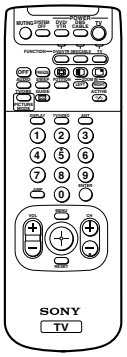
Self Diagnosis Supported model

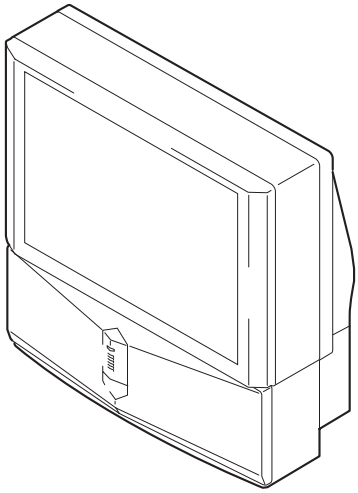
SERVICE MANUAL RA-4B CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.
KP-HR53KR1	RM-Y902K	Korean	SCC-P35A-A
KP-HR61KR1	RM-Y902K	Korean	SCC-P35B-A

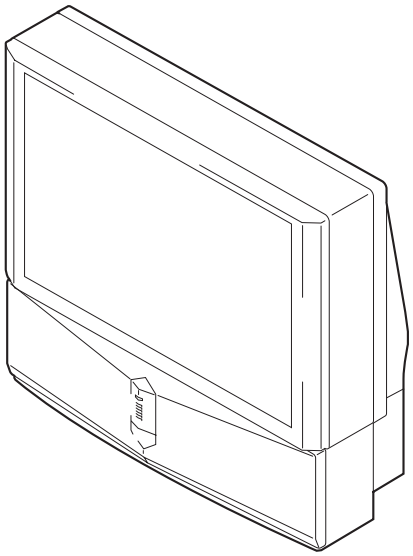
MODEL	COMMANDER	DEST.	CHASSIS NO.



RM-Y902K



KP-HR53KR1



KP-HR61KR1

∗ Please file according to model size. ..... ☐

53 61

PROJECTION TV

SONY®

SPECIFICATIONS

Projection system
3 picture tubes, 3 lenses, horizontal in- line system

Picture tube
7- inch high- brightness monochrome tubes (6.3 raster size), with optical coupling and liquid cooling system

Projection lenses
High performance, large diameter hybrid lens F1.1

Television system
American TV standard

Channel coverage
VHF: 2– 13/ UHF: 14– 69/ CATV: 1– 125

Antenna
75 ohm external terminal for VHF/ UHF

Screen size (measured diagonally)
53 inches (KP- HR53KR1)
61 inches (KP- HR61KR1)

Inputs/ outputs
VIDEO 1/ 3 IN
VIDEO 2 INPUT
S VIDEO IN (4- pin mini DIN):
Y: 1 Vp- p, 75- ohms unbalanced, sync negative
C: 0.286 Vp- p (Burst signal), 75 ohms
VIDEO (phono jack): 1 Vp- p, 75- ohms unbalanced, sync negative
AUDIO (phono jacks): 500 mVrms (100% modulation), Impedance: 47 kilohms

VIDEO 4 IN
S VIDEO IN (4- pin mini DIN):
Y: 1 Vp- p, 75- ohms unbalanced, sync negative
C: 0.286 Vp- p (Burst signal), 75 ohms
VIDEO (phono jack): 1 Vp- p, 75- ohms unbalanced, sync negative
Y: 1 Vp- p, 75 ohms, sync negative
P B : 0. 7 Vp- p, 75 ohms
P R : 0. 7 Vp- p, 75 ohms
AUDIO (phono jacks): 500 mVrms (100% modulation), Impedance: 47 kilohms

VIDEO 5 (DTV) IN
Maximum scanning rate: 1080i
Y: 1 Vp- p, 75 ohms, negative or tri- level sync
P B : 0.7 Vp- p, 75 ohms
P R : 0.7 Vp- p, 75 ohms
or
G: 0.7 Vp- p, 75 ohms
B: 0.7 Vp- p, 75 ohms
R: 0.7 Vp- p, 75 ohms
HD: 0.5– 5 Vp- p, 2.2 kilohms
VD: 0.6– 5 Vp- p, 2.2 kilohms

Note:
The VIDEO 5 (DTV) IN jacks are not compatible with a computer's 5BNC (R/ G/ B/ HD/ VD) video output connectors.
AUDIO (phono jacks): 500 mVrms (100% modulation), Impedance: 47 kilohms

SELECT OUT
VIDEO (phono jack): 1 Vp- p, 75- ohms unbalanced, sync negative
AUDIO (phono jacks): 470 mVrms (100% modulation), Impedance: 47 kilohms

AUDIO (VAR) OUT (phono jacks): 700 mVrms (100% modulation)
AUDIO (FIX) OUT (phono jacks): 500 mVrms (100% modulation)
CONTROL S IN/ OUT: minijacks

Speaker
Front (Tweeter): 66 mm ($2^5/_8$")x2
Front (Woofer):
130 mm ($5^1/_8$")x2 (KP- HR53KR1)
160 mm ($6^1/_8$") x2 (KP- HR61KR1)

Speaker output
Front: 20 Wx2

Power requirement
220 V AC, 60 Hz

Power consumption
In use (Max.): 240 W
In standby: 1 W

Dimensions (W/ H/ D)
1,218x1,459x635 mm (48x$57^1/_2$x25 inches) (KP- HR53KR1)
1,372x1,558x670 mm ($54^1/_8$x$61^3/_8$x$26^1/_2$ inches) (KP- HR61KR1)

Mass
84 kg (185 lbs 3 oz) (KP- HR53KR1)
102 kg (224 lbs 14 oz) (KP- HR61KR1)

Supplied accessories
Remote control RM- Y902K (1)
Batteries size AA (R6) (2)

Design and specifications are subject to change without notice.

SELF DIAGNOSIS FUNCTION

1. Summary of Self-Diagnosis Function

- This device includes a self-diagnosis function.
- In case of abnormalities, the TIMER/STAND BY indicator automatically blinks. It is possible to predict the abnormality location by the number of blinks. The Instruction Manual describes blinking of the TIMER/STAND BY indicator.
- If the symptom is not reproduced sometimes in case of a malfunction, there is recording of whether a malfunction was generated or not. Operate the remote command to confirm the matter on the screen and to predict the location of the abnormality.

2. Diagnosis Items and Prediction of Malfunction Location

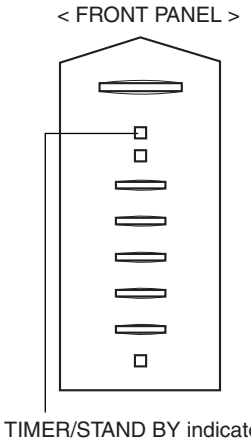
- When a malfunction occurs the TIMER/STAND BY indicator only blinks for one of the following diagnosis items. In case of two or more malfunctions, the item which first occurred blinks. If the malfunctions occurred simultaneously, the item with the lower blink count blinks first.
- The screen display displays the results regarding all the diagnosis items listed below. The display " 0 " means that no malfunctions occurred.

Diagnosis item	TIMER/STANDBY Indicater Number of blinks	Supposed malfunction	Condition	Self-diagnosis screen display, Diagnosis item: Results
• Power not ON	0	[Standby Power Supply System] F6001 open. R6012 open. IC6001 is broken. [Main Power Supply System] F6002 open. IC6002, 6003 and Q6004, 6007, 6008 are broken. VD6001, 6002 short-circuit.	Cannot turn on the power. LED doesn't blink.	
+B OCP detection	2 times	Short circuit of power supply system in each circuit.	Goes to the standby mode Short circuit of +B line	2 : +B OCP 000
+B OVP detection	3 times	IC6005 is broken. IC6101 is broken.	Goes to the standby mode Malfunction of power supply circuit	3 : +B OVP 000
Vertical deflection stop	4 times	IC5004(V out) is broken. IC512 (VDSP) is broken.	Raster goes to one line horizontally.	4 : V Stop 000
Video out abnormality detection	5 times	Video out, IC7101, 7201, 7301 and others in CR.CG and CB boards circuit. Q510,516,524 (A board)	TIMER/STANDBY LED blinks approx. 30 seconds, and then blinks for the self diagnosis.	5 : AKB 000
Horizontal deflection stop	6 times	Q5013 (H OUT) is broken. IC507 (H Jungle) is broken.	Raster doesn't appear.	6 : H Stop 000
High voltage abnormality detection	7 times	Q8008 is broken	Raster doesu't appear.	7 : HV 000
Audio abnormality detection	8 times	IC2601, 2602, 2603 are broken. PS6103, 6104 are broken.	The sound is not out. Goes to the standby mode	8 : Audio 000

* : 000 the range of values for number of operations is 000-255. For 256 or higher there is no count up and the number remains at 255.

3. Blinking count display of TIMER/STAND BY indicator

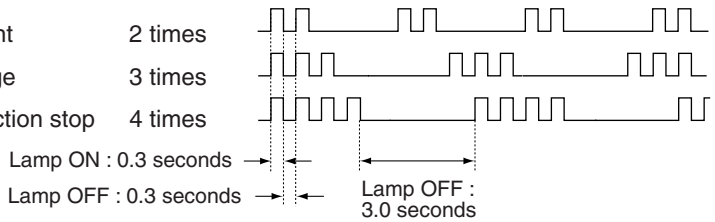
* One blink is not used for self-diagnosis.



•EXAMPLE

<Diagnosis Items> <Number of Blinks>

- +B overcurrent 2 times
- +B overvoltage 3 times
- Vertical deflection stop 4 times



Release of TIMER/STAND BY indicator blinking.

- The TIMER/STAND BY indicator blinking display is released by turning OFF the power switch on the TV main unit or removing the plug from the power.

4. Self-diagnosis screen displays

- In cases of malfunctions where it is not possible to determine the symptom such as when the power goes off occasionally or when the screen disappears occasionally, there is a screen display on whether the malfunction occurred or not in the past (and whether the detection circuit operated or not) in order to allow confirmation.

<Screen Display Method>

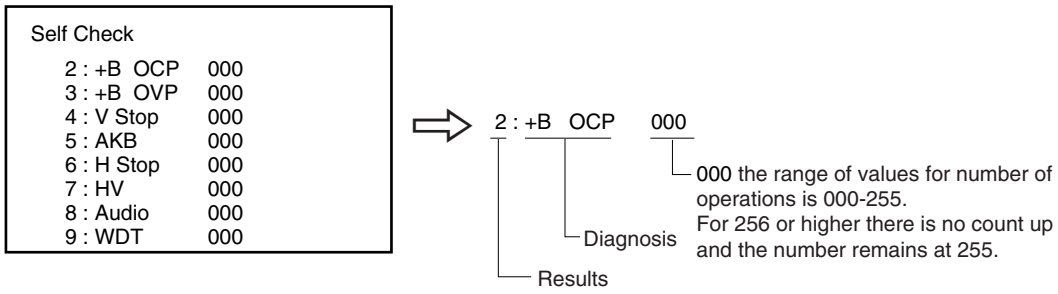
- Quickly press the remote command button in the following order from the standby state.

DISPLAY ➡ Channel 5 ➡ VOL – ➡ POWER

⇧

Be aware that this differs from the method of entering the service mode (volume +).

Self-diagnosis screen display



5. Self-Diagnosis Screen Display

- The results display is not automatically cleared. In case of repairs and after repairs, check the self-diagnosis screen and be sure to return the results display to " 0 ".
- If the results display is not returned to " 0 " it will not be possible to judge a new malfunction after completing repairs.

<Method of Clearing Results Display>

1. Power off (Set to the standby mode)
2. DISPLAY ➡ Channel 5 ➡ VOL + ➡ POWER (Service Mode)
3. Channel 8 ➡ ENTER (Test reset = Factory preset condition)

<Method of Ending Self Diagnosis Screen>

- When ending the self-diagnosis screen completely, turn the power switch OFF on the remote commander or the main unit.

6. Self-diagnosis function operation

OCP Low B and +B line detect DET SHORT, and shut-down POWER ON RELAY.
Reset by turning power on/off.
In case of +B is loaded approx. 1.5A or more, microcomputer detects it via IC6102.

OVP In case of +B becomes approx. 150V or more, POWER ON RELAY shuts down and microcomputer detects it via IC6102.
Reset by turning power on/off just the same as OCP.

V Stop In case of V Drive disappeared, Q5005 detecs it and shut-down POWER ON RELAY. Microcomputer detects it and makes LED blinking.

AKB IK detection. Makes LED blinking in case of microcomputer doesn't detect IK returns of IC511 (CXA2101AQ) 30 seconds or more.

H Stop In case of H DRIVE is disappeared, Q5006 detects it and shut-down POWER ON RELAY shuts down.
Microcomputer receives H Stop data from Q5006 and makes LED blinking.

HV Stop In case of HV becomes 33KV or more. IC8006 and IC8010 detect it and shut-down POWER ON RELAY. Microcomputer makes LED blinking.

Audio In case of DC component overlaps the output of Audio Amp., POWER ON RELAY shuts down.
Microcomputer detects it and makes LED blinking.

Self-diagnosis block diagram

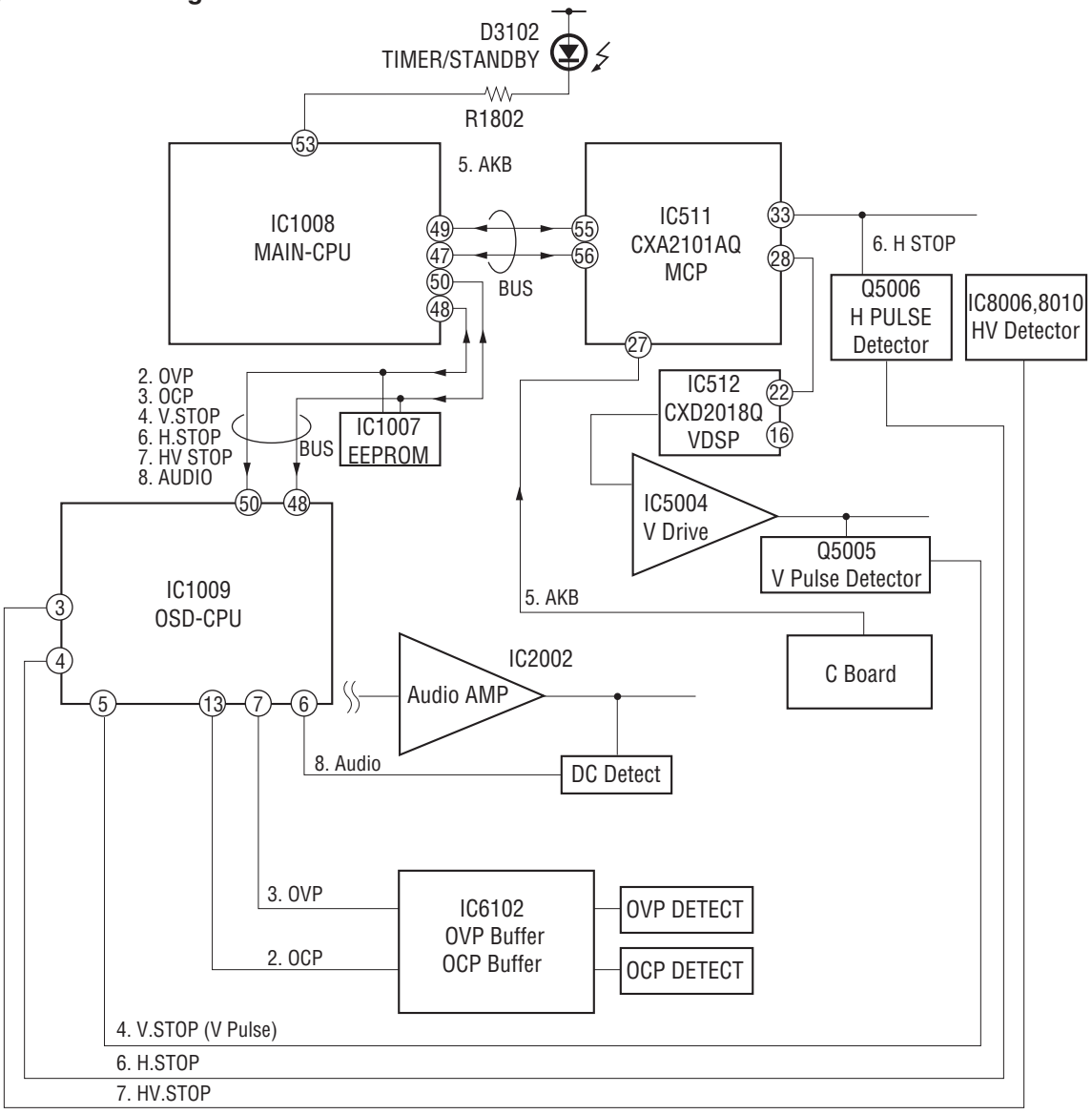


TABLE OF CONTENTS

(CAUTION)

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

WARNING!!

AN ISOLATION 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 SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESECOMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFEOPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

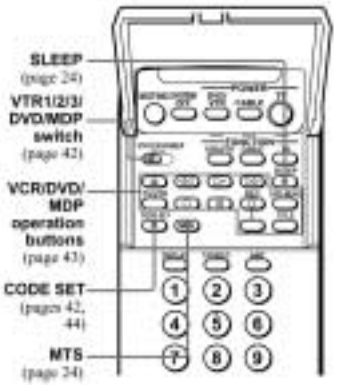
SECTION 1
GENERAL

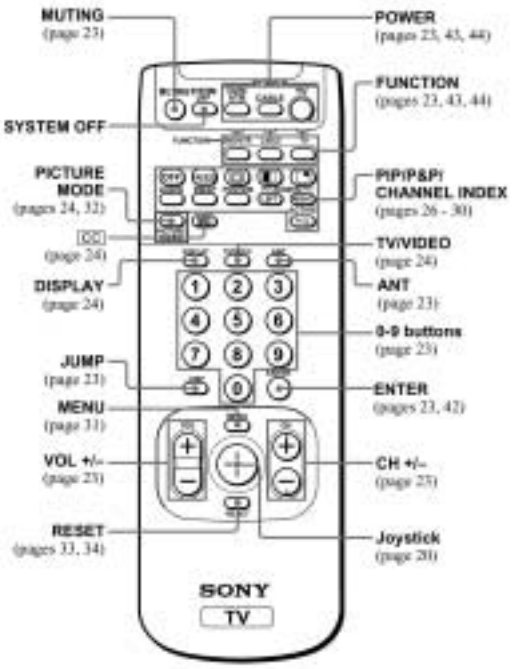
The operating instructions mentioned here are partial abstracts from the Operating Instructions Manual. The page numbers of the Operating Instruction Manual remain as in the manual. (Part no : 4-074-163-11)

Remote Control

In the instructions that follow, we will refer to the buttons on your remote control. Keep this flap unfolded and use this page for reference.

For a detailed explanation of most buttons, see "Watching the TV" on page 23.





Getting to know the buttons on the remote control

Names of the buttons on the remote control are presented in different colors to represent the available functions.

Button color

Transparent: Press to select the component you want to control; e.g. VTR (VCR)/MDP/DVD Player, CABLE, or projection TV.

Green: Buttons relevant to power operations, like turning the projection TV, CABLE, or VTR (VCR)/MDP/DVD Player on or off.

Label color

White: TV/VTR (VCR)/MDP/DVD Player/CABLE operation buttons

Yellow: PIP, P&P, and CHANNEL INDEX operation buttons

Pink: DVD Player operation buttons

Additional Information

Before You Begin

Welcome!

Thank you for purchasing the Sony Projection TV. This manual is for models KP-HR53KR1 and KP-HR61KR1.

Model KP-HR53KR1 is used for illustration purposes.

The features you will enjoy include:

- "1080i Capable," enabling you to receive the 1080i, 480p and 480i digital TV formats (except for 720p format). By using the VIDEO 5 (DTV) IN jacks, you can connect a DTV (digital television) receiver to view DTV programs.
  The VIDEO 5 (DTV) IN jacks also function as R/G/B connectors with SYNC signal (HD/VD), but are not compatible with a computer's 5BNC video output connectors.
- DRC (Digital Reality Creation), a technology unique to Sony, allowing you to obtain a finer, more detailed picture with four-times higher density than the conventional NTSC picture. (not available for input from the VIDEO 5 (DTV) IN jacks)
- MID (Multi Image Driver), a newly developed device, allowing you to enjoy the following features and, at the same time, to use your projection TV easily. (not available for input from the VIDEO 5 (DTV) IN jacks)
  — Picture & Picture (P&P) with zoom-in function (Twin View™)
  — Picture-in-Picture (PIP)
  — CHANNEL INDEX, allowing you to view and choose from twelve programs
  — FAVORITE CHANNEL, allowing you to view and choose from eight of your favorite channels
- FLASH FOCUS, allowing you to adjust convergence automatically.
- Two Y/Pb/Pr inputs for DVD Player connection (480p format capability is on the VIDEO 5 (DTV) IN jacks).
- Four AUDIO/VIDEO/S VIDEO inputs.

Using this Manual

We recommend that you carefully review the contents of the following four sections in the order provided to ensure that you fully understand the operation of your new projection TV.

1 **Installing and Connecting the Projection TV**
This section guides you through your initial set up. It shows you how to install your projection TV, to connect your new components and to connect to the antenna and cable.

2 **Basic Setup**
This section teaches you the basic skills needed to operate your new projection TV, including Easy Set Up. It shows you how to operate the remote control's special functions.

3 **Using Your New Projection TV**
This section shows you how to begin using your new projection TV. It shows you how to use your remote control's features.

