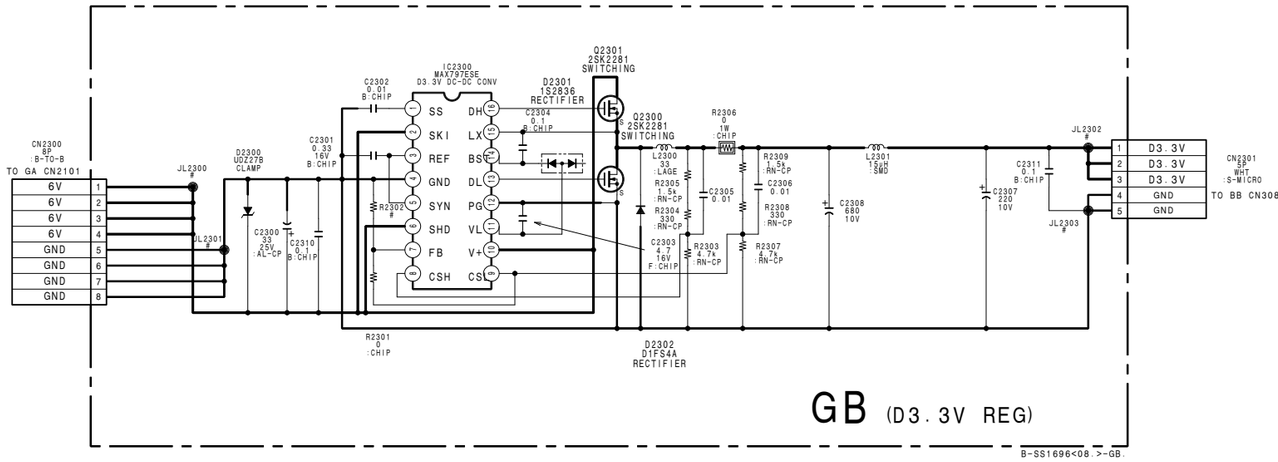
GB – B SIDE –

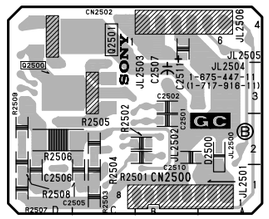
SUFFIX ; -11



GB– A SIDE –

SUFFIX ; -11





GC – B SIDE –

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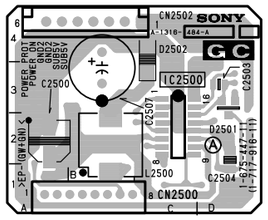

GC– A SIDE –

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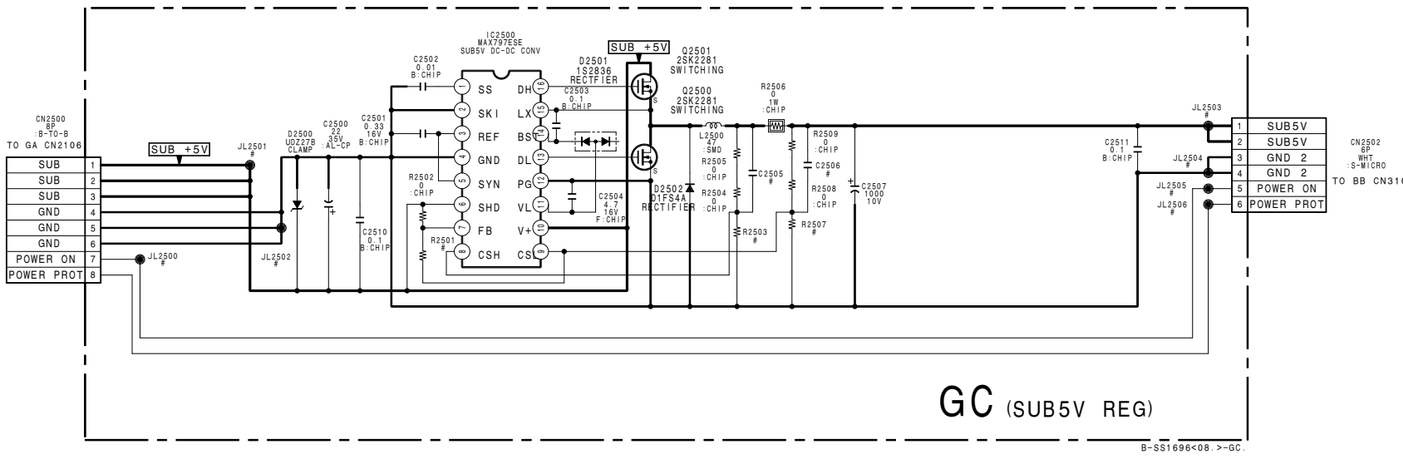