4 **Adjusting Your Set Up (menus)**
This section teaches you how to access on-screen menus and adjust your projection TV's settings.

Instructions in this manual are written for the remote control. Similar controls may be found on the projection TV console.

Precautions

Safety

- Operate the projection TV only on 220 V AC.
- The plug is designed, for safety purposes, to fit into the wall outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- If any liquid or solid object should fall inside the cabinet, unplug the projection TV immediately and have it checked by qualified service personnel before operating it further.
- If you will not be using the projection TV for several days, disconnect the power by pulling the plug itself. Never pull on the cord.

For details concerning safety precautions, see "Important Safeguards" on page 3.

Note on cleaning

Clean the cabinet of the projection TV with a dry soft cloth. To remove dust from the screen, wipe it gently with a soft cloth. Stubborn stains may be removed with a cloth slightly dampened with solution of mild soap and warm water. Never use strong solvents such as thinner or benzine for cleaning.

If the picture becomes dark after using the projection TV for a long period of time, it may be necessary to clean the inside of the projection TV. Consult qualified service personnel.

Installing

- To prevent internal heat buildup, do not block the ventilation openings.
- Do not install the projection TV in a hot or humid place, or in a place subject to excessive dust or mechanical vibration.
- Avoid operating the projection TV at temperature below 5°C (41°F).
- If the projection TV is transported directly from a cold to a warm location, or if the room temperature changes suddenly, the picture may be blurred or show poor color. In this case, please wait a few hours to let the moisture evaporate before turning on the projection TV.
- To obtain the best picture, do not expose the screen to direct illumination or direct sunlight. It is recommended to use spot lighting directed down from the ceiling or to cover the windows that face the screen with opaque drapery. It is desirable to install the projection TV in a room where the floor and walls are not of a reflective material.

Important Safeguards

For your protection, please read these instructions completely, and keep this manual for future reference.

Carefully observe and comply with all warnings, cautions and instructions placed on the set, or described in the operating instructions or service manual.

WARNING

To guard against injury, the following basic safety precautions should be observed in the installation, use, and servicing of the set.

Use

Power Sources
This set should be operated only from the type of power source indicated on the serial/model plate.
If you are not sure of the type of electrical power supplied to your home, consult your dealer or local power company. For those sets designed to operate from battery power, refer to the operating instructions.

Grounding or Polarization
This set is equipped with a polarized AC power cord plug (a plug having one blade wider than the other), or with a three-wire grounding type plug (a plug having a third pin for grounding).
Follow the instructions below:

Overloading
Do not overload wall outlets, extension cords or convenience receptacles beyond their capacity, since this can result in fire or electric shock.

Always turn the set off when it is not to be used. When the set is left unattended and unused for long periods of time, unplug it from the wall outlet as a precaution against the possibility of an internal malfunction that could create a fire hazard.

Object and Liquid Entry
Never push objects of any kind into the set through the cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the set.

Attachments
Do not use attachments not recommended by the manufacturer, as they may cause hazards.

Cleaning
Unplug the set from the wall outlet before cleaning or polishing it. Do not use liquid cleaners or aerosol cleaners. Use a cloth lightly dampened with water for cleaning the exterior of the set.

If a snapping or popping sound from a projection TV set is continuous or frequent while the projection TV is operating, unplug the projection TV and consult your dealer or service technician. It is normal for some projection TV sets to make occasional snapping or popping sounds, particularly when being turned on or off.

(continued)

Installation

Water and Moisture

Do not use power-line operated sets near water—for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement or near a swimming pool, etc.

Accessories

Do not place the set on an unstable cart, stand, table or shelf. The set may fall, causing serious injury to a child or an adult, and serious damage to the set. Use only a cart or stand recommended by the manufacturer for the specific model of projection TV.

An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

Ventilation

The slots and openings in the cabinet and in the back or bottom are provided for necessary ventilation. To ensure reliable operation of the set, and to protect it from overheating, these slots and openings must never be blocked or covered.

- Never cover the slots and openings with a cloth or other materials.

- Never block the slots and openings by placing the set on a bed, sofa, rug or other similar surface.

- Never place the set in a confined space, such as a bookcase, or built-in cabinet unless proper ventilation is provided.

- Do not place the set near or over a radiator or heat register, or where it is exposed to direct sunlight.

Power-Cord Protection

Do not allow anything to rest on or roll over the power cord, and do not place the set where the power cord is subject to wear or abuse.

Antennas

Outdoor Antenna Grounding — If an outdoor antenna is installed, follow the precautions below.

An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come in contact with such power lines or circuits.

WHEN INSTALLING AN OUTDOOR ANTENNA SYSTEM, EXTREME CARE SHOULD BE TAKEN TO KEEP FROM CONTACTING SUCH POWER LINES OR CIRCUITS AS CONTACT WITH THEM IS ALMOST INVARIABLY FATAL.

Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges.

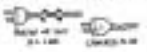
Lightning

For added protection for this television receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage to the receiver due to lightning and power-line surges.

Service

Damage Requiring Service

Unplug the set from the wall outlet and refer servicing to qualified service personnel under the following conditions:



- When the power cord or plug is damaged or frayed.

- If liquid has been spilled into the set.

- If the set has been exposed to rain or water.

- If the set has been subject to excessive shock by being dropped, or the cabinet has been damaged.

- If the set does not operate normally when following the operating instructions. Adjust only those controls that are specified in the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the set to normal operation.

- When the set exhibits a distinct change in performance—this indicates a need for service.

Servicing

Do not attempt to service the set yourself since opening the cabinet may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Replacement Parts

When replacement parts are required, be sure the service technician certifies in writing that he has used replacement parts specified by the manufacturer that have the same characteristics as the original parts.

Unauthorized substitutions may result in fire, electric shock, or other hazards.

Safety Check

Upon completion of any service or repairs to the set, ask the service technician to perform routine safety checks (as specified by the manufacturer) to determine that the set is in safe operating condition, and to so certify.

When the set reaches the end of its useful life, improper disposal could result in a picture tube implosion. Ask a qualified service technician to dispose of the set.

Installing and Connecting the Projection TV

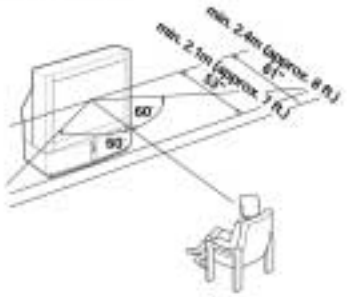
Carrying Your Projection TV

Carrying the projection TV requires three or more people.

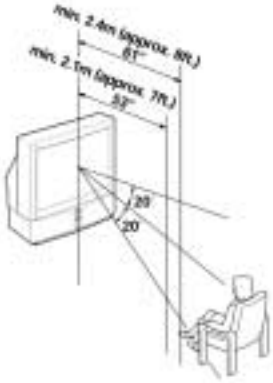
The projection TV has been equipped with casters for easy movement on a hard surface. Please move your projection TV using the casters.

Installing the Projection TV

Recommended viewing area (Horizontal)



Recommended viewing area (Vertical)



Connector Types

You may find it necessary to use some of the following connector types during set up.

Coaxial cable

Standard TV cable and antenna cable

S Video cable

High quality video cable for enhanced picture quality

Audio/Video cable

Video - Yellow
Audio (Left) - White
Audio (Right) - Red

Some DVD Players are equipped with the following three video connectors.

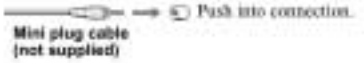
Y - Green
P_B (C_B, C_b or B–Y) - Blue
P_R (C_R, C_r or R–Y) - Red

Composite video cable for a DTV receiver

G/Y - Green
B/P_B - Blue
R/P_R - Red
(HD - Gray)
(VD - Black)

CONTROL S cable

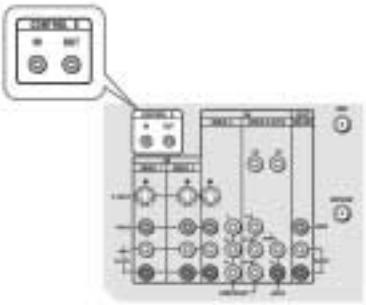
Sony cable for CONTROL S connections. These features are exclusive to Sony products and allow greater control of all Sony equipment.



About the CONTROL S IN/OUT jacks

To control other Sony equipment with the projection TV's remote control, connect the CONTROL S IN jack of the equipment to the CONTROL S OUT jack on the projection TV with the CONTROL S cable.

To control the projection TV with a remote control for another Sony product, connect the CONTROL S OUT jack of the equipment to the CONTROL S IN jack on the projection TV with the CONTROL S cable.



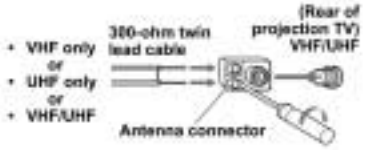
Making Connections

Connecting Directly to a Cable or an Antenna

The connection you choose will depend on the cable found in your home. Newer homes will be equipped with standard coaxial cable (see **A**); older homes will probably have 300-ohm twin lead cable (see **B**); still other homes may contain both (see **C**).

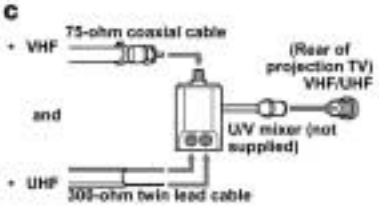
A

B



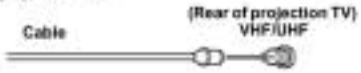
(continued)

C



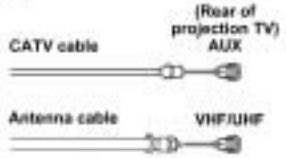
Cable or antenna

This is the simplest connection. Connection is made directly from the cable or antenna to the projection TV.



Cable and antenna

You may find it convenient to use the following set up if your cable provider does not feature local channels that you are able to receive using an antenna.

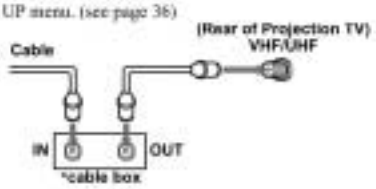


Select Cable or ANT mode by pressing ANT on the remote control.

Connecting a Cable Box

Some pay cable TV systems use scrambled or encoded signals that require a cable box* to view all channels.

Also, set CABLE to ON in the CHANNEL SET UP menu. (see page 36)

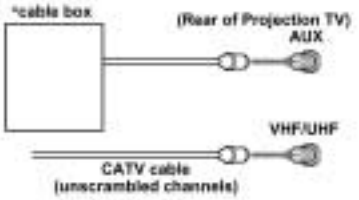


Note:

- If you will be controlling all channel selection through your cable box, you should consider using the CHANNEL FIX feature. (see "CHANNEL FIX" on page 37)

Cable box and cable

Some pay cable TV systems use scrambled or encoded signals requiring a cable box* only for certain channels.



For this set up, you can switch between scrambled channels (through your cable box), and normal (CATV) channels by pressing ANT on your remote control.

Notes:

- You may be able to program your Sony remote control to operate your cable box. (see "Operating a Cable Box" on page 44)
- During PIP, P&P, CHANNEL INDEX or FAVORITE CHANNEL viewing, the AUX input can only be viewed in the main picture.
- If you are connecting a cable box through the AUX input and would like to switch between the AUX and normal (CATV) input, you should consider using CHANNEL FIX. (see "CHANNEL FIX" on page 37)

Connecting an Antenna/Cable TV System to a VCR

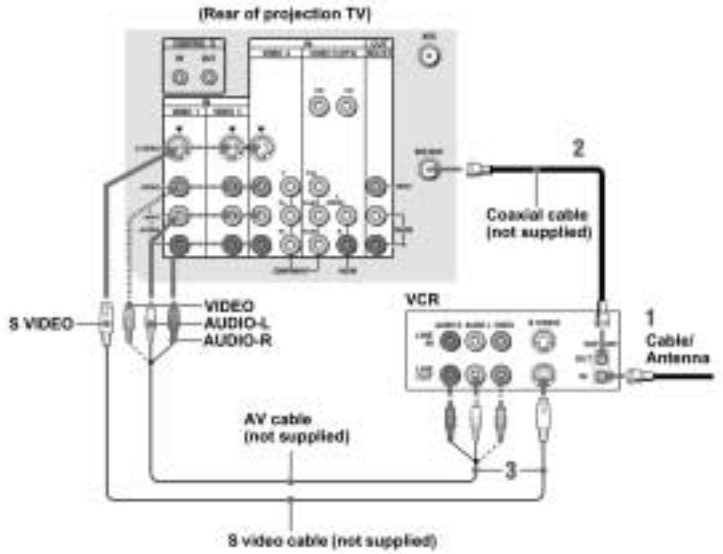
1. Attach the coaxial cable from the incoming cable connection or antenna to IN on the VCR.
2. Using a coaxial cable, connect OUT on the VCR to VHF/UHF on the projection TV.
3. Using AUDIO and S VIDEO* cables, connect AUDIO and S VIDEO OUT on the VCR to AUDIO and S VIDEO IN on the projection TV (White-AUDIO Left, Red-AUDIO Right).

* If your VCR is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.

Note:

- If you are connecting a monaural VCR, connect only the single audio output to the left (MONO) input on the projection TV.

Disconnect all power sources before making any connections.



Connecting a VCR and Projection TV to a Cable Box

1 Connect the single (input) jack of the splitter to the incoming cable connection, and connect the other two (output) jacks (using the coaxial cable) to IN on the cable box and VHF/UHF on the projection TV.

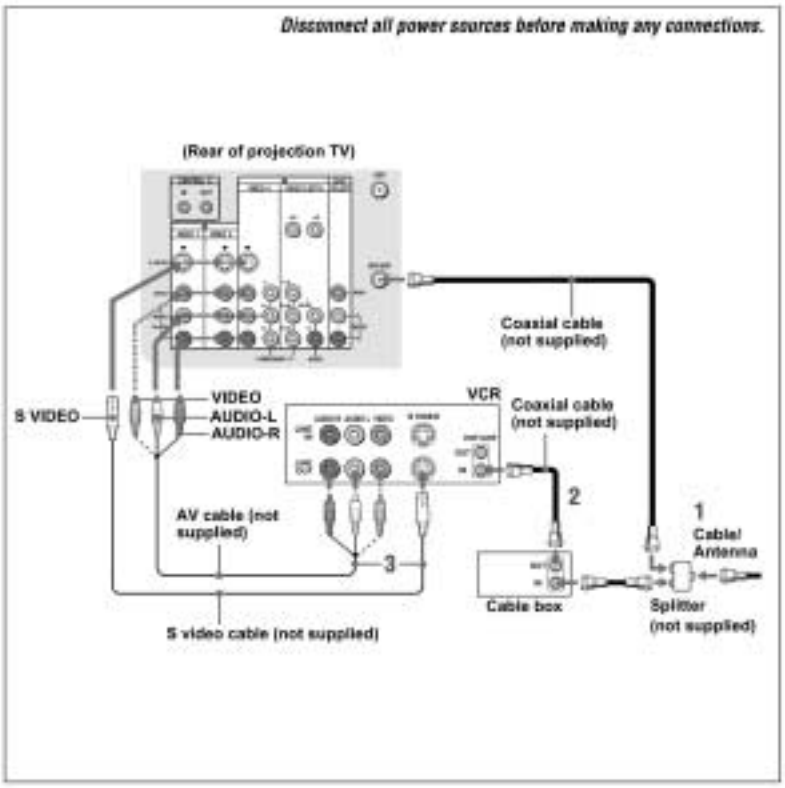
2 Using a coaxial cable, connect OUT on the cable box to IN on the VCR.

3 Using AUDIO and S VIDEO* cables, connect AUDIO and S VIDEO OUT on the VCR to AUDIO and S VIDEO IN on the projection TV (White-AUDIO Left, Red-AUDIO Right).

* If your VCR is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.

Note:

- To view scrambled channels through the cable box, select the video input which the cable box is connected to by pressing TV/VIDEO.



Connecting a DTV (Digital Television) Receiver

Before connecting, be sure to read the Operating Instructions of the DTV receiver.

Connecting a DTV (digital television) receiver with the G/B/R/ HD/VD jacks

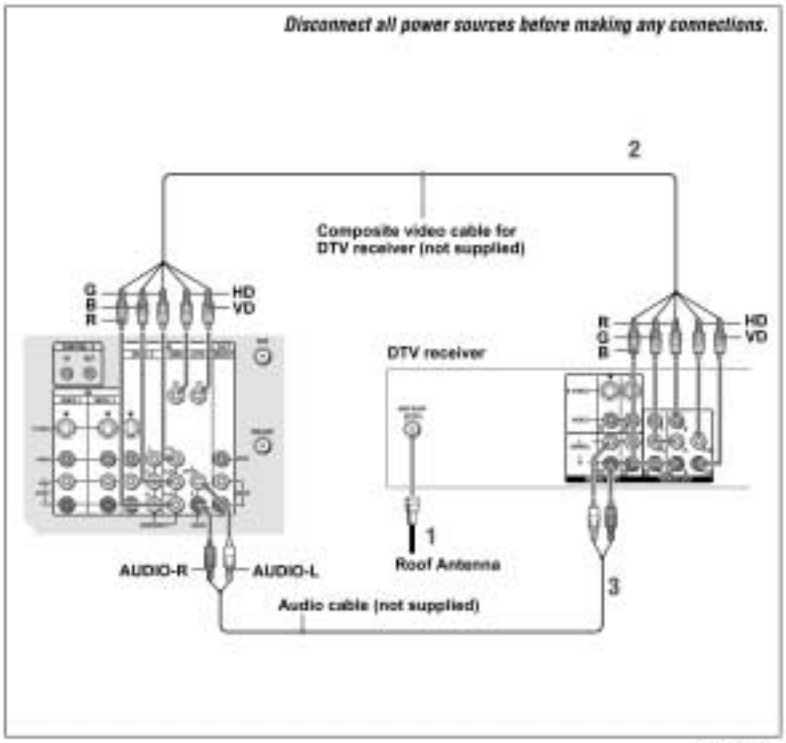
1 Attach the coaxial cable from the roof antenna to VHF/UHF on the DTV receiver.

2 Using a composite video cable for DTV receiver, connect G, B, R, HD and VD of VIDEO OUT on the DTV receiver to G, B, R, HD and VD respectively of VIDEO 5 (DTV) IN on the projection TV.
If the DTV receiver is equipped with the Y/Pb/Pb jacks, proceed to step 2 in "Connecting a DTV (digital television) receiver with the Y/Pb/Pr (component video input) jacks" on page 12.

3 Using an AUDIO cable, connect AUDIO OUT on the DTV receiver to AUDIO of VIDEO 5 (DTV) IN on the projection TV (White-AUDIO Left, Red-AUDIO Right).

4 Select VIDEO 5 by the TV/VIDEO button.

5 Select the SET UP menu and set DTV INPUT to R.G.B. (see "DTV INPUT" on page 41)



(continued)

Connecting a DTV (digital television) receiver with the Y/Pb/Pr (component video input) jacks

1 Attach the coaxial cable from the roof antenna to VHF/UHF on the DTV receiver.

2 Using three VIDEO cables, connect Y, Pb and Pr of COMPONENT VIDEO OUT on the DTV receiver to Y, Pb and Pr of VIDEO 5 (DTV) IN on the projection TV.

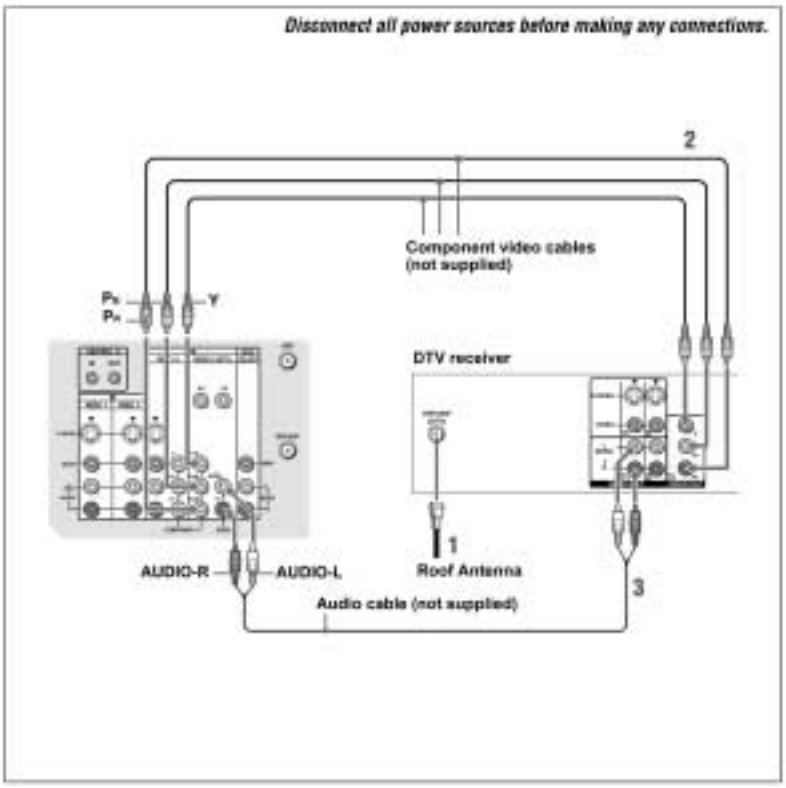
3 Using an AUDIO cable, connect LINE OUT on the DTV receiver to AUDIO of VIDEO 5 (DTV) IN on the projection TV (White-AUDIO Left, Red-AUDIO Right).

4 Select VIDEO 5 by the TV/VIDEO button.

5 Select the SET UP menu and set DTV INPUT to Y PB PR. (see "DTV INPUT" on page 41)

Note:

- Some DTV receiver terminals may be labeled differently. If so, connect as follows:
  Connect Y (green) to Y.
  Connect Pb (blue) to Cb, Cb or B-Y.
  Connect Pr (red) to Cr, Cr or R-Y.



Connecting a Camcorder

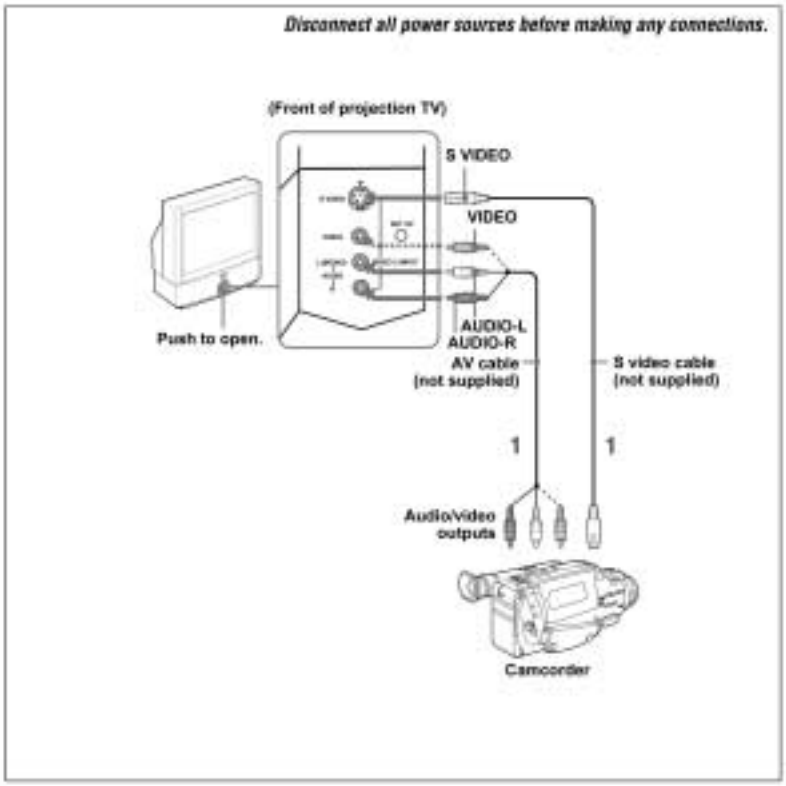
Use this connection to view a picture directly from your camcorder.

1 Using AUDIO and S VIDEO* cables, connect AUDIO and S VIDEO OUT on the camcorder to AUDIO and S VIDEO IN inside the lower front panel on the projection TV (White-AUDIO Left, Red-AUDIO Right**).

2 Press VIDEO 2 to select the video inputs from a camcorder.

* If your camcorder is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.

** If you are connecting a monaural camcorder, connect only the single audio output to the left (MONO) input on the projection TV.



Connecting Two VCRs for Tape Editing

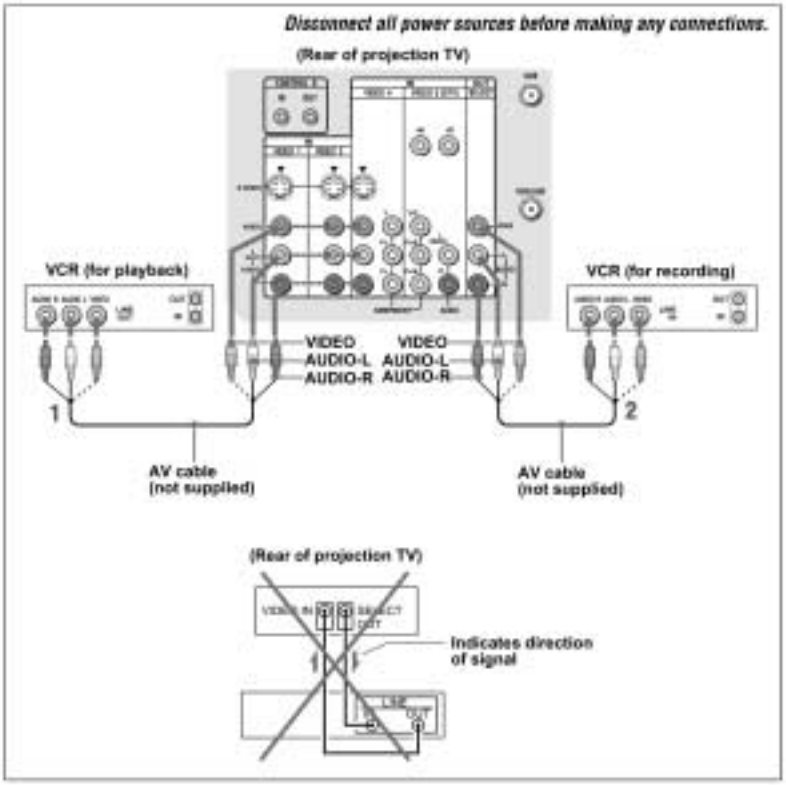
SELECT OUT gives you the ability to use a second VCR to record a program being played by the primary VCR or to perform tape editing and dubbing.

1 Connect the VCR intended for playback using the connection instructions on page 9 of this manual.

2 Using an AUDIO/VIDEO cable, connect AUDIO and VIDEO IN on the VCR intended for recording to AUDIO and VIDEO OUT of SELECT OUT on the projection TV.

Notes:

- Do not change the input signal while editing through SELECT OUT.
- When connecting a single VCR to the projection TV: if VCR LINE OUT is connected to VIDEO IN on the projection TV, do not connect the SELECT OUT on the projection TV to the VCR LINE INPUT (see right). Doing so will cause program interference and other viewing problems.
- You can select the output signal from SELECT OUT from the SET UP menu. (see "SELECT OUT" on page 40)

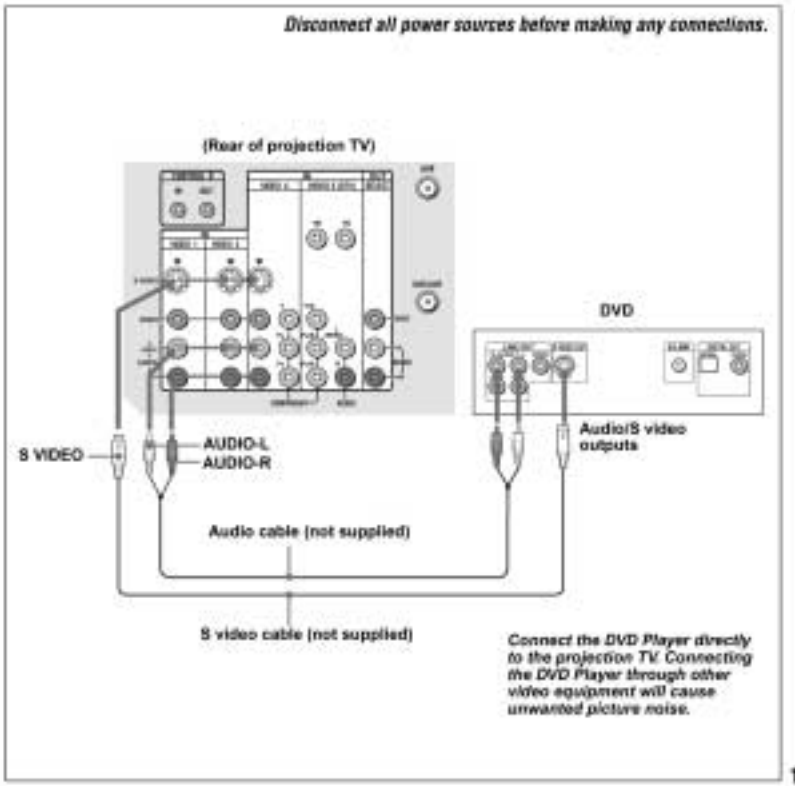


Connecting a DVD Player With S Video or Composite Video Output Connectors

Using an AUDIO and S VIDEO cables, connect AUDIO and S VIDEO IN on the projection TV to AUDIO and S VIDEO OUT on the DVD Player (White-AUDIO Left, Red-AUDIO Right).

Note:

- Since the high quality pictures on a DVD disc contain a lot of information, picture noise may appear. In this case, adjust NR in the VIDEO menu. (see "NR" on page 33)



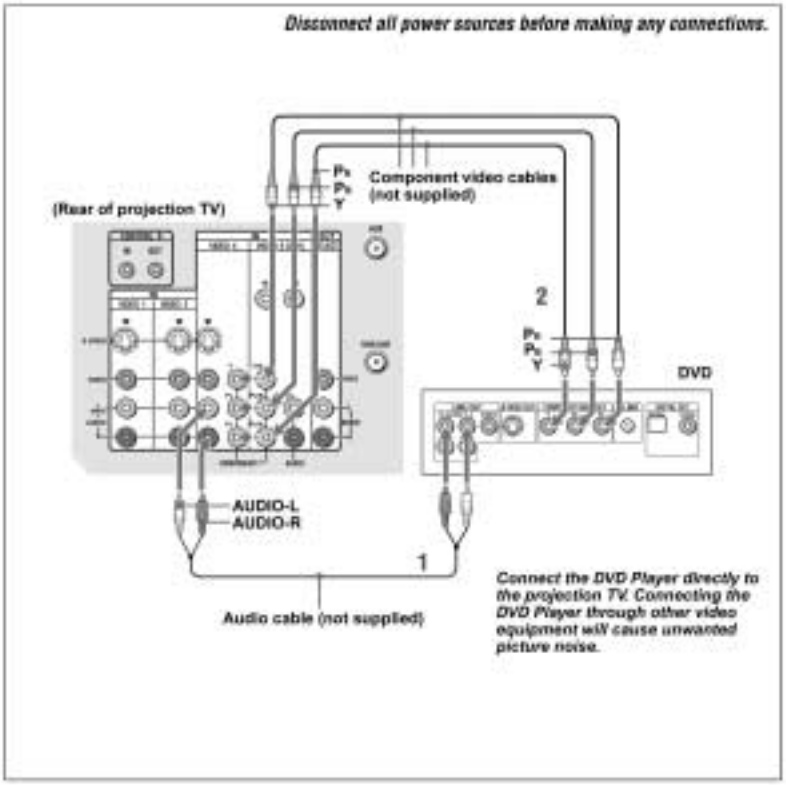
Connecting a DVD Player With Component Video Output Connectors

1 Using an AUDIO cable, connect AUDIO R and L of LINE OUT on the DVD Player to AUDIO R and L of VIDEO 4 IN or VIDEO 5 (DTV) IN on the projection TV (White-AUDIO Left, Red-AUDIO Right).

2 Using three VIDEO cables, connect Y, Pb and Pr of the COMPONENT VIDEO OUT on the DVD Player to Y, Pb and Pr of VIDEO 4 IN or VIDEO 5 (DTV) IN on the projection TV.

Notes:

- If your DVD Player has 480p format capability, connect it to the Y, Pb and Pr of VIDEO 5 (DTV) IN on the projection TV.
- Some DVD Player terminals may be labeled differently. If so, connect as follows:
  Connect Y (green) to Y.
  Connect Pb (blue) to C_B, C_b or B-Y.
  Connect Pr (red) to C_R, C_r or R-Y.
- Since the high quality pictures on a DVD disc contain a lot of information, picture noise may appear. In this case, adjust NR in the VIDEO menu. (see "NR" on page 33)



Connecting an AV Receiver

For greater control of all audio and video equipment, connect an AV receiver.

1-2 Perform as described on page 9.

3 Using a VIDEO cable, connect VIDEO of VIDEO 1 IN on the projection TV to MONITOR OUT on the AV receiver.

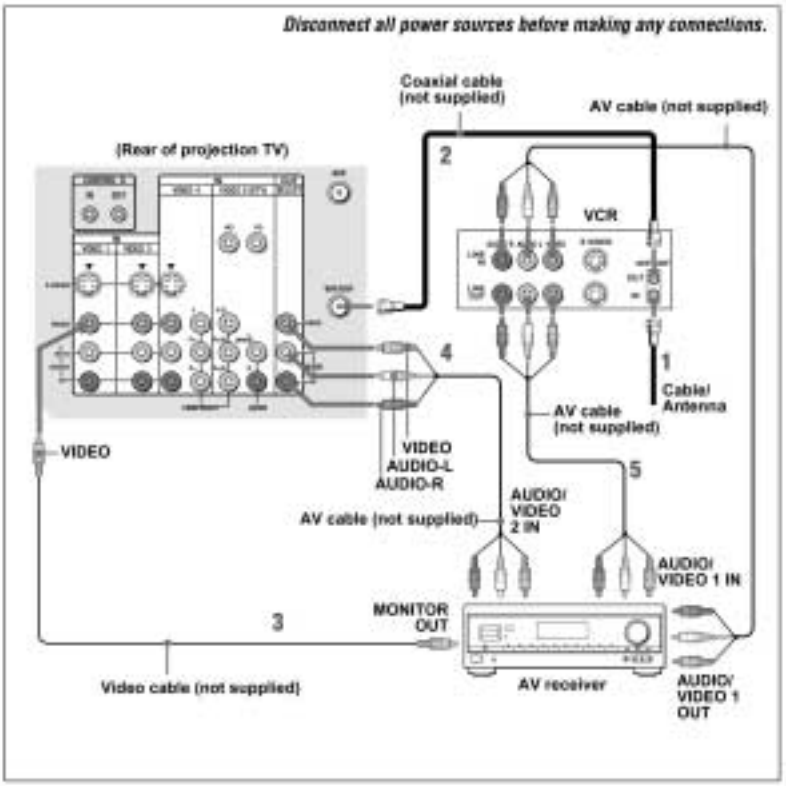
4 Using an AUDIO/VIDEO cable, connect SELECT OUT on the projection TV to AUDIO/VIDEO 2 IN on the AV receiver.

5 Using an AUDIO/VIDEO cable, connect the video equipment to the AV receiver.

6 Select the SET UP menu and set SELECT OUT to TV OUT. (see "SELECT OUT" on page 40)

Note:

- You may want to use CHANNEL FIX to fix your projection TV's input to the AV receiver (VIDEO 1). (see "CHANNEL FIX" on page 37)



Connecting an Audio System

For more dynamic sound, connect an audio system to the projection TV.

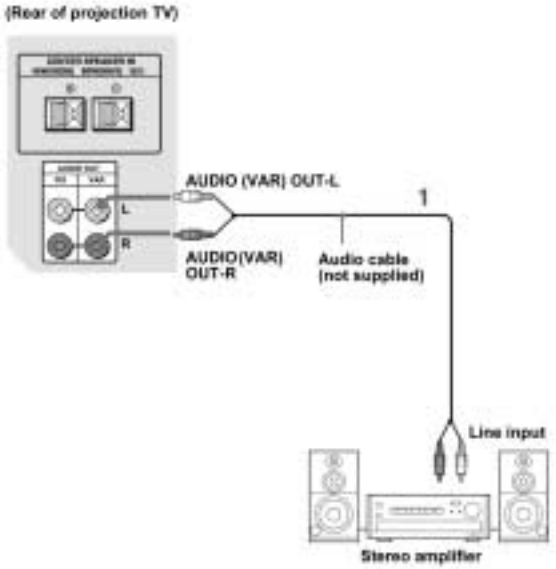
1 Using an AUDIO cable, connect AUDIO (VAR) OUT on the projection TV to one of the unused Line inputs (e.g. Tape-2, AUX1, etc.) on the stereo (White-AUDIO Left, Red-AUDIO Right).

2 Set the stereo to the chosen Line input and use the AUDIO menu to switch the projection TV's speakers off. (see "SPEAKER" on page 34)

Note:

- You can adjust VOLUME, BASS, TREBLE and BALANCE through the projection TV on AUDIO (VAR) OUT only.

Disconnect all power sources before making any connections.



Connecting an Amplifier That Supports Dolby Pro Logic Decoder

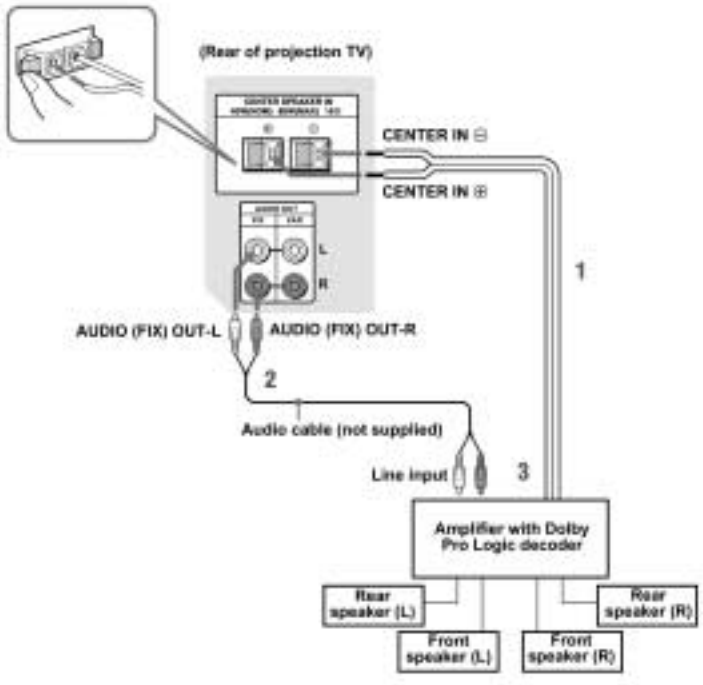
If you use an amplifier with a Dolby Pro Logic decoder instead of the projection TV's audio system, you can still use the projection TV's speaker as a center speaker.

1 Using the speaker cords (supplied with the amplifier), connect the speaker terminals on the amplifier to CENTER SPEAKER IN +/– on the projection TV.

2 Using an AUDIO cable, connect AUDIO (FIX) OUT on the projection TV to one of the unused Line inputs (e.g. Tape-2, AUX1, etc.) on the amplifier (White-AUDIO Left, red-AUDIO Right).

3 Set the amplifier to the chosen Line input and use the AUDIO menu to set "SPEAKER" to "CENTER IN" on the projection TV. (see "SPEAKER" on page 34)

Disconnect all power sources before making any connections.



Using the Remote Control

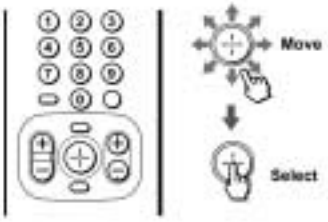
Inserting the batteries

Insert two size AA (R6) batteries (supplied) by matching the + and – on the batteries to the diagram inside the remote control's battery compartment.

Notes:

- Remove the batteries to avoid damage from possible battery leakage whenever you anticipate that the remote control will not be used for an extended period.
- Handle the remote control with care. Avoid dropping it, getting it wet, or placing it in direct sunlight, near a heater or where the humidity is high.
- Your remote control can be programmed to operate most video equipment. (see "Operating Video Equipment" on page 42)

Using the remote control joystick



The supplied remote control has a joystick which moves the on-screen selector in eight directions. In most cases, moving the joystick up, down, left or right will cause the selector to move in the selected direction.

In some cases, the selector may move in eight directions according to the function. Pressing down on the center of the joystick (⊕) will activate the selected item.

You may also move the joystick right to activate a selected item. (There are some exceptions to this option.)

Adjusting sliders

When menu items present a slider (▬● or ●▬), move the joystick up, down, left or right to adjust the setting.

On-line help/instructions

Several menu windows will provide prompts and instructions to assist you in navigating through the different functions.

Setting Up the Projection TV Automatically

The AUTO SET UP feature will allow you to set the on-screen language and set all receivable channels.

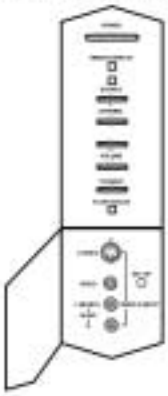
The AUTO SET UP feature does not apply for installations that use a cable box for all channel selection.

You can also set up the projection TV manually. (see "Using the CHANNEL SET UP Menu" on page 36)

Notes:

- Perform this function during the day, with the antenna and/or cable properly connected, to ensure that all available channels will be broadcasting and receivable.
- Before you perform AUTO SET UP, make sure that the input from ANT (not AUX) is selected by pressing ANT until "AUX" does not appear next to the channel number.
- When you perform AUTO PROGRAM, your CHANNEL FIX and ON/OFF TIMER settings will be erased.
- When you perform AUTO PROGRAM, all the settings in the VIDEO and AUDIO menus are reset to the factory settings.

Using the buttons on the front panel and inside the lower front panel on the projection TV:



1 Press POWER to turn on the projection TV.

2 Press SET UP inside the lower front panel.

The AUTO SET UP screen appears.

3 Press CHANNEL + to select English, CHANNEL – to select Spanish or VOLUME + to select French.

The screen will change to reflect your choice.

4 Press VOLUME – to continue.

(continued)

5 Press CHANNEL + to preset channels automatically.

"AUTO PROGRAM" appears and the projection TV starts scanning and presetting channels automatically. While scanning, the received channel will be displayed on the sub screen. When all the receivable channels are stored, the lowest numbered channel will be displayed.

If your projection TV is not connected to a cable system

If you perform AUTO SET UP, CABLE is set to ON automatically. After finishing AUTO SET UP, set CABLE to OFF in the CHANNEL SET UP menu, then set AUTO PROGRAM to YES to perform automatic channel presetting. (see "CABLE" and "AUTO PROGRAM" on page 36)

To perform AUTO SET UP again

- Press SET UP inside the lower front panel on the projection TV, and perform steps 3-5 on page 21.
- Press CHANNEL +, CHANNEL – or VOLUME + to select a language.
- Press VOLUME – to restore factory settings ("CONTINUE TO AUTO PROGRAM?" will appear on the screen. Press CHANNEL + to execute or CHANNEL – to exit).
- Press SET UP to exit.