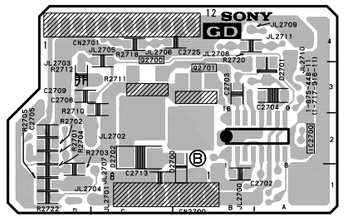

GD – B SIDE –

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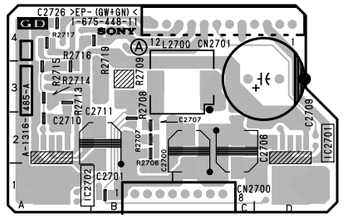
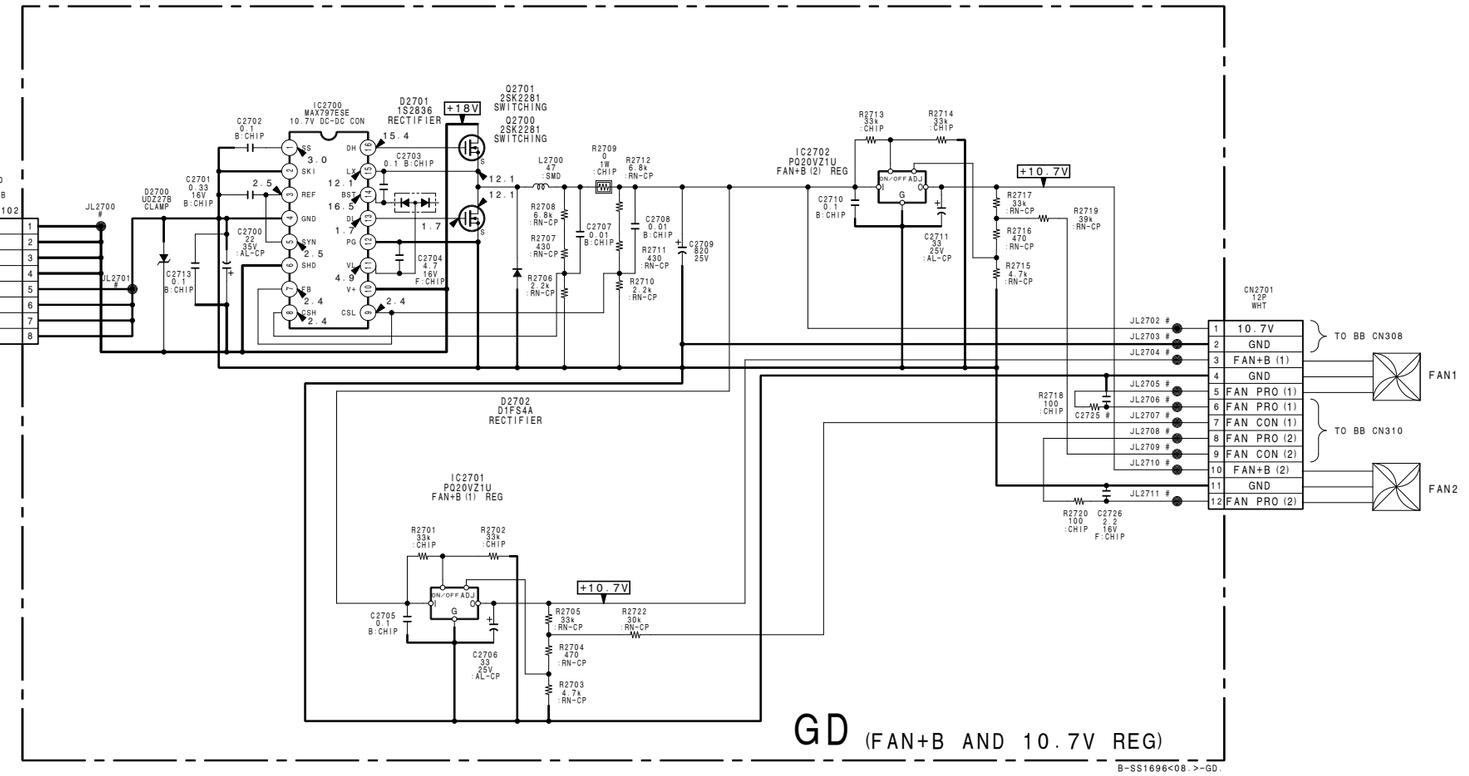


GD– A SIDE –

SUFFIX ; -11



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