Adjusting the Convergence Automatically (FLASH FOCUS)

The projection tube image appears on the screen in three layers (red, green and blue). If they do not converge, the color is poor and the picture blurs.

Before you use your projection TV, be sure to adjust the convergence.

The FLASH FOCUS feature allows you to adjust the convergence automatically.

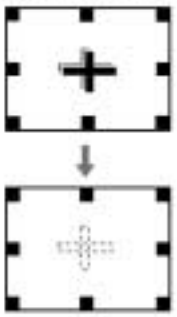
Tip

- It is recommended to perform FLASH FOCUS about 30 minutes after the projection TV is first turned on.

1 Receive a TV or cable TV program.

2 Press FLASH FOCUS.

The cross pattern appears and FLASH FOCUS begins to work. The adjustment is completed when the cross pattern becomes white.



To obtain an optimum convergence

The optimum convergence alignment varies with digital TV formats. Therefore, perform FLASH FOCUS periodically on conventional and digital TV programs. Also, whenever you find that the picture blurs, press FLASH FOCUS.

Notes:

- You cannot perform any other functions until FLASH FOCUS has completed its cycle.
- If you perform any other operation while FLASH FOCUS is in progress, FLASH FOCUS operation is canceled.

Using Your New Projection TV

Watching the TV

Many TV features can be accessed directly through the remote control. The following will explain the function of some buttons found on your remote control.

Using the white labeled buttons for projection TV operations

REFER TO THE ILLUSTRATION OF THE REMOTE CONTROL ON THE INSIDE FRONT COVER OF THIS MANUAL AS YOU REVIEW THE FOLLOWING DESCRIPTIONS.

TV (FUNCTION)

Activates the remote control for use with the projection TV.

ANT
— (AUX input)

Press to change between the VHF/UHF input and the AUX input. (for detailed connection information, see "Cable and antenna" or "Cable box and cable" on page 8).

TV POWER

Turns the projection TV on and off. If a video input indication (e.g., VIDEO 1, VIDEO 2) appears on the screen, press TV/VIDEO until a channel number appears.

0 - 9 and ENTER

Use for direct channel selection. Press 0-9 to select a channel (for example, to select channel 10, press 1 and 0). The channel will change after 2 seconds, or you can press ENTER for immediate selection.

CH +/–

Press to scan through the channels (+ up or – down).

VOL +/–

Press to adjust the volume (+ up or – down).

JUMP

Press to alternate or jump back and forth between two channels. The projection TV will jump between the current channel and the last channel selected using the 0-9 buttons.

MUTING

Press to mute the sound. "MUTING" will appear on the screen and will dim three seconds later. To restore sound, press again or press VOL +.

FREEZE
— (yellow labeled button)

This is useful when you need to copy down information that appears on the TV's screen.

Press to freeze the picture.

Press again or press OFF to cancel.

If you select TWIN as a FREEZE MODE in the SET UP menu, you can freeze the desired scene and display it on the left while viewing the normal picture on the right. (see "FREEZE MODE" on page 41)

Notes:

- The FREEZE button does not function with the picture from VIDEO 5 (DTV) IN.
- If the frozen picture mode is not canceled for more than an hour, the normal picture is resumed automatically.

(continued)

SLEEP

Press repeatedly until the projection TV displays the approximate time in minutes (30, 60, or 90) that you want the projection TV to remain on before shutting off automatically.

Cancel by pressing until "SLEEP OFF" appears.

DISPLAY

Press to display the channel number, current time, channel caption (if set), and bilingual mode. The bilingual mode indication disappears and the other indications dim three seconds later.

To turn the display off, press DISPLAY again.

CC

Press repeatedly to scroll through available displays:

XDS (Extended Data Service)

Displays a network name, program name, program type, program length, program description, call letters and time of the show if the broadcaster offers this service.

Caption Vision

Displayed on the screen if the broadcaster offers this service. (see "CAPTION VISION" on page 39)

No display

"OFF" appears and the display is canceled.

Note:
Before using this button, be sure to press TV (FUNCTION).

TV/VIDEO

Press repeatedly to scroll through available video inputs:

TV, VIDEO 1, VIDEO 2, VIDEO 3, VIDEO 4 and VIDEO 5

If you select SKIP as a VIDEO LABEL in the SET UP menu, your projection TV will skip the video input you selected. (see "VIDEO LABEL" on page 40)

MTS

Press to cycle through the bilingual sound options as follows: (MAIN ➡ MAIN+SUB ➡ SUB ➡ MAIN)

MAIN:

Select to listen to the main sound from both left and right speakers.

MAIN+SUB:

Select to listen to the main sound from the left speaker, and sub sound from the right speaker.

SUB:

Select to listen to the sub sound from both left and right speakers.

If there is noise in the stereo program, set AUTO STEREO to OFF. (see "AUTO STEREO" on page 33)

PICTURE MODE

Press PICTURE MODE repeatedly to directly choose one of five different video modes that best suits the program you are watching.

VIVID:

Select for enhanced picture contrast and sharpness.

STANDARD:

Select to display a standard picture for normal viewing environments.

MOVIE:

Select to display a finely detailed picture for low light environments.

GAME:

Select to display graphics such as a video game.

PRO (Professional):

Select to display a picture with minimum enhancements.

When you select each mode, you can also adjust the picture quality (such as BRIGHTNESS, COLOR, etc.) to suit your taste.

For details, see "MODE" on page 32.

Note:
Before using this button, be sure to press TV (FUNCTION).

Watching Digital TV

When you have connected the DTV receiver, you can enjoy digital TV programs. This projection TV is capable of receiving the 1080i, 480p and 480i digital TV formats.

Note:

- This projection TV is not suitable for 720p digital TV format. When a 720p format signal is received, the picture will dim and "This signal is not available" is displayed on the screen.

To view a digital TV program

1 Connect the DTV receiver to VIDEO 5 (DTV) IN on the projection TV. (for details, see pages 11 and 12)

2 Press TV/VIDEO to select VIDEO 5. The digital TV format being received is displayed on the screen for three seconds.

Note:
- You cannot select VIDEO 5 unless a DTV receiver is connected.

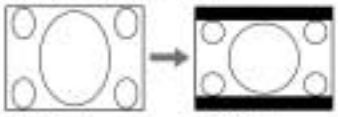
3 Select a digital channel on the DTV receiver. For details, see the Operating Instructions of the DTV receiver.

Tip

The optimum convergence alignment varies with digital TV formats. Whenever you find that the picture blurs, press FLASH FOCUS. (for details, see page 22)

If the picture appears stretched vertically

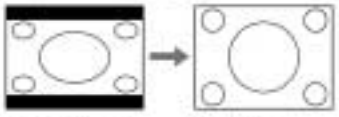
Select the SET UP menu and set ASPECT RATIO to 16:9. (for details, see page 41)



16:9 picture (ASPECT RATIO is set to 4:3.) **16:9 picture (ASPECT RATIO is set to 16:9.)**

If the picture appears compressed vertically

Select the SET UP menu and set ASPECT RATIO to 4:3. (for details, see page 41)



4:3 compressed picture (ASPECT RATIO is set to 16:9.) **4:3 picture (ASPECT RATIO is set to 4:3.)**

Note:

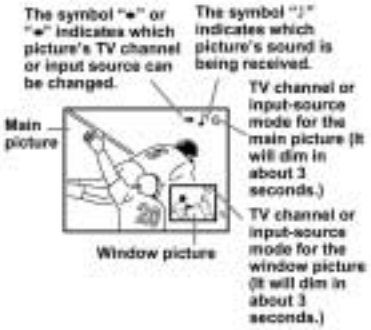
- If the signal format is 1080i, the aspect ratio will be fixed to 16:9. You cannot set ASPECT RATIO to 4:3.

Watching Two Programs at One Time — PIP

The Picture-in-Picture (PIP) feature allows you to view two channels simultaneously, one in the full size "main" picture and one in a smaller "window" picture.

You can move the window picture to any location on the screen (Free Layout PIP).

Note:
- The PIP feature is not available for the inputs from VIDEO 5 (DTV) IN.



Using the yellow labeled buttons for PIP operations

REFER TO THE ILLUSTRATION OF THE REMOTE CONTROL ON THE INSIDE FRONT COVER OF THIS MANUAL AS YOU REVIEW THE FOLLOWING DESCRIPTION.

Tip

If you press RESET in PIP mode, the window picture will move to the bottom right (factory-preset location).

Press to display a window picture.

Each time you press this button, the picture size will change (1/4 → 1/9 → 1/16).

Press OFF to close the window picture.

POSITION

Press to change the location of the window picture (counterclockwise) around the main picture.

— *(white labeled button)*

To change the location of the window picture, move the joystick in any direction and release it when the picture is in the desired location.

ACTIVE

Press to select either the main or window picture in order to change the TV channel or video source using the white labeled buttons below. The symbol "➧" (or "➧") will appear to indicate which picture's channel or input mode can be changed.

TV/VIDEO — *(white labeled button)*

Press repeatedly to scroll through the available video inputs for the picture on which the symbol "➧" (or "➧") is displayed. (see "TV/VIDEO" on page 24)

CH + or − or **0**-**9** and **ENTER** or **JUMP**

— *(white labeled button)*

Press to select the TV channel on which the symbol "➧" (or "➧") is displayed. (for details, see "Watching the TV" on page 23)

ANT — *(white labeled button)*

Press to change between the VHF/UHF input and the AUX input for the picture on which the symbol "➧" (or "➧") is displayed.

AUDIO

Press to alternate sound between the main picture and the window picture. The symbol "♪" will appear for a few seconds to indicate which picture's sound is being received.

FREEZE

This is useful when you need to copy down information that appears on the TV's screen.

Press to freeze the main and window pictures. The symbols "➧" and "♪" and the channel number disappear.

Press again to resume PIP viewing. Press OFF to cancel and resume normal TV viewing.

Note:
- The FREEZE button does not function with digital TV programs.

SWAP

Press to switch the audio and video of the main picture and the window picture.

Each time you press SWAP, the picture and sound of the two will be exchanged.

Press to access CHANNEL INDEX for direct channel selection. (see "Using CHANNEL INDEX" on page 29)

OFF

Press to cancel the PIP function and return to normal viewing.

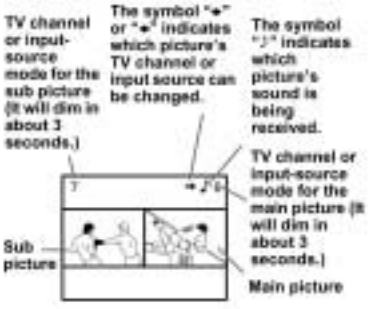
Notes:
- If one of the pictures received through PIP is snowy, the entire screen may become unstable. In this case, erase the snowy channel. (see "CHANNEL SKIP" on page 36)
- If you select VIDEO 5 when the main picture is active, the window picture disappears and you can view the picture from VIDEO 5 (DTV) IN. When the window picture is active, you cannot view the picture from VIDEO 5 (DTV) IN.

Watching Two Programs at One Time — P&P (Twin View™)

The Picture-and-Picture (P&P) feature allows you to view two channels simultaneously, both in a reduced size screen. The main picture will appear on the right.

You can change the size of both pictures to suit your personal preference.

Note:
- The P&P feature is not available for the inputs from VIDEO 5 (DTV) IN.



(continued)

Using the yellow labeled buttons for P&P operations

REFER TO THE ILLUSTRATION OF THE REMOTE CONTROL ON THE INSIDE FRONT COVER OF THIS MANUAL AS YOU REVIEW THE FOLLOWING DESCRIPTIONS.

Tip

If you press RESET to P&P mode, the right and left pictures will be reset to the same size (factory-preset size.)

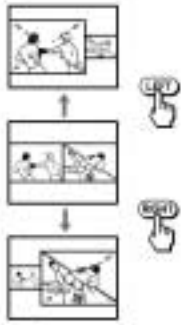
Press to display right (main) and left pictures.

Press OFF to close the sub picture.

— (white labeled button)

Press and hold either RIGHT or LEFT to zoom in on the selected picture.
Release at the desired size. The other picture will be zoomed out simultaneously.

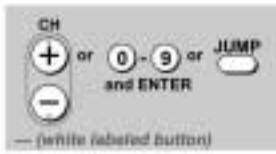
Moving the joystick right or left will activate the same function.



Press to select either the right or left picture in order to change the TV channel or video source using the white labeled buttons below. The symbol "▶" (or "◀") will appear to indicate which picture's channel or input mode can be changed.

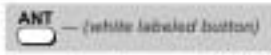
— (white labeled button)

Press repeatedly to scroll through the available video inputs for the picture on which the symbol "▶" (or "◀") is displayed. (see "TV/VIDEO" on page 24)



— (white labeled button)

Press to select the TV channel on which the symbol "▶" (or "◀") is displayed. (for details, see "Watching the TV" on page 23)



— (white labeled button)

Press to change between the VHF/UHF input and the AUX input for the picture on which the symbol "▶" (or "◀") is displayed.

Press to alternate sound between the right and left pictures. The symbol "♪" will appear for a few seconds to indicate which picture's sound is being received.

This is useful when you need to copy down information that appears on the TV's screen.

Press to freeze both the right and left pictures.

Press again to resume P&P viewing or press OFF to cancel and resume normal TV viewing.

Press to switch the audio and video of the right and left pictures.

Each time you press SWAP, the picture and sound of the two will be exchanged.

Press to cancel the P&P function and return to normal viewing.

Notes:

- If one of the pictures received through P&P is snowy, the entire screen may become unstable. In this case, erase the snowy channel. (see "CHANNEL SKIP" on page 36)
- If you select VIDEO 5 when the right picture is active, the left picture disappears and you can view the picture from VIDEO 5 (DTV) IN. When the left picture is active, you cannot view the picture from VIDEO 5 (DTV) IN.

Using CHANNEL INDEX

You can use the CHANNEL INDEX feature to display multiple channels and select one directly.

Channels used for CHANNEL INDEX will come directly from the TV's list of receivable channels (those set during AUTO PROGRAM or through the CHANNEL SET UP menu).

Note:

- The CHANNEL INDEX feature is not available for the inputs from VIDEO 5 (DTV) IN.

1 Press (▣).

The current channel will be reduced in size and displayed in the center of the screen in normal motion picture format. The first twelve receivable channels will appear one after another, clockwise, around the center picture. These small pictures are updated in intervals of one second. The channel number and channel caption (if set) on the second and later appearances will dim.

A cyan-colored frame will appear to indicate current channel selection.

2 Move the joystick in any direction to move the cyan frame to the picture that you wish to view, and press ⊕.

The selected channel will zoom in and move to the center, and the sound of that channel will be heard.

3 If you wish to view another channel, repeat step 2.

To view the normal picture of the selected channel, proceed to step 4.

4 Press ⊕.

The center picture will be enlarged for normal viewing.

(continued)

Notes:

- You cannot move the cyan frame until all of the surrounding pictures appear.
- The projection TV will continually update each of the surrounding pictures while the CHANNEL INDEX screen is displayed.
- Sound will only be heard from the center picture.
- If one of the pictures received through CHANNEL INDEX is snowy, the entire screen may become unstable. In this case, erase the snowy channel. (see "CHANNEL SKIP" on page 36)
- If you leave the CHANNEL INDEX screen displayed for an hour without any additional operation, CHANNEL INDEX is canceled and the normal picture reappears.

Using the yellow labeled buttons for CHANNEL INDEX operations

REFER TO THE ILLUSTRATION OF THE REMOTE CONTROL ON THE INSIDE FRONT COVER OF THIS MANUAL AS YOU REVIEW THE FOLLOWING DESCRIPTIONS.

(yellow)

Press to display the next twelve receivable channels.

OFF

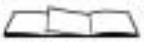
Press to cancel the current operation and return to normal TV viewing.

FREEZE

Press to freeze the center picture.

Press again to cancel the frozen picture and resume normal center picture viewing.

Using the white labeled buttons for center picture operations



REFER TO THE ILLUSTRATION OF THE REMOTE CONTROL ON THE INSIDE FRONT COVER OF THIS MANUAL AS YOU REVIEW THE FOLLOWING DESCRIPTIONS.

TV/VIDEO

Press to scroll the center picture through the video inputs.

The surrounding channels will not change.

Note:

- If you press VIDEO 5 while the CHANNEL INDEX screen is displayed, the CHANNEL INDEX feature is canceled and the normal picture of the VIDEO 5 input will be displayed.

ANT

Press to switch the center picture between the VHF/UHF input and the AUX input.

CH (+ / −) or **0** - **9** or **JUMP** and **ENTER**

Press to select a channel for the center picture. (for details, see "Watching the TV" on page 23)

Adjusting Your SET UP (menus)

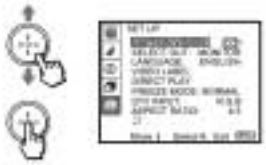
Learning Menu Selection

Use the MENU button to access a menu and use the joystick to alter the settings. Use the following example to learn how to modify settings.

1 Press the MENU button.

The main menu appears.

2 Move the joystick up or down to highlight the desired menu and press ⊕ (press down on the center of the joystick) to activate it.



You may also move the joystick right to activate your selection.

3 Move the joystick up or down to highlight the desired option.

4 Press ⊕ (press down on the center of the joystick).

Options for your selection (Pop-up menu or Adjusting menu) will be displayed.

Pop-up menu

Adjusting menu

5 Move the joystick up or down to make your selection and press ⊕ to activate it.

The previous screen will reappear.

Some adjustment menus may require further operations. For details, see each menu option.

To return to the previous screen (except for the slider adjustment menus), choose ⮌ at the bottom of the menu and press ⊕ or move the joystick left.

6 Once you have completed all menu corrections, press MENU to exit the menu screens.

MENU

To exit from the menus at any time

Press MENU.

Using the VIDEO Menu

For detailed information on using the remote control to modify menu settings, refer to "Learning Menu Selection" on page 31.

To select the VIDEO menu:

MODE
— Customized picture viewing

You can choose one of five different video modes that best suits the program you are watching. You can also adjust the picture quality (such as BRIGHTNESS, COLOR, etc.) for each MODE to suit your taste.

First select each MODE individually before adjusting the picture quality.

VIVID:
Select for enhanced picture contrast and sharpness.

STANDARD:
Select to display a standard picture for normal viewing environments.

MOVIE:
Select to display a finely detailed picture for low light environments.

GAME:
Select to display graphics such as a video game.

PRO (Professional):
Select to display a picture with minimum enhancements.

Press PICTURE MODE on the remote control for direct selection of a MODE setting.

Note:
Before using this button, be sure to press TV (FUNCTION).

PICTURE
— Picture Adjustment

Adjust slider right (up) to increase picture contrast.

Adjust slider left (down) to decrease picture contrast.

BRIGHTNESS
— Picture Adjustment

Adjust slider right (up) to brighten the picture.

Adjust slider left (down) to darken the picture.

COLOR
— Picture Adjustment

Adjust slider right (up) to increase color intensity.

Adjust slider left (down) to decrease color intensity.

HUE
— Picture Adjustment

Adjust slider right (up) to increase the green tones.

Adjust slider left (down) to increase the red tones.

SHARPNESS
— Picture Adjustment

Adjust slider right (up) to sharpen the picture.

Adjust slider left (down) to soften the picture.

TRINITONE
— White Intensity Adjustment

HIGH:
Select to give the white colors a blueish tint.

MEDIUM:
Select to give the white colors a neutral tint.

NTSC STD:
Select to give the white colors a reddish tint.

NR
— Picture Noise Reduction

Select **ON** to reduce picture noise.

Select **OFF** to cancel the feature.

DYNAMIC PICTURE
— Black Intensity Adjustment

Select **ON** to emphasize the black level and to produce a bolder dynamic picture.

Select **OFF** to cancel the feature.

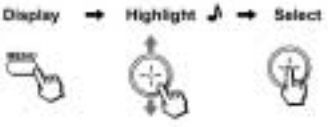
To restore the factory settings

Press RESET on the remote control while the VIDEO menu is selected. To restore each MODE to the factory setting, press RESET after selecting the mode to be reset.

Using the AUDIO Menu

For detailed information on using the remote control to modify menu settings, refer to "Learning Menu Selection" on page 31.

To select the AUDIO menu:



TREBLE
— Sound Adjustment

Adjust slider right (up) to increase high pitched sounds.

Adjust slider left (down) to decrease high pitched sounds.

BASS
— Sound Adjustment

Adjust slider right (up) to increase low pitched sounds.

Adjust slider left (down) to decrease low pitched sounds.

BALANCE
— Sound Adjustment

Adjust slider right (up) to emphasize right speaker volume.

Adjust slider left (down) to emphasize left speaker volume.

AUTO STEREO
— Enjoy stereo programs automatically

ON:
Select for stereo reception when viewing a program broadcast in stereo.

OFF:
Select for mono reception. (use to reduce noise during stereo broadcasts)

Note:
Although the STEREO indicator lights up on stereo broadcast reception even when AUTO STEREO is set to OFF, sound will be monaural.

(continued)

EFFECT
— Customizes surround sound effects based on the program's audio type

EFFECT can only be set when SPEAKER is set to ON.

TRUSURROUND*:

Produces a virtual surround effect for Dolby-surround encoded programs.

SRS 3D MONO:

Adds a surround-like effect to mono programs.

OFF:

Normal stereo or mono reception.

SPEAKER
— Custom selection of audio output source

ON:

Select to listen to the sound from the projection TV speakers alone.

OFF:

Select to turn off the projection TV speakers and listen to the projection TV's sound only through an external audio system's speakers.

CENTER IN:

Select to use the projection TV as center speaker when you connect an amplifier with a Dolby Pro Logic decoder. (see "Connecting an Amplifier That Supports Dolby Pro Logic Decoder" on page 19)

To restore the factory settings

Press RESET on the remote control while the AUDIO menu is selected.

*(●)TruSurround

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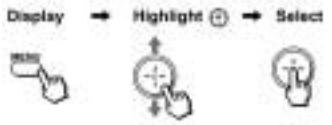
TruSurround and SRS technology is incorporated under license from SRS Labs, Inc.

⏲ Using the TIMER Menu

After setting the clock you can use the timer to turn the projection TV on and off.

For detailed information on using the remote control to modify menu settings, refer to "Learning Menu Selection" on page 31.

To select the TIMER ⏲ menu:



Tip

Set daylight saving time before setting the clock. Any loss of power will cause these settings to be erased.

DAYLIGHT SAVING
— Automatically adjusts the time

Select **YES** to compensate for Daylight Saving Time in spring. The current time automatically moves ahead one hour.

Select **NO** at the end of Daylight Saving Time in fall. The current time moves back one hour.

CURRENT TIME
— Necessary for the TIMER

1 Press ⊕, then move the joystick up or down until the current day (MON-SUN) is displayed, and press ⊕.

2 Move the joystick up or down until the current hour (1-12) and AM/PM is displayed, and press ⊕.

3 Move the joystick up or down until the current minute (00-59) is displayed, and press ⊕.

The Clock has now started. Press MENU to exit.

ON/OFF TIMER
— Wake up or scheduled viewing

1 Select the desired timer (1 or 2).

2 Move the joystick up or down until the desired day (MON-SUN) or range of days (EVERY SUN-SAT or EVERY MON-FRI) is displayed, and press ⊕.

3 Move the joystick up or down until the time (hours and minutes) that you want the projection TV to remain on is displayed, and then press ⊕.

4 Move the joystick up or down to set the time duration (maximum of 6 hours) and press ⊕.

5 Move the joystick up or down to select the desired channel and press ⊕.

The timer is now set. The TIMER/STAND BY indicator on your projection TV will be lit.

Press MENU to exit. To cancel your timer setting, select timer 1 or 2 and press RESET while in the ON/OFF TIMER window. Performing AUTO PROGRAM will erase all TIMER settings.

Using the CHANNEL SET UP Menu

For detailed information on using the remote control to modify menu settings, refer to "Learning Menu Selection" on page 31.

To select the CHANNEL SET UP menu:

Display → Highlight → Select

CHANNEL SKIP
— Skips unnecessary channels

After AUTO PROGRAM, you can erase unnecessary TV channels from the channel preset memory.

With the CHANNEL SKIP window open:

1 Move the joystick up or down to select the desired channel. You can view the channel that is selected with the CHANNEL SKIP menu in the center sub screen. You can also use CH +/– or 0–9 and ENTER buttons.

2 Press ⊕.

3 Move the joystick up or down to select **YES**, and press ⊕.
The selected channel will be erased.

If you want to re-enter the skipped channel, follow the steps above and select **NO**.

CHANNEL CAPTION
— Easy recognition of the channel you are watching

You can add a caption for up to 32 channels of both VHF/UHF and AUX inputs.

With the CHANNEL CAPTION window open:

1 Press ⊕ and then move the joystick up or down to select the desired channel. You can view the channel that is selected with the CHANNEL CAPTION menu in the center sub screen.

2 Press ⊕.

3 Move the joystick up or down to display the first letter or number of the caption and press ⊕ to select it.

4 Repeat until up to four digits are selected.

5 Press ⊕.

To erase a caption, press RESET.

CABLE
— Cable system setting

Select **ON** if your projection TV is connected to a cable system.

Select **OFF** if your projection TV is connected to an antenna.

AUTO SET UP will automatically set CABLE to **ON**.

AUTO PROGRAM
— Automatic channel presetting

Select **YES** to signal the projection TV to automatically program all receivable TV channels. When all the receivable channels are stored, the lowest numbered channel will be displayed.

Select **NO** to cancel AUTO PROGRAM.

FAVORITE CHANNEL
— User's favorite channels

The FAVORITE CHANNEL feature enables easy access to the eight channels that you preset (or the last channel that you were watching).
(for details on how to set up this feature, see "Setting and Selecting FAVORITE CHANNEL" on page 37)

CHANNEL FIX
— Locks selection of your projection TV's input when used in conjunction with external equipment such as a cable box, AV receiver, etc.

2-6:

When the cable box is connected to the VHF/UHF input, you can fix the TV's input to one of the channels between 2 and 6. Press CABLE (FUNCTION) and then CH +/– to change the cable box channels.

AUX 2-6:

Use this when a cable box is connected to AUX, and a cable or antenna is connected to VHF/UHF.

VIDEO 1:

Use this when you have connected external video equipment (e.g. AV receiver) and you want the projection TV's input fixed to it.

OFF:

When you want to switch CHANNEL FIX off.

If the projection TV is in the AUX mode when you turn CHANNEL FIX off, press ANT to return to UHF input mode.

TIMER settings are erased when CHANNEL FIX is set.

Note:

- You cannot change channels with the TV's tuner when you set CHANNEL FIX. If you want to use the TV's tuner while fixing the TV's input to VIDEO 1, use the SET UP menu to set SELECT OUT to TV OUT. (see "SELECT OUT" on page 40)

Setting and Selecting FAVORITE CHANNEL

The FAVORITE CHANNEL feature of your projection TV enables easy access to the eight channels that you preset (or the last channel that you were watching).

Your FAVORITE CHANNEL options can be set automatically or manually.

The factory setting for FAVORITE CHANNEL is AUTO.

When FAVORITE CHANNEL is set to AUTO, the last eight channels selected with the 0–9 buttons will be set as FAVORITE CHANNEL options. If you want to input your own selections as FAVORITE CHANNEL settings, set to MANUAL.

Setting FAVORITE CHANNEL manually

1 Select FAVORITE CHANNEL from the CHANNEL SET UP menu. (see pages 36 and 37)

(continued)

2 Move the joystick up or down to select MANUAL and press ⊕.

The FAVORITE CHANNEL menu will appear. If you set CHANNEL CAPTION names (e.g. KBS1, MBC), they will also be displayed. (see "CHANNEL CAPTION" on page 36)

3 Move the joystick up or down to select a position (1–8), and press ⊕.

4 Move the joystick up or down to select a channel.

You have now selected a favorite channel.

5 Press ⊕ and use the joystick to program other favorite channels. (Follow steps 3 and 4.)

6 Press MENU when you have finished.

Your favorite channels are now ready for use.

Resetting FAVORITE CHANNEL choices

You have the option of returning to the FAVORITE CHANNEL screen to adjust any of your favorite channel choices.

Simply proceed as described in "Setting FAVORITE CHANNEL manually" (skip step 2 if MANUAL is already selected).

When you reach step 3, select the position you want to change and press ⊕. Press RESET to clear the channel for that position.

Move the joystick up or down to select a new channel.
Press MENU when you are done.

Note:

- The FAVORITE CHANNEL feature is not available for the picture input from AUX or VIDEO 1–5 (DTV) IN.

Using FAVORITE CHANNEL

You can use the FAVORITE CHANNEL feature to directly select the channel you want to watch.

1 Press ⊕ once.

The favorite channel menu and a window picture will be superimposed over the current

channel. The window picture displays the channel selected from the menu.

2 Move the joystick up or down to select the channel that you wish to view from the menu.

The picture of the selected channel will be displayed in the window picture.

3 Press ⊕ to select the channel.

The selected channel will be displayed for normal viewing.

To cancel the favorite channel menu before selecting a channel, move the joystick up or down to select EXIT at the bottom of the menu and press ⊕.

Using the SET UP Menu

For detailed information on using the remote control to modify menu settings, refer to "Learning Menu Selection" on page 31.

To select the SET UP menu:

Display → Highlight → Select

CAPTION VISION

— Television closed caption display

Some programs are broadcast with Caption Vision.
To display Caption Vision, select CC 1, CC 2, CC 3, CC 4, **TEXT1**, **TEXT2**, **TEXT3** or **TEXT4** from the menu. Then press the CC button until Caption Vision is displayed.

CC 1, CC 2, CC 3 or CC 4 displays a printed version of the dialogue or sound effects of a program. (The mode should be set to CC 1 for most programs.) **TEXT1**, **TEXT2**, **TEXT3** or **TEXT4** displays network/station information presented using either half or the whole screen.

Notes:

- Poor reception of TV programs can cause errors in Caption Vision and XDS.
  Captions may appear with a white box or other errors instead of the intended text.
- XDS, Caption Vision, and the status display cannot be used at the same time.

(continued)

SELECT OUT
— Output signal selection from SELECT OUT

You can select the desired output signal from the SELECT OUT jacks at the rear of the projection TV.

Note:
- SELECT OUT setting is not available for the inputs from VIDEO 5 (DTV) IN.

MONITOR:

Select to edit tapes while monitoring. SELECT OUT outputs the picture displayed on the screen.

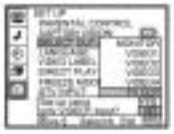
VIDEO1–VIDEO4:

Select to edit tapes while viewing an input image different from that being recorded. SELECT OUT outputs the signal input to the projection TV regardless of the displayed picture on the screen.

TV OUT:

Select if you connect an AV receiver to VIDEO 1 IN. SELECT OUT outputs the signal that the TV is tuned to, regardless of the displayed picture. (see "Connecting an AV Receiver" on page 17 for connection)

If you select **TV OUT**, the following pop-up menu appears.



Select **YES** only if you have connected an AV receiver, with no other equipment, to your projection TV. You can always select the signal from the receiver by pressing TV/VIDEO once.

Select **NO** if you have connected multiple components to your projection TV. You can select an input (VIDEO1 – VIDEO5) with the TV/VIDEO button.

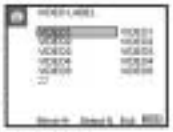
Note:
- The SELECT OUT signal is only available when the projection TV is on.

LANGUAGE
— User's preferred language

Select from available languages (**ENGLISH**, **ESPAÑOL** or **FRANÇAIS**) to display all menus in your language of choice.

VIDEO LABEL
— Easy recognition of connected equipment (e.g. VHS, 8mm etc.)

This feature allows you to label each input mode so that you can easily identify the connected equipment (e.g. you can label VIDEO 1 IN as VHS).



With the VIDEO LABEL window open:

1 Move the joystick up or down to select the input mode you want to label and press ⊕.

2 Move the joystick up or down to select the label and press ⊕.

VIDEO LABEL Options:

VIDEO 1: VIDEO 1, VHS, 8mm, BETA, LD, DVD, AV RECEIVER, SKIP

VIDEO 2–4: VIDEO 2–4, VHS, 8mm, BETA, LD, DVD, SKIP

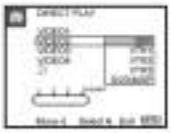
VIDEO 5: VIDEO 5, DTV, DVD, SKIP

If you select SKIP, your projection TV will skip this connection when you scan through video sources using the TV/VIDEO button.

DIRECT PLAY
— Easy operation of a connected VCR

This feature allows you to switch the input mode from the TV to a Sony VCR (MDP or DVD) and start playing by only pressing the ► (playback) button on the remote control. You have to set the VTR 1/2/3/DVD/MDP switch on the remote control (e.g., you connect your VCR to the VIDEO 3 IN jacks and set the VTR 1/2/3/DVD/MDP switch to VTR 3). With the DIRECT PLAY window open:

1 Move the joystick up or down to select the input to which your video equipment is connected, and press ⊕.



2 Move the joystick up or down to select the position of the VTR 1/2/3/DVD/MDP switch, and press ⊕.

Note:
- DIRECT PLAY setting is not available for the inputs from VIDEO 5 (DTV) IN.

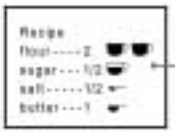
FREEZE MODE
— Freeze picture mode

Useful when you need to copy down information that appears on the TV's screen.

Note:
- The FREEZE MODE feature is not available for the inputs from VIDEO 5 (DTV) IN jacks.

NORMAL:

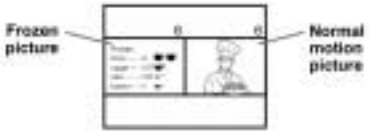
Select to freeze the whole picture on the screen by pressing FREEZE.



TWIN:

Select to freeze the desired scene and display it on the left of the screen while viewing the normal picture of the current channel on the right by pressing FREEZE.

This mode is not available for PIP, P&P or CHANNEL INDEX screens.



Press FREEZE again or press OFF to display the normal picture.

DTV INPUT
— Input signal selection from the DTV receiver

Select **R,G,B** when you connect a DTV receiver to the G/B/R/HD/VD jacks of VIDEO 5 (DTV) IN on the rear of the projection TV. Select **Y PB PR** when you connect a DTV receiver to the Y/Pb/Pr jacks of VIDEO 5 (DTV) IN.

Note:
- Picture color will be incorrect if wrong DTV INPUT is selected.

ASPECT RATIO
— Wide picture mode for digital TV

The feature allows you to display a compressed 4:3 picture in 16:9 aspect ratio with higher-density (available for 480p and 480i formats only). (see page 25)

Normally, set to **4:3**. Select **16:9** if the picture of DTV 480p or 480i format appears stretched vertically.

Note:
- If the signal format is 1080i, the aspect ratio will be fixed to 16:9. You cannot set ASPECT RATIO to 4:3.

Operating Video Equipment

Setting the Manufacturer's Code

You can use the supplied remote control to operate Sony or non-Sony video equipment that has an infrared sensor.

1 Set the VTR 1/2/3/DVD/MDP switch to the input through which you would like to access your video equipment.

The following Sony equipment is preset to each input as shown below:

VTR1 (303)	Beta, ED Beta VCRs
VTR2 (302)	8 mm VCR
VTR3 (301)	VHS VCR
DVD/MDP (751)	DVD Player

2 Press CODE SET, DVD/VTR (FUNCTION), and the 0-9 buttons to enter the manufacturer's code number (see the following chart), then press ENTER.

For example, to operate a Sony 8mm VCR:

If the remote control doesn't work

• See the tips on page 44.

VCR manufacturer code numbers

Manufacturer	Code
Sony	301, 302, 303
Aiwa	330
Admiral (M. Ward)	327
Audio Dynamic	314, 337
Bell & Howell (M. Ward)	330, 345
Brokaumic	319, 317
Canon	309, 308
Citizen	332
Craig	315, 302, 332
Criterion	315
Curtis Mathis	304, 338, 308
Daewoo	341, 312, 309
DBX	314, 336, 337
Dimensia	304
Emerson	319, 320, 316, 317, 318, 341
Fisher	330, 334, 335, 333
Funai	338
General Electric	329, 304, 309
Go Video	340, 339, 322
Goldstar	332
Hitachi	306, 304, 305, 338
Instant Replay	309, 308
JC Penney	309, 305, 304, 330, 314, 336, 337
JVC	314, 336, 337
Kenwood	314, 336, 332, 337
LXI (Sears)	332, 305, 335, 334, 330, 335, 338
Magnavox	308, 309, 310
Marantz	314, 336, 337
Marta	332
Memorex	309, 335
Minolta	305, 304
Mitsubishi/MGA	323, 324, 325, 326
Multitech	325, 338, 321
NEC	314, 336, 337
Olympic	309, 308
Optimus	327
Panasonic	306, 309, 306, 307
Penton	305, 304
Philco	308, 309
Philips	308, 309, 310
Pioneer	308
Quasar	308, 309, 306
RCA/PROSCAN	304, 305, 308, 309, 311, 329, 312, 313, 310
Realistic	309, 330, 328, 335, 326, 338
Samsa	314
Singer	315
Samsung	322, 313, 321
Sanyo	330, 335
Scott	312, 313, 321, 335, 323, 324, 325, 328
Sharp	327, 328
Shintom	315
Signature 2000 (M. Ward)	338, 327
Sylvania	308, 309, 338, 310
Symphonic	338
SV2000	338
Tashiro	332
Tatung	314, 336, 337
Teac	314, 336, 338, 337
Technics	309, 308
Tektronix	342, 338
Toshiba	312, 311
Wards	327, 328, 335, 331, 332
XR-1000	315
Yamaha	330, 314, 336, 337
Zenith	331

MDP manufacturer code numbers

Manufacturer	Code
Sony	701
Panasonic	704
Pioneer	702

DVD Player manufacturer code numbers

Manufacturer	Code
Sony	751
Panasonic	753
Pioneer	752
RCA	755
Toshiba	754

Tips

- *In some rare cases, you may not be able to operate your non-Sony video equipment with the supplied remote control. In this case, please use the equipment's own remote control.*
- *When you remove the batteries, the code number may revert to the factory setting.*

Operating video equipment

1 Set the VTR1/2/3/DVD/MDP switch to the input through which you would like to access your video equipment.

2 Press DVD/VTR (FUNCTION).

3 Use the VCR/DVD/MDP operation buttons indicated in the following tables.

Operating a VCR using the remote control

To turn On/Off	Press DVD/VTR (POWER) [Green Button]
To select a channel	Press the 0 – 9 buttons.
To change channels	Press CH +/–.
To record	Press ● (REC) while pressing ▭ (lower).
To play	Press ►.
To stop	Press ■.
To fast forward	Press ▶▶.
To rewind the tape	Press ◀◀.
To pause	Press ❚❚. Press again to resume normal playback.
To search the picture forward or backward	Press ▶▶ or ◀◀ during playback. Release to resume normal playback.
To change input mode	Press TV/VTR.

Operating an MDP using the remote control

To turn On/Off	Press DVD/VTR (POWER) [Green Button]
To play	Press ►.
To stop	Press ■.
To pause	Press ❚❚. Press again to resume normal playback.
To search the picture forward or backward	Press ▶▶ or ◀◀ during playback. Release to resume normal playback.
To search a chapter forward or backward	Press CH +/–.

Operating a DVD Player using the remote control

To turn On/Off	Press DVD/VTR (POWER) [Green Button]
To play	Press ►.
To stop	Press ■.
To pause	Press ❚❚. Press again to resume normal playback.
To step through different tracks of an audio disc	Press ▶▶ to step forward or ◀◀ to step backward.
To step through different chapters of a video disc	Press CH+ to step forward or CH– to step backward.
To display the Title menu	Press TITLE.
To display the DVD menu	Press DVD MENU.
To select tracks directly	Press 0-9 buttons.
To display the menu (Set up)	Press MENU.

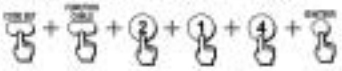
Operating a Cable Box

Setting the Manufacturer's Code

You can program the supplied remote control to operate a cable box.

Press CODE SET, CABLE (FUNCTION), and the 0-9 buttons to enter the manufacturer's code number (see the following chart), then press ENTER.

For example, to operate a Pioneer cable box:



Manufacturer code numbers (cable box)

Manufacturer	Code
General	235
Hamlin/Regal	222, 223, 224, 225, 226
Jerrold/G. I.	201, 202, 203, 204, 205, 222, 206, 207, 208, 218
Macom	230, 231, 232
Magnavox	234
Oak	227, 228, 229
Panasonic	219, 220, 221
Philips	236, 237, 238, 239, 240, 241
Pioneer	214, 215
Samsung	235
Scientific Atlanta	209, 210, 211
Tocom	216, 217
Zenith	212, 213

Operating a cable box

1 Press CABLE (POWER) [Green Button] to turn on/off the cable box.

2 Press CABLE (FUNCTION).

3 For other operations, refer to the operating instructions that come with the equipment.

If the remote control doesn't work

Try repeating the set up procedures using the other codes listed for your equipment.

To operate the projection TV

Press TV (FUNCTION). Then use the projection TV control buttons to control the projection TV.

Tips

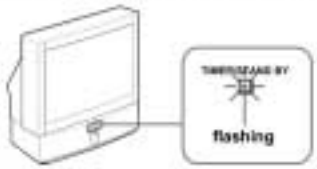
- *If more than one code number is listed, try entering them one by one until you come to the correct code for your equipment.*
- *If you enter a new code number, the code number you previously entered at that setting is erased.*
- *In some rare cases, you may not be able to operate your equipment with the supplied remote control. In this case, use the equipment's own remote control unit.*
- *Whenever you remove the batteries — to replace them, for example — if too much time is taken, the code numbers may revert to the factory setting and must be reset.*

Additional Information

Troubleshooting

The picture turns off and the TIMER/STAND BY indicator on the front panel flashes (self-diagnosis function)

- The projection TV is equipped with a self-diagnosis function. If there is a problem with your projection TV, the TIMER/STAND BY indicator on the front panel will flash repeatedly. Counting the number of flashes helps you inform qualified Sony personnel of the projection TV's condition.



1 Count how many times the TIMER/STAND BY indicator flashes in total. It flashes twice at 3 seconds' intervals. If, for example, the indicator flashes twice, stops flashing for 3 seconds, and flashes twice again, that counts as twice.

2 Press POWER on the projection TV to turn it off, then inform qualified Sony personnel of the number of flashes.

No picture (screen not lit), no sound

- Make sure the power cord is plugged in.
- Operate with the buttons on both the projection TV and the remote control.
- Check to see if the TV/VIDEO setting is correct: when watching TV, set to TV, and when watching video tapes, set to VIDEO 1, 2, 3, 4 or 5.
- Try another channel. *It could be station trouble.*
- Perform AUTO SET UP again using the SET UP button to return to the factory preset condition. (see "To perform AUTO SET UP again" on page 22)

Remote control does not operate.

- Batteries could be weak. Replace the batteries.
- Press TV (FUNCTION) when operating your projection TV.
- Make sure the projection TV's power cord is connected securely to the wall outlet.
- Locate the projection TV at least 3-4 feet away from fluorescent lights.
- Check the polarity of the batteries.

Dark, poor or no picture (screen lit), good sound

- Adjust PICTURE in the VIDEO menu. (see "PICTURE" on page 32)
- Adjust BRIGHTNESS in the VIDEO menu. (see "BRIGHTNESS" on page 32)
- Check antenna/cable connections.
- Perform AUTO SET UP again using the SET UP button to return to the factory preset condition. (see "To perform AUTO SET UP again" on page 22)
- Adjust the convergence again using the FLASH FOCUS button. (see "Adjusting the Convergence Automatically (FLASH FOCUS)" on page 22)

Good picture, no sound

- Press MUTING so that "MUTING" disappears from the screen. (see "MUTING" on page 23)
- Make sure SPEAKER is set to ON in the AUDIO menu. (see "SPEAKER" on page 34)
- Perform AUTO SET UP again using the SET UP button to return to the factory preset condition. (see "To perform AUTO SET UP again" on page 22).

(continued)

Cannot receive digital channels (when a DTV receiver is connected)

- Check the connections between the DTV receiver and the projection TV. (see pages 11 and 12)
- Check your local listings to find out if you can receive digital broadcasts in your area.

The color of the digital TV program is not correct

- Check the DTV INPUT setting in the SET UP menu. (see "DTV INPUT" on page 41)

Cannot receive upper channels (UHF) when using an antenna

- Make sure CABLE is OFF in the CHANNEL SET UP menu. (see "CABLE" on page 36)
- Use AUTO PROGRAM to add receivable channels that are not presently in the TV's memory. (see "AUTO PROGRAM" on page 36)

No color

- Adjust the COLOR in the VIDEO menu. (see "COLOR" on page 32)
- Black and white programs cannot be seen in color.
- Perform AUTO SET UP again using the SET UP button to return to the factory preset condition. (see "To perform AUTO SET UP again" on page 22)

Only snow and noise appear on the screen

- Check the CABLE setting in the CHANNEL SET UP menu. (see "CABLE" on page 36)
- Check the antenna/cable connections.
- Make sure the channel is broadcasting programs.
- Press ANT to change the input mode. (see "ANT" on page 23)

Dotted lines or stripes

- Adjust the antenna.
- Keep the projection TV away from noise sources such as cars, neon signs or hair-dryers.

TV is fixed to one channel

- Use AUTO PROGRAM to add receivable channels that are not presently in TV's memory. (see "AUTO PROGRAM" on page 36)
- Try turning CHANNEL FIX off. (see "CHANNEL FIX" on page 37)

Double images or ghosts

- Use a highly directional outdoor antenna or a cable (when the problem is caused by reflections from nearby mountains or tall buildings).

Cannot operate the menu

- If the item you want to choose appears in gray, you cannot select it.
- Press the projection TV's power button off and on again.

Cannot receive any channels when using cable TV

- Check the connection with a cable box again. (see pages 8 and 10)
- Make sure CABLE is ON in the CHANNEL SET UP menu. (see "CABLE" on page 36)
- Use AUTO PROGRAM to add receivable channels that are not presently in the TV's memory. (see "AUTO PROGRAM" on page 36)

Cannot gain enough volume when using a cable box

- Increase the volume at the cable box. Then press TV (FUNCTION) and adjust the projection TV's volume.

CHANNEL INDEX does not display all available channels

- Make sure CABLE is ON in the CHANNEL SET UP menu. (see "CABLE" on page 36)
- Use AUTO PROGRAM to add receivable channels that are not presently in the TV's memory. (see "AUTO PROGRAM" on page 36)

FAVORITE CHANNEL does not display your choices

- Verify that FAVORITE CHANNEL is set to MANUAL in the CHANNEL SET UP menu. (see "Setting FAVORITE CHANNEL manually" on page 37)

Some video sources do not appear when you press TV/VIDEO

- Ensure that VIDEO LABEL is not set to SKIP. (see "VIDEO LABEL" on page 40)

Recording through SELECT OUT does not function properly when recording in PIP or P&P mode

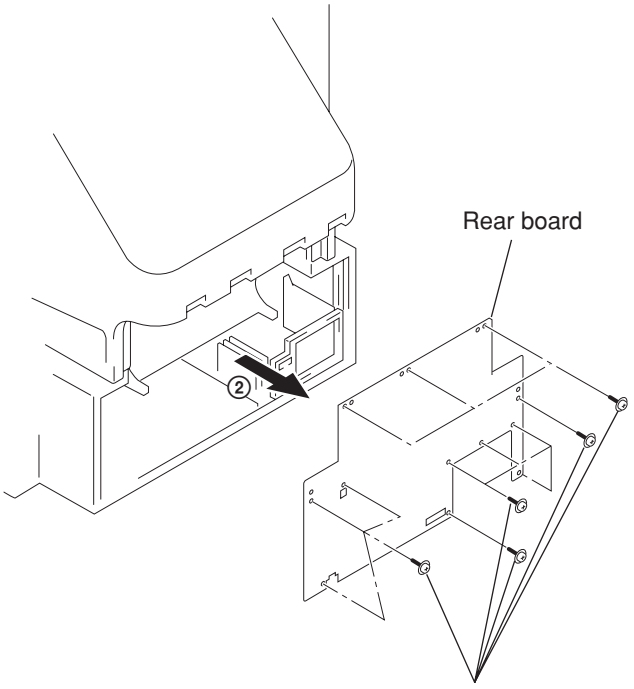
- SELECT OUT will not record both images in PIP or P&P. Only the main picture will be recorded.
- If you are recording the main picture and you switch to the sound of the sub picture using the AUDIO button, the main picture will be recorded with sound from the other program.

Cannot play shooting games

- Some shooting games which involve pointing a light beam at the TV screen with an electronic gun or rifle cannot be used with this projection TV. For details, see the instruction manual supplied with the video game software.

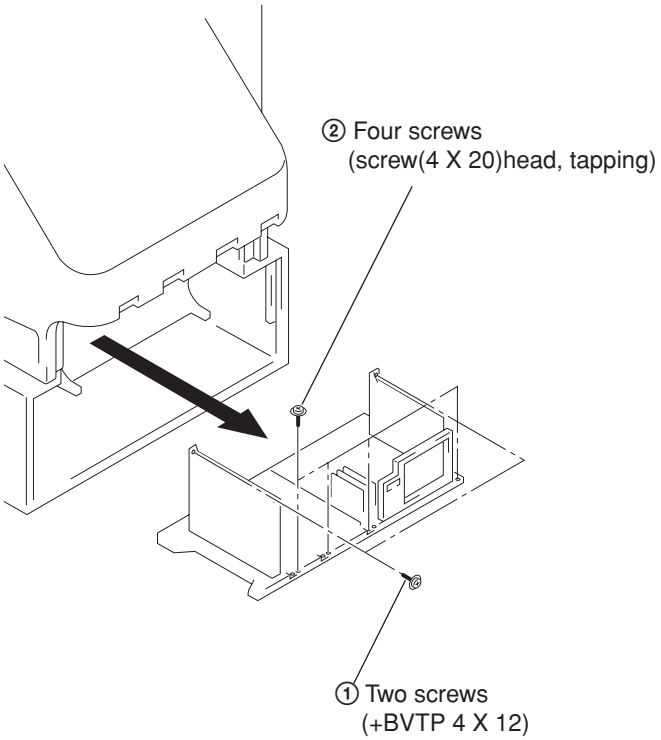
SECTION 2
DISASSEMBLY

2-1. REAR BOARD REMOVAL

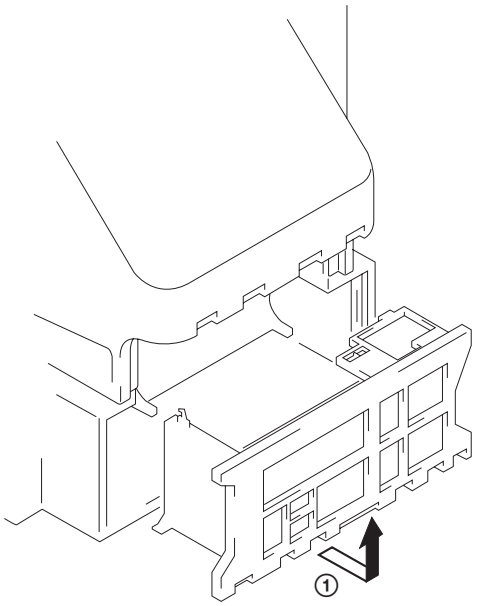


① Fourteen screws (KP-HR53KR1)
Thirteen screws (KP-HR61KR1)
(screw(4 X 20), tapping)

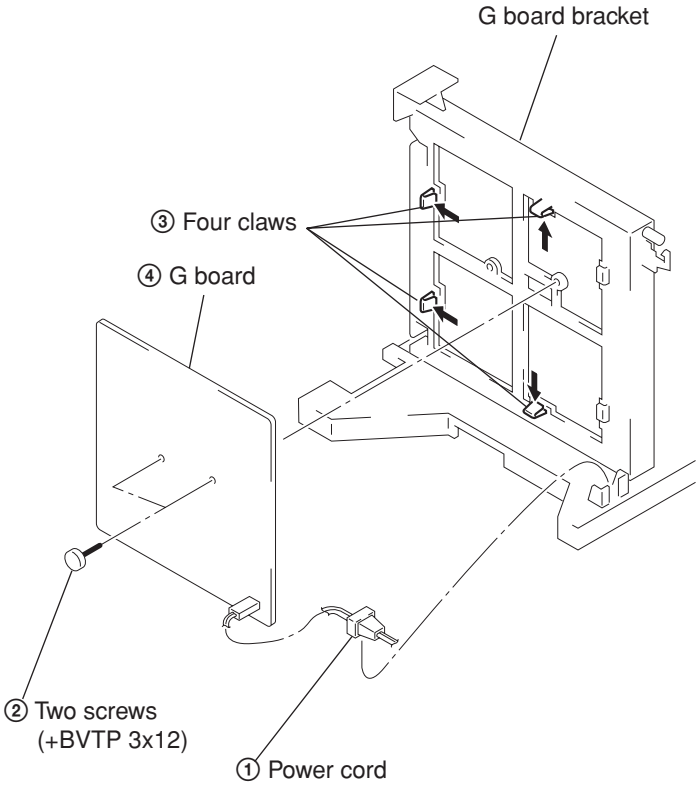
2-2. MAIN BRACKET REMOVAL



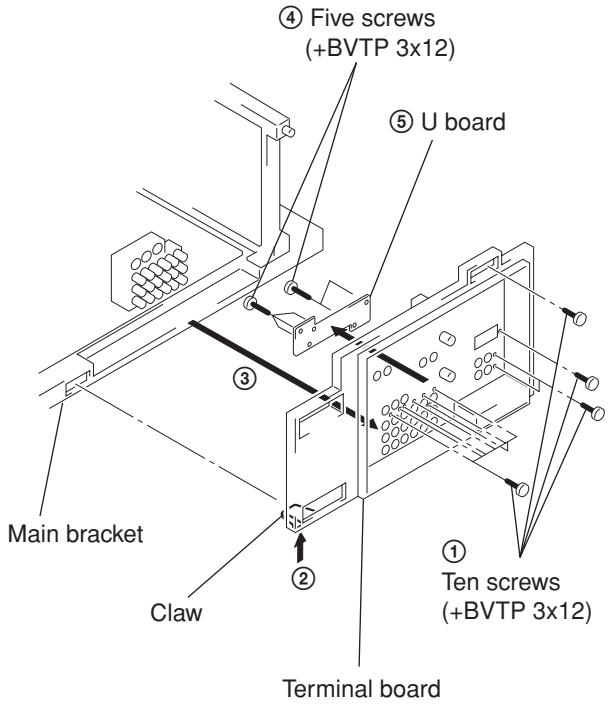
2-3. SERVICE POSITION



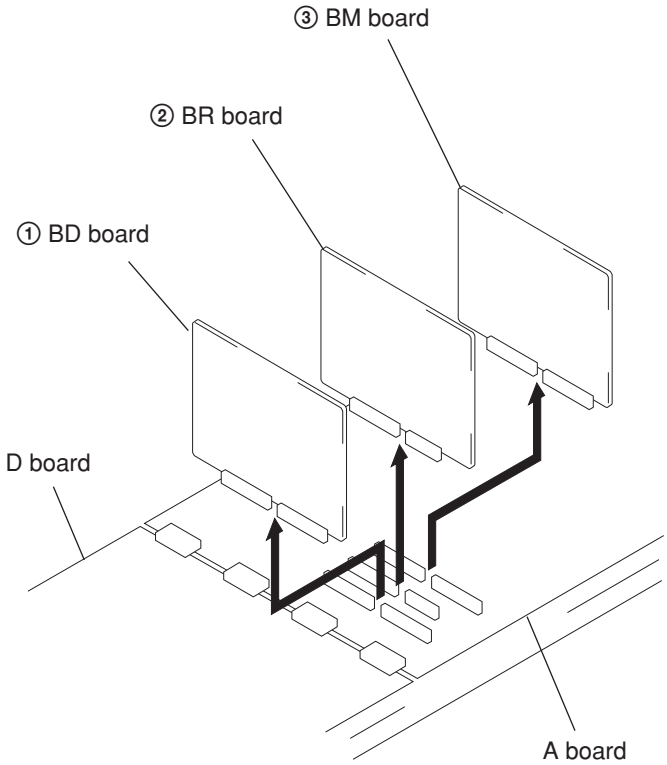
2-4. G BOARD REMOVAL



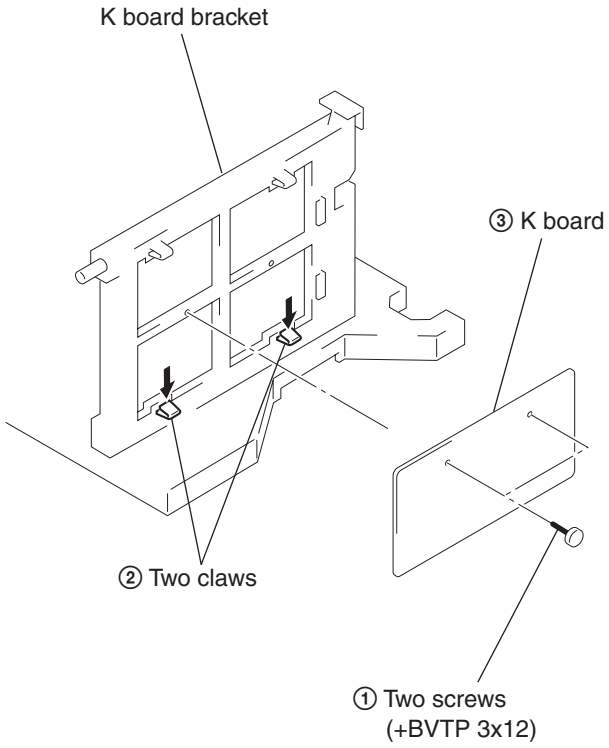
2-5. TERMINAL BOARD AND U BOARD REMOVAL



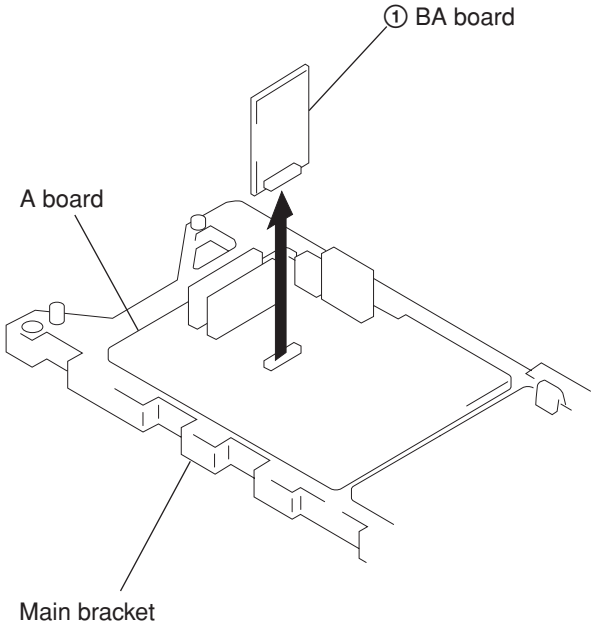
2-6. BM, BR AND BD BOARD REMOVAL



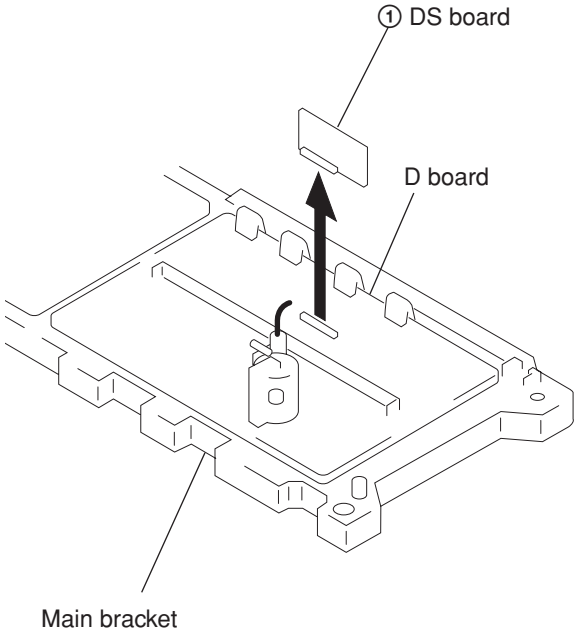
2-7. K BOARD REMOVAL



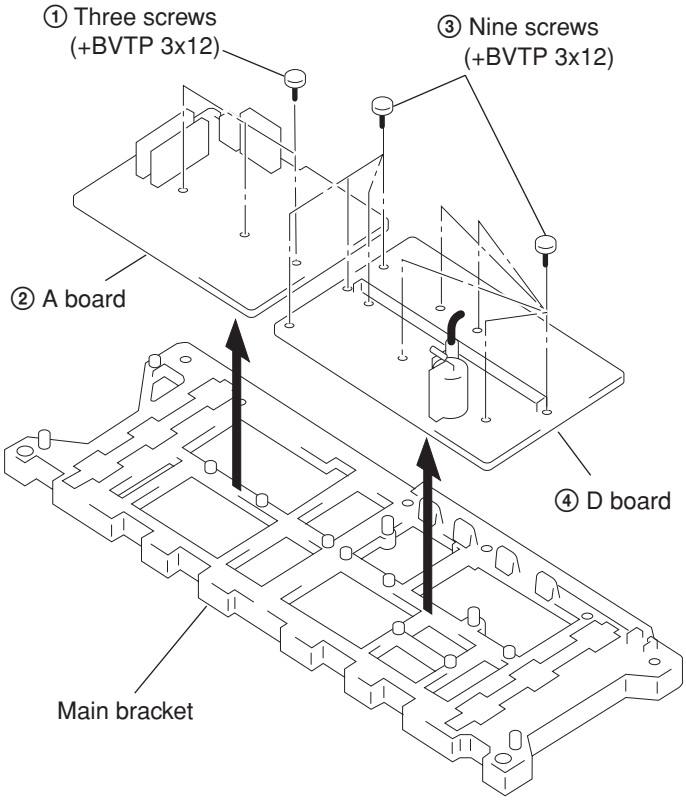
2-8. BA BOARD REMOVAL



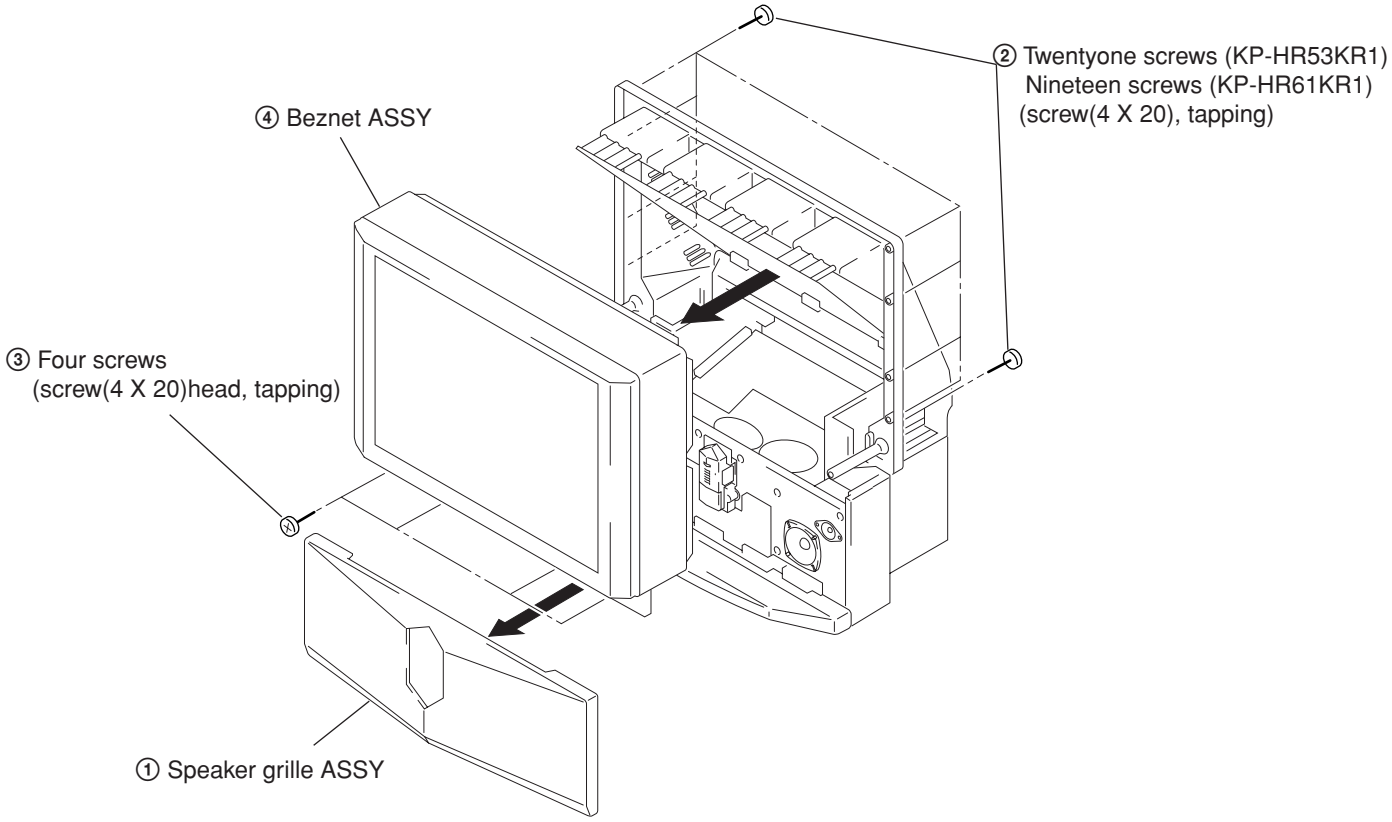
2-9. DS BOARD REMOVAL



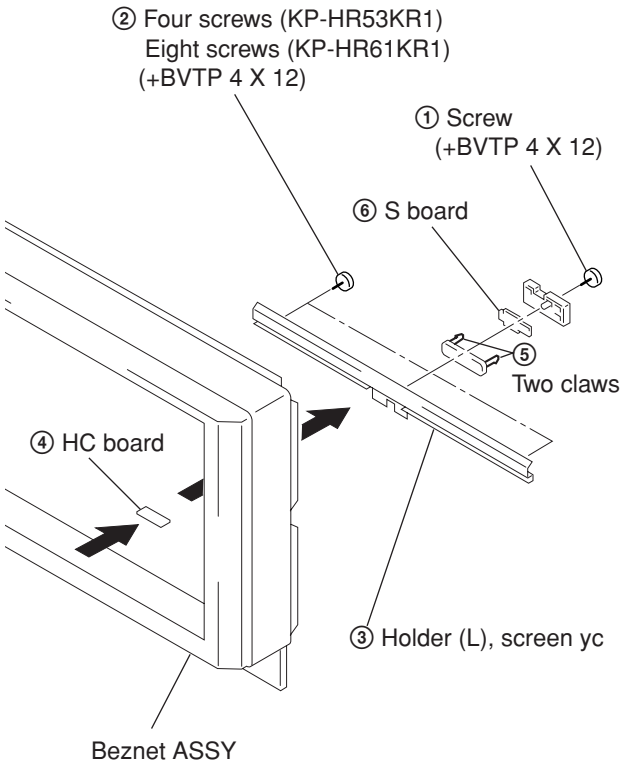
2-10. A AND D BOARD REMOVAL



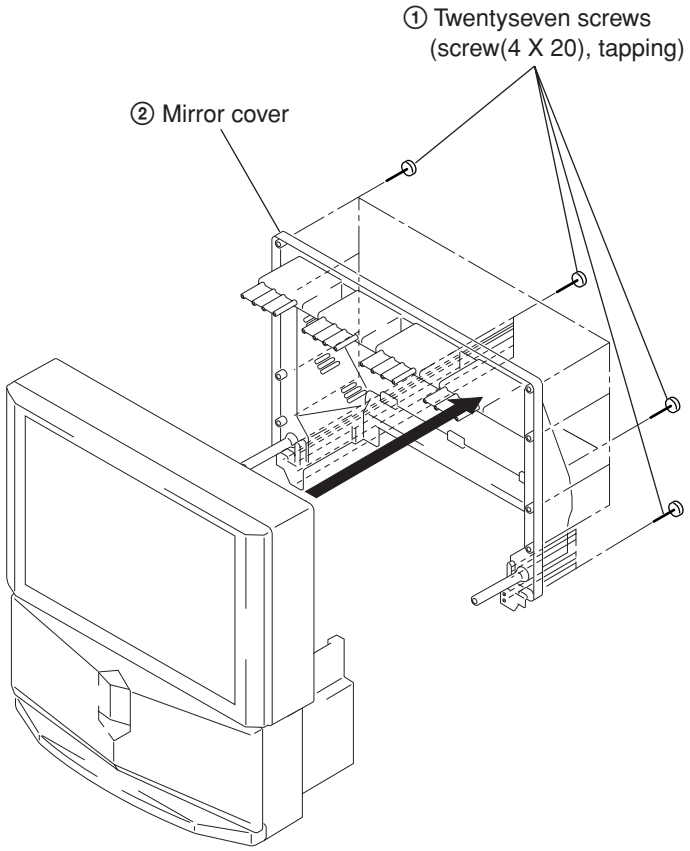
2-11.BEZNET ASSY REMOVAL



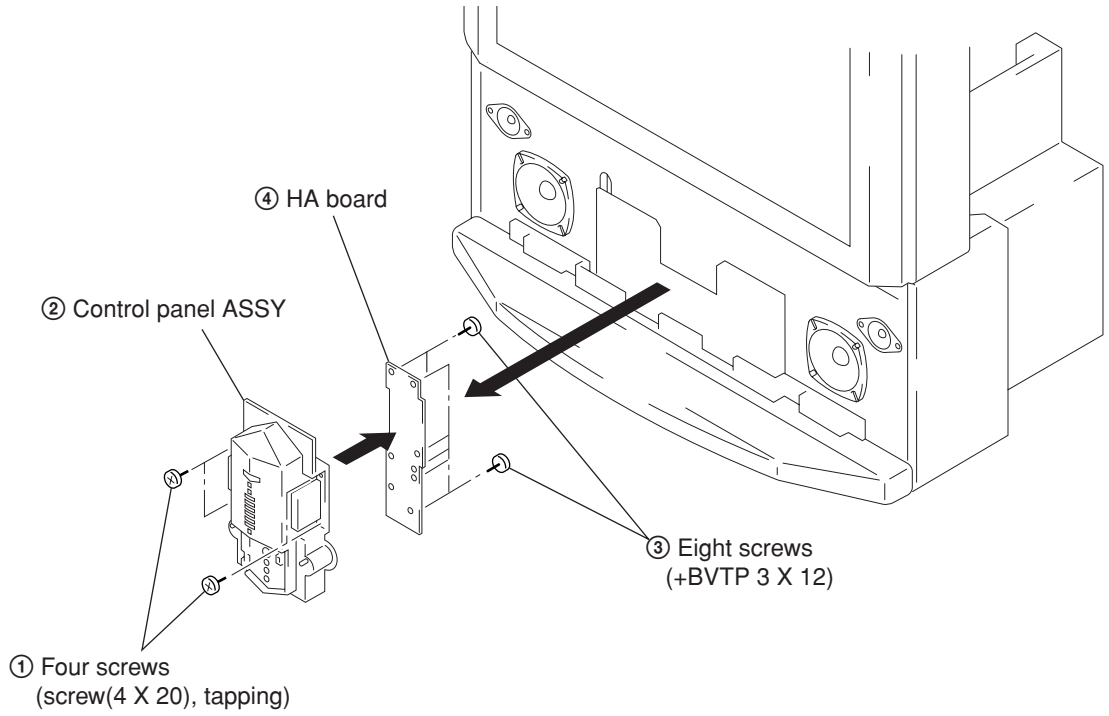
2-12. HC AND S BOARD REMOVAL



2-13. MIRROR COVER REMOVAL

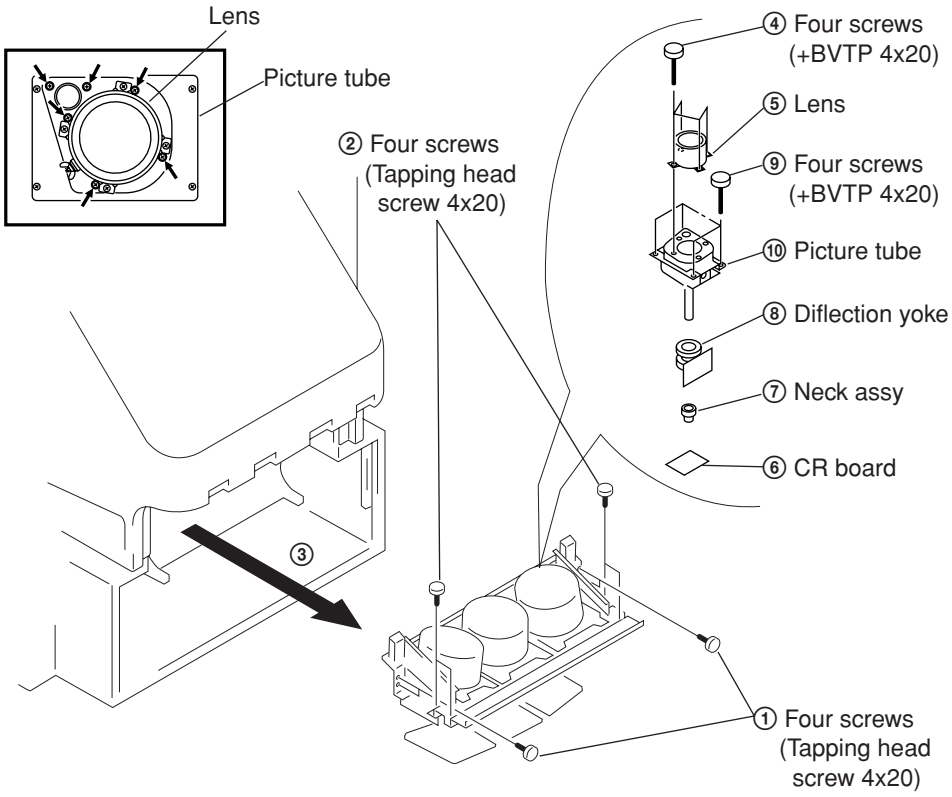


2-14. HA BOARD REMOVAL

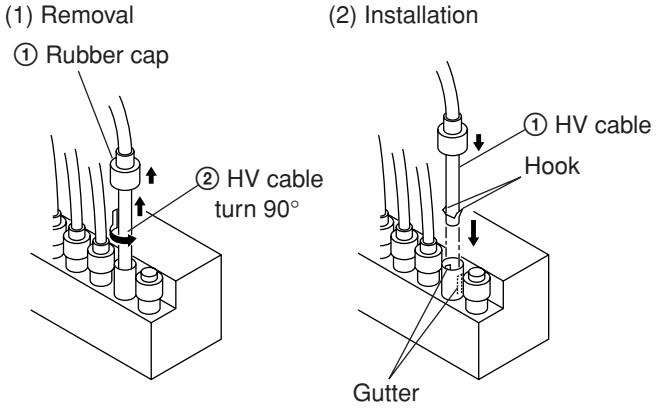


2-15. PICTURE TUBE REMOVAL

CAUTION: Removing the arrow-marked screws is strictly prohibited. If removed, it may cause liquid spill.



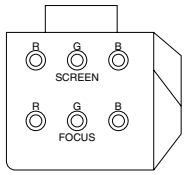
2-16. HIGH-VOLTAGE CABLE INSTALLATION AND REMOVAL



SECTION 3
SET-UP ADJUSTMENTS

3-1. SCREEN VOLTAGE ADJUSTMENT (COARSE ADJUSTMENT)

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



FOCUS block

Fig. 3-1

3-2. SCREEN (G2) ADJUSTMENT (FINE ADJUSTMENT)

Fine Mode is recommended to set screen controls to their optimal condition. It is necessary to build the simple jig, illustrated below, using 3-watt resistors. Please note, that if the proper voltage is not obtained with their listed values, resistors, then please increase or decrease one of the values in the resistor network to obtain the correct voltage.

1. Select VIDEO1 mode without signals.
2. Connect G2 JIG.
3. SW on JIG.
4. Connect an oscilloscope to the TP7103(KR), TP7203(KG) and TP7303(KB) of CR board, CG board and CB board.
5. Adjust R, G and B screen voltage to 175 ± 2V with screen VR on the Focus block.

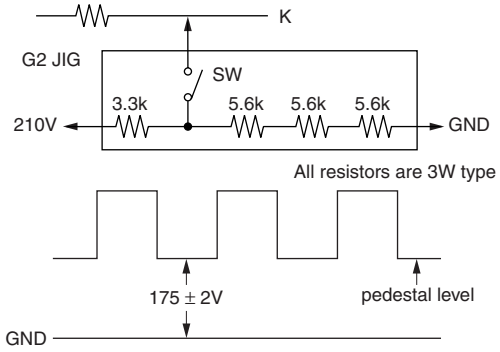


Fig. 3-2

3-3. DEFLECTION YOKE TILT ADJUSTMENT

1. Receive the Monoscope signal.
2. Set in service mode.
3. Cover the both red and blue picture lenses with the lens caps to show only the green color.
4. Loosen the deflection yoke set screw and align the tilt of the Deflection Yoke so that the bars at the center of the monoscope pattern are horizontal.
5. After aligning the deflection yoke, fasten it securely to the funnel-shaped portion (neck) of the CRT.
6. The tilt of the deflection yoke for red is aligned in the mode Cover the both green and blue picture lenses with the lens caps and the tilt of the deflection yoke for blue is aligned with in the mode Cover the both green and red picture lenses with the lens caps is aligned the same as was done for green.

Note: Instead of items 3 and 6, you can cut off the unnecessary color beams by controlling the service mode MCP1 07 RON, 08GON, and 09BON.

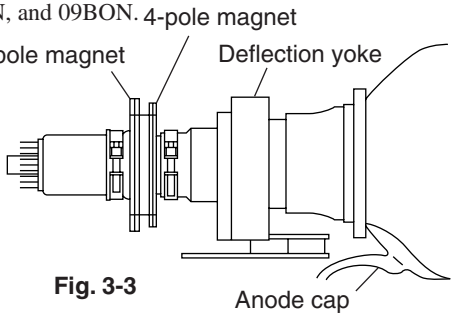


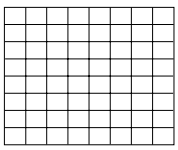
Fig. 3-3

3-4. FOCUS LENS ADJUSTMENT

In this adjustment, use the remote commander in the service mode.

For details of the usage of the service mode and the remote commander, please refer the item 3-9. ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER.

1. Loosen the lens screw.
2. Set to the service mode.
3. Receive the all-white signal.
4. Cover the both red and blue picture lenses with the lens caps to show only the green color.
5. Set to PJE, and press 6 to display the test signal (crosshatch)“ on the screen.
6. Turn the green lens to adjust to the optimum focus point with the test signal.
7. Tighten the lens screw.
8. Cover the both green and blue picture lenses with the lens caps to show only the red color.
9. Set to PJE, and press 6 to display the test signal (crosshatch)“ on the screen.
10. Adjust red CRT lens just the same as green.
11. Cover the both green and red picture lenses with the lens caps to show only the blue color.



Test signal

Fig. 3-4

12. Set to PJE, and press 6 to display the test signal (crosshatch)“ on the screen.
13. Adjust blue CRT lens just the same as green.
14. After adjusting the items 3-5. Focus VR Adjustment, 3-6. 2-Pole Magnet Adjustment and 3-7. 4-Pole Magnet Adjustment, adjust again to the optimum focus point.

*: Every time you press 6, the test signal changes to “crosshatch+video signal” - “dots+video signal” - “crosshach(black)” - “dots(black)” - off.

Note: Instead of items 4, 8 and 11, you can cut off the unnecessary color beams by controlling the service mode MCP1 07 RON, 08GON, and 09BON.

3-5. FOCUS VR ADJUSTMENT

1. Set to the service mode.
2. Receive the all-white signal.
3. Cover the both red and blue picture lenses with the lens caps to show only the green color.
4. Set to PJE, and press 6 to display the test signal (crosshatch) on the screen.
5. Turn the green focus VR on the focus block to adjust to the optimum focus point with the test signal.
6. Cover the both green and blue picture lenses with the lens caps to show only the red color.
7. Set to PJE, and press 6 to display the test signal (crosshatch) on the screen.
8. Turn the red focus VR on the focus block to adjust to the optimum focus point with the test signal.
9. Cover the both green and red picture lenses with the lens caps to show only the blue color.
10. Set to PJE, and press 6 to display the test signal (crosshatch) on the screen.
11. Turn the blue focus VR on the focus block to adjust to the optimum focus point with the test signal.
12. After adjusting the items 3-4. Focus Lens Adjustment, 3-6. 2-Pole Magnet Adjustment and 3-7. 4-Pole Magnet Adjustment, adjust again to the optimum focus point.

Note: Instead of items 3, 6 and 9, you can cut off the unnecessary color beams by controlling the service mode MCP1 07 RON, 08 GON, and 09 BON.

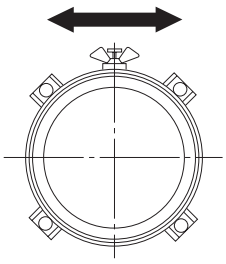


Fig. 3-5

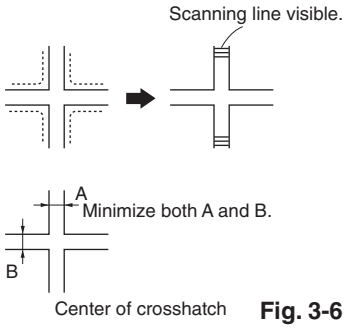


Fig. 3-6

3-6. 2-POLE MAGNET ADJUSTMENT (GREEN,RED)

1. Receive the Dot signal.
2. Set in service mode.
3. Cover the both red and blue picture lenses with the lens caps to show only the green color.
4. Turn the green focus VR on the focus block to the right and set to overfocus to enlarge the spot.
5. Now align the 2-Pole Magnet so that the enlarged spot is in the center of the Just Focus spot.
6. Align the green focus VR and set for just (precise) focus.
7. Perform the same alignment for red.

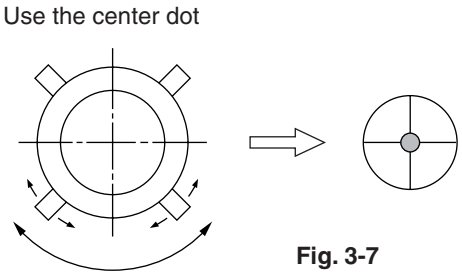


Fig. 3-7

3-7. 4-POLE MAGNET ADJUSTMENT

1. Receive the Dot signal.
2. Set in service mode.
3. Cover the both red and blue picture lenses with the lens caps to show only the green color.
4. Turn the green focus VR on the focus block to the left and set to underfocus to enlarge the spot.
5. Now align the 4-Pole Magnet so that the enlarged spot becomes a perfect circle for green and red.
6. Perform the same alignment for blue.

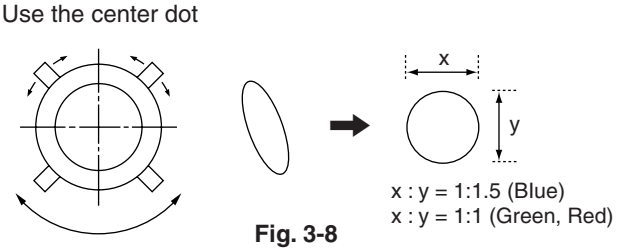


Fig. 3-8

3-8. DEFOCUS ADJUSTMENT (BLUE)

Note: Please adjust the blue dot to be slightly larger than red and green dots. This adjustment provides a more pleasing picture to the customer.

1. Select the video menu and set the mode to “VIVID” mode.
2. Set to the service mode.
3. Change TV mode to the video input mode.
4. Set to PJE, and press 6 to display the test signal (dots) on the screen.
5. Turn the blue focus VR on the focus block to adjust to the diameter of the dots as shown in the figure below.

[Focus adjustment point]

Inch	53"	61"
L	8	9

Fig. 3-9

3-9. ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER

By using Remote Commander (RM-Y902K),all circuit adjustments can be made.

NOTE : Test Equipment Required.

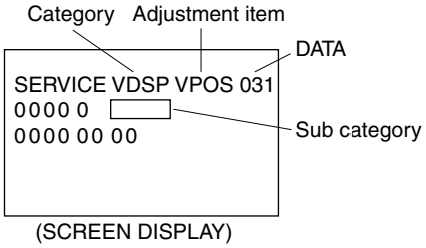
1. Pattern Generator (with component outputs)
2. Frequency counter
3. Digital multimeter
4. Audio oscillator

1. METHOD OF SETTING THE SERVICE ADJUSTMENT MODE

SERVICE MODE PROCEDURE

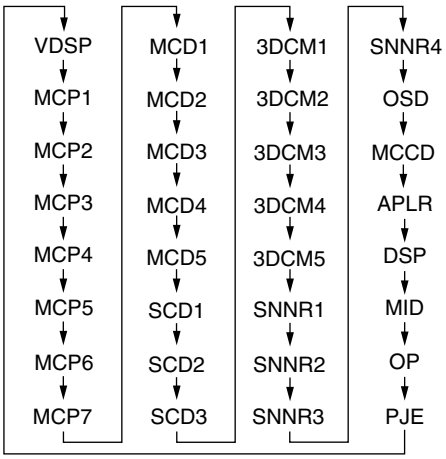
1. Standby mode. (Power off)
2. [DISPLAY] → [5] → [VOL (+)] → [TV POWER] on the Remote Commander.
   (Press each button within a second.)

SERVICE MODE ADJUSTMENT



(SCREEN DISPLAY)

3. The SCREEN displays the item being adjusted.
4. Press [1] or [4] on the Remote Commander to select the adjustment item.
5. Press [3] or [6] on the Remote Commander to change the data.
6. Press [2] or [5] on the Remote Commander to select the category.
   Every time you press 2(Category up), Service mode changes in the order as shown below.



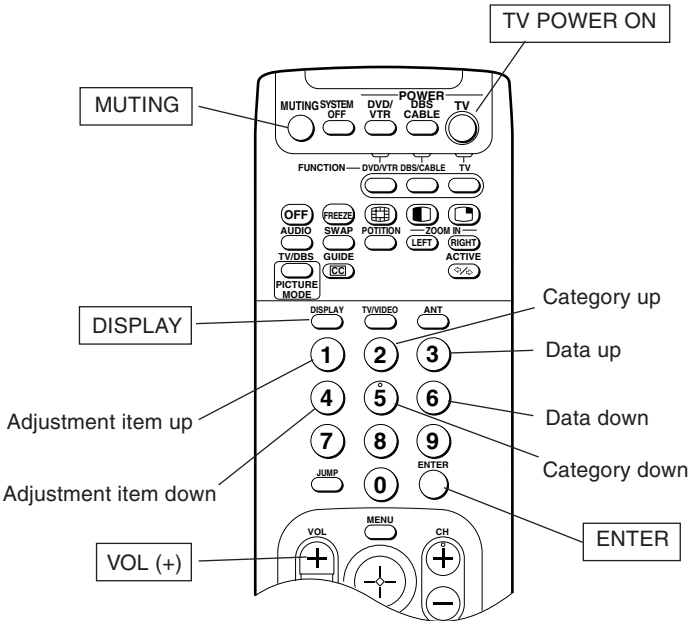
7. If you want to recover the latest values press [0] then [ENTER] to read the memory.
8. Press [MUTING] then [ENTER] to write into memory.
9. Turn power off.

Note: Press [8] then [ENTER] on the Remote Commander to initialize or turn set off and on to exit.

2. MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, remove the plug from AC outlet, and then replace the plug in AC outlet again.
2. Turn the power switch ON and set to Service Mode.
3. Call the adjusted items again and confirm they were adjusted.

3. ADJUSTING BUTTONS AND INDICATOR



RM-Y902K

Note : When the PJE mode is activated, which displays an internally generated signal, several buttons on the remote commander will have different functions than listed above. Therefore, when in the PJE mode, refer to page 45 for button functions.

4. SERVICE MODE LIST

Note: • shaded items are fixed. There is no need to change data. Others are different a little in the sets individually. Basically, there is no need to change data, too.
• Usually, there is no need to adjust except for VDSP and PJE. Use data as a reference in case of replacing printed circuit boards or devices.
( ) in the category column is the sub category.

VDSP (Vertical Deflection Signal Processor)

( ) : 1080I

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
VDSP	00	VPOS	31	0–63	V SHIFT	CXD2018Q
	01	VANG	7	0–15	V ANGLE	
	02	VBOW	7	0–15	V BOW	
	03	VLIN	7	0–15	V LIN	
	04	VSIZ	31 (10)	0–63	V SIZE	
	05	VSCO	7	0–15	S CORRECTION	
	06	HPOS	41	0–63	H SHIFT	
	07	HSIZ	31	0–63	H SIZE	
	08	HKEY	11	0–15	TILT	
	09	PAMP	15	0–63	PIN AMP	
	10	UPIN	7	0–15	UPPER CORNER PIN	
	11	LPIN	7	0–15	LOWER CORNER PIN	

MCP (Multi Component Processor)

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
MCP 1	00	RDRV	31	0–63	R DRIVE	CXA2101AQ
	01	GDRV	31	0–63	G DRIVE	
	02	BDRV	31	0–63	B DRIVE	
	03	RCUT	31	0–63	R CUTOFF	
	04	GCUT	10	0–63	G CUTOFF	
	05	BCUT	31	0–63	B CUTOFF	
	06	P ON	1	0,1	PICON	
	07	R ON	1	0,1	R ON	
	08	G ON	1	0,1	G ON	
	09	B ON	1	0,1	B ON	
	10	PABL	15	0–15	PEAK ABL LEVEL	
	11	LTIL	0	0–3	LTI LEVEL	
	12	CTIL	0	0,1	CTI LEVEL	
	13	LIMT	2	0–3	INPUT LEVEL LIMIT	
	14	CBO1	7	0–15	CB OFFSET 1	
	15	CRO1	7	0–15	CR OFFSET 1	
	16	CBO2	7	0–15	CB OFFSET 2	
	17	CRO2	7	0–15	CR OFFSET 2	
	18	DCTR	1	0–3	DC TRAN	
	19	DPIC	1	0–3	D PIC	
	20	ABLT	3	0–3	ABL T/H (ACTIVE ON 16 :9)	
	21	VTC	2	0–3	V SYNC SFP TC	
	22	CBO3	7	0–15	CB OFFSET3	
	23	CRO3	7	0–15	CR OFFSET3	

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
MCP2	00	SCON	5	0-15	SUB CONTRAST	
(DRC/480ip)	01	SBRT	31	0-63	SUB BRIGHTNESS	
	02	SHUE	7	0-15	SUB HUE	
	03	SCOL	12	0-15	SUB COLOR	
MCP3	00	SCON	3	0-15	SUB CONTRAST	
(1080i)	01	SBRT	31	0-63	SUB BRIGHTNESS	
	02	SHUE	7	0-15	SUB HUE	
	03	SCOL	5	0-15	SUB COLOR	
MCP 4	00	SSHP	3	0–3	SUB SHARPNESS	
(TV)	01	SHPF	1	0–3	SHARPNESS f0	
	02	VMDL	3	0–3	VM DELAY	
	03	SYS	1	0–3	SYSTEM	
	04	PREO	0	0–3	PRE/OVER RATIO	
MCP 5	00	SSHP	3	0–3	SUB SHARPNESS	
(VIDEO)	01	SHPF	1	0–3	SHARPNESS f0	
	02	VMDL	3	0–3	VM DELAY	
	03	SYS	1	0–3	SYSTEM	
	04	PREO	1	0–3	PRE/OVER RATIO	
MCP6	00	SSHP	3	0–3	SUB SHARPNESS	
(1080 - 480)	01	SHPF	2	0–3	SHARPNESS f0	
	02	VMDL	3	0–3	VM DELAY	
	03	SYS	1	0–3	SYSTEM	
	04	PREO	0	0–3	PRE/OVER RATIO	
MCP 7	00	UPIC	63	0–63	USER PICTURE(VIVID)	
			44	0–63	USER PICTURE(STANDARD)	
			40	0–63	USER PICTURE(MOVIE)	
			38	0–63	USER PICTURE(GAME)	
			38	0–63	USER PICTURE(PRO)	
	01	UBRT	28	0–63	USER BRIGHTNESS(VIVID)	
			31	0–63	USER BRIGHTNESS(STANDARD)	
			31	0–63	USER BRIGHTNESS(MOVIE)	
			27	0–63	USER BRIGHTNESS(GANE)	
			31	0–63	USER BRIGHTNESS(PRO)	
	02	UCOL	31	0–63	USER COLOR(VIVID)	
			31	0–63	USER COLOR(STANDARD)	
			31	0–63	USER COLOR(MOVIE)	
			31	0–63	USER COLOR(GAME)	
			31	0–63	USER COLOR(PRO)	
	03	USHP	40	0–63	USER SHARPNESS(VIVID)	
			40	0–63	USER SHARPNESS(STANDARD)	
			33	0–63	USER SHARPNESS(MOVIE)	
			36	0–63	USER SHARPNESS(GAME)	
			40	0–63	USER SHARPNESS(PRO)	

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
	04	UTRI	2	0–3	USER TRINITONE(VIVID)	
			1	0–3	USER TRINITONE(STANDARD)	
			0	0–3	USER TRINITONE(MOVIE)	
			2	0–3	USER TRINITONE(GAME)	
			1	0–3	USER TRINITONE(PRO)	
	05	UNR	0	0–3	USER NR MODE(VIVID)	
			0	0–3	USER NR MODE(STANDARD)	
			0	0–3	USER NR MODE(MOVIE)	
			0	0–3	USER NR MODE(GAME)	
			0	0–3	USER NR MODE(PRO)	
	06	UDPI	1	0,1	USER DYNAMIC PICTURE(VIVID)	
			1	0,1	USER DYNAMIC PICTURE(STANDARD)	
			0	0,1	USER DYNAMIC PICTURE(MOVIE)	
			0	0,1	USER DYNAMIC PICTURE(GAME)	
			1	0,1	USER DYNAMIC PICTURE(PRO)	
	07	UVML	3	0–3	USER VM LEVEL(VIVID)	
			2	0–3	USER VM LEVEL(STANDARD)	
			1	0–3	USER VM LEVEL(MOVIE)	
			3	0–3	USER VM LEVEL(GAME)	
			1	0–3	USER VM LEVEL(PRO)	

MCD (Main Chroma Decoder)

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
MCD 1 (DRC-TV)	00	SCON	5	0–15	SUB CONTRAST	CXA2019AQ
	01	SHUE	6	0–15	SUB HUE	
	02	SCOL	4	0–15	SUB COLOR	
MCD 2 (P&P-TV)	00	SCON	5	0–15	SUB CONTRAST	
	01	SHUE	6	0–15	SUB HUE	
	02	SCOL	5	0–15	SUB COLOR	
MCD 3 (DRC-VIDEO)	00	SCON	5	0–15	SUB CONTRAST	
	01	SHUE	8	0–15	SUB HUE	
	02	SCOL	5	0–15	SUB COLOR	
MCD 4 (P&P-VIDEO)	00	SCON	5	0–15	SUB CONTRAST	
	01	SHUE	7	0–15	SUB HUE	
	02	SCOL	7	0–15	SUB COLOR	
MCD 5	00	MYDR	3	0–31	YDRIVE	
	01	Y2DR	31	0–31	Y2 DRIVE	
	02	U2DR	15	0–31	U2 DRIVE	
	03	V2DR	15	0–31	V2 DRIVE	
	04	MUPE	7	0–15	U PED	
	05	MVPE	7	0–15	V PED	
	06	U2PE	7	0–15	U2 PED	
	07	V2PE	7	0–15	V2 PED	
	08	DPIC	1	0,1	D PIC	
	09	DCTR	0	0–7	DC TRAN	

SCD (Sub Chroma Decoder)

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
SCD 1 (TV)	00	SCON	6	0–15	SUB CONTRAST(TV)	CXA2019AQ
	01	SHUE	6	0–15	SUB HUE(TV)	
	02	SCOL	6	0–15	SUB COLOR(TV)	
SCD 2 (VIDEO)	00	SCON	6	0–15	SUB CONTRAST(VIDEO)	
	01	SHUE	6	0–15	SUB HUE(VIDEO)	
	02	SCOL	6	0–15	SUB COLOR(VIDEO)	
SCD 3	00	MYDR	3	0–31	YDRIVE	
	01	Y2DR	31	0–31	Y2 DRIVE	
	02	U2DR	15	0–31	U2 DRIVE	
	03	V2DR	15	0–31	V2 DRIVE	
	04	MUPE	7	0–15	U PED	
	05	MVPE	7	0–15	V PED	
	06	U2PE	7	0–15	U2 PED	
	07	V2PE	7	0–15	V2 PED	
	08	DPIC	1	0,1	D PIC	
	09	DCTR	0	0–7	DC TRAN	

3DCM (3D Comb Filter)

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
3DCM 1 (YCS)	00	NRMD	0	0–3	NRMD	UPD64081
	01	DYCO	2	0,1	DYCOR	
	02	DYGA	11	0–15	DYGAIN	
	03	DCCO	1	0,1	DCCOR	
	04	DCGA	12	0–15	DCGAIN	
	05	SELD	1	0,1	SELD	
	06	D2GA	4	0–7	D2GAIN	
3DCM 2 (YCNR)	00	NRMD	3	0–3	NRMD	
	01	DYCO	2	0,1	DYCOR	
	02	DYGA	11	0–15	DYGAIN	
	03	DCCO	1	0,1	DCCOR	
	04	DCGA	12	0–15	DCGAIN	
	05	SELD	1	0,1	SELD	
	06	D2GA	4	0–7	D2GAIN	
3DCM 3 (TV)	00	WSC	0	0–3	WSC	
	01	VTRH	1	0–3	VTRH	
	02	VTRR	1	0–3	VTRR	
	03	LDSR	3	0–3	LDSR	
	04	YPFT	3	0–3	YPFT(TV:NR OFF)	
	05	YPFG	12	0–15	YPFG(TV:NR OFF)	
	06	YPFC	0	0,1	YPFT CORING(TV:NR OFF)	

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
3DCM 4 (VIDEO)	00	WSC	0	0–3	WSC	
	01	VTRH	1	0–3	VTRH	
	02	VTRR	1	0–3	VTRR	
	03	LDSR	1	0–3	LDSR	
	04	YPFT	3	0–3	YPFT(VIDEO:NR OFF)	
	05	YPFG	12	0–15	YPFG(VIDEO:NR OFF)	
	06	YPFC	1	0,1	YPFT CORING(VIDEO:NR OFF)	
3DCM 5	00	MSS	0	0–3	MSS	
	01	YNKI	2	0–3	YNRK & YNRIV	
	02	YNRL	0	0–3	YNRLIM	
	03	CNKI	2	0–3	CNRK & CNRINV	
	04	CNRL	0	0–3	CNRLIM	
	05	V1PS	2	0–3	V1PS	
	06	VEGS	1	0–3	VEGS	
	07	CC3N	0	0,1	CC3N	
	08	HDP	4	0–7	HDP	
	09	CDL	3	0–7	CDL	
	10	HSSL	12	0–15	HSSL	
	11	VSSL	3	0–15	VSSL	
	12	HPLF	1	0,1	HPLLFS	
	13	BPLF	1	0,1	BPLLFS	
	14	FSCF	0	0,1	FSCFG	
	15	EXAD	1	0,1	ADIN	
	16	WSLT	2	3	WSL THRESHHOLD	

SNNR (Signal Noise and Noise Reduction)

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
SNNR1	00	SSHP	3	0-3	MCP SUB SHARPNESS	
	01	LTIL	0	0-3	MCP LTI	
	02	YPFT	3	0-3	3DCM YPFT	
	03	YPFG	10	0-15	3DCM YPFG	
	04	YPFC	0	0,1	3DCM YPFC	
	05	WSLT	15	0-255	3DCM WSL THRESHOLD	
SNNR2	00	SSHP	3	0-3	MCP SUB SHARPNESS	
	01	LTIL	0	0-3	MCP LTI	
	02	YPFT	3	0-3	3DCM YPFT	
	03	YPFG	9	0-15	3DCM YPFG	
	04	YPFC	0	0,1	3DCM YPFC	
	05	WSLT	79	0-255	3DCM WSL THRESHOLD	
SNNR3	00	SSHP	3	0-3	MCP SUB SHARPNESS	
	01	LTIL	0	0-3	MCP LTI	
	02	YPFT	1	0-3	4DCM YPFT	
	03	YPFG	7	0-15	4DCM YPFG	
	04	YPFC	1	0,1	4DCM YPFC	
	05	WSLT	175	0-255	4DCM WSL THRESHOLD	
SNNR4	00	SSHP	2	0-3	MCP SUB SHARPNESS	
	01	LTIL	0	0-3	MCP LTI	
	02	YPFT	1	0-3	4DCM YPFT	
	03	YPFG	5	0-15	4DCM YPFG	
	04	YPFC	1	0,1	4DCM YPFC	

OSD (On Screen Display)

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
OSD	00	FREQ	95	0–255	OSD FREQ	MB90091 & OSD U-COM
	01	HPOS	26	0–255	H POSITION	
	02	VPOS	30	0–255	V POSITION	

MCCD (Main Closed Caption Decoder)

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
MCCD	00	CRIL	2	0–15	CRI COUNT LOW	MAIN U-COM
	01	CFLD	5	0–15	CAPTION FIXED-FIELD COUNT	
	02	CCDI	3	0–7	CCD INT	
	03	CRIP	4	0–7	CRI & PARITY	
	04	CRIT	1	0–3	CRI TIME CONSTANT(MASK=1,OTP=2)	
	05	CSB1	3	0–3	SYNC SLICE BIAS 1	

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
	06	CSB2	4	0–7	SYNC SLICE BIAS 2	
	07	CREP	142	0–255	CRI SIGNAL END POSITION	
	08	CDSD	8	0–31	DATA START DELAY	
	09	CCDS	9	0–31	CAPTION DATA THRESHOLD	
	10	CHMK	42	0–63	P8 HMASK	
	11	CHSY	136	0–255	P8 HSYNC	
	12	CCDH	27	0–63	CCD H POSITION	

APLR (Audio Processor Left and Right)

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
APLR	00	SVOL	0	0–15	SUB VOLUME	TDA7312
	01	ATTL	0	0–15	ATT LCH	
	02	ATTR	0	0–15	ATT RCH	
	03	SBAS	7	0–15	SUB BASS	
	04	STRE	7	0–15	SUB TREBLE	

DSP (Digital Signal Processor)

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
DSP	1	TB0H	48	0-128	TRUSURROUND EFFECT(L+R) COARSE	TC9447F
	2	TB0L	0	0-128	TRUSURROUND EFFECT(L+R) FINE	
	3	TB1H	64	0-128	TRUSURROUND EFFECT(L-R) COARSE	
	4	TB1L	0	0-128	TRUSURROUND EFFECT(L-R) FINE	
	5	TB2H	64	0-128	TRUSURROUND EFFECT(C) COARSE	
	6	TB2L	0	0-128	TRUSURROUND EFFECT(C) FINE	
	7	TBFH	165	0-128	TRUSURROUND EFFECT(S) COARSE	
	8	TBFL	0	0-128	TRUSURROUND EFFECT(S) FINE	
	9	TC0H	90	0-128	TRUSURROUND EFFECT(S) COARSE	
	10	TC0L	126	0-128	TRUSURROUND EFFECT(S) FINE	
	11	TC1H	11	0-128	TRUSURROUND EFFECT(L,R) COARSE	
	12	TC1L	130	0-128	TRUSURROUND EFFECT(L,R) FINE	
	13	SADH	64	0-128	SRS SPACE LEVEL COARSE	
	14	SADL	100	0-128	SRS SPACE LEVEL FINE	
	15	SB0H	92	0-128	SRS CENTER LEVEL COARSE	
	16	SB0L	0	0-128	SRS CENTER LEVEL COARSE	

MID (Multi Image Driver)

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
MID	00	DLYC	3	0–7	DELAY(Y OUTPUT DELAY)	CXD2079Q & MID U-COM
	01	YSDY	1	0–7	YSDY(YS DELAY)	
	02	VJTC	0	0–3	VJITTC(V JITTER MODE)	
	03	HPHA	43	0–255	HPHASA(ACH H PHASE)	
	04	VPHA	11	0–255	VPHASA(ACH V PHASE)	
	05	DLYA	4	0–7	DELAYA(ACH Y DELAY)	
	06	HPOA	87	0–255	HPOSIA(ACH H POSITION:NOT USE)	
	07	VPOA	64	0–255	VPOSIA(ACH V POSITION:NOT USE)	
	08	HPHB	43	0–255	HPHASB(BCH H PHASE)	
	09	VPHB	11	0–255	VPHAHB(BCH V PHASE)	
	10	DLYB	4	0–7	DELAYB(BCH Y DELAY)	
	11	HPOB	4	0–15	HPOSIB(BCH H POSITION:PIP ONLY)	
	12	VPOB	6	0–15	VPOSIB(BCH V POSITION:PIP ONLY)	
	13	BPDY	0	0–15	BPDELAY(BP DELAY)	
	14	ADSW	1	0,1	A/BCH ADC INT/EXT(EXT=1)	
	15	OSDH	25	0–63	OSD H POSITION	
	16	OSDV	7	0–63	OSD V POSITION	
	17	WCOL	2	0–3	WKCA/WKCB(A/BCH WINDOW COLOR)	

OP (Option)

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
OP	00	AGCA	152	0–255	AGC ATT LEVEL	MAIN U-COM
	01	16:9	0	0,1	16:9 ON/OFF (ON = 1)	
	02	DRCP	0	0,1	DRC INTERLACE/PROGRESSIVE	
	03	1080	0	0,1	FORCED 1080I(VIDEO5)	
	04	IDXT	2	0-15	INDEX CH SCAN TIME	
	05	VPI	0	0-3	PICTURE BOOSTER SETTING(VIVID)	
	06	SPI	9	0-15	PICTURE BOOSTER SETTING(STAVDARD)	

PJE (Projection TV Engine)

( ) : 1080I < > 16 :9

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
PJE	00	FDIS	00	0,1	FINE ADJUST DISPLAY ON(ON=1, OFF=0)	CM0006AF & PJED U-COM
	01	OSDH	32	0–255	PJED OSD H POSITION	
	02	OSDV	55	0–255	PJED OSD V POSITION	
	03	FVST	51(00)	0–255	FINE V START LINE	
	04	V1ST	00	0–255	V1 START	
	05	V1CU	31(29)	0–255	V1 COUNT UP	
	06	COHP	00	0–255	COARSE H PHASE	
	07	FIHP	206(205)	0–255	FINE H PHASE	
	08	TPHP	49(55)<46>	0–255	TEST PATTERN H PHASE	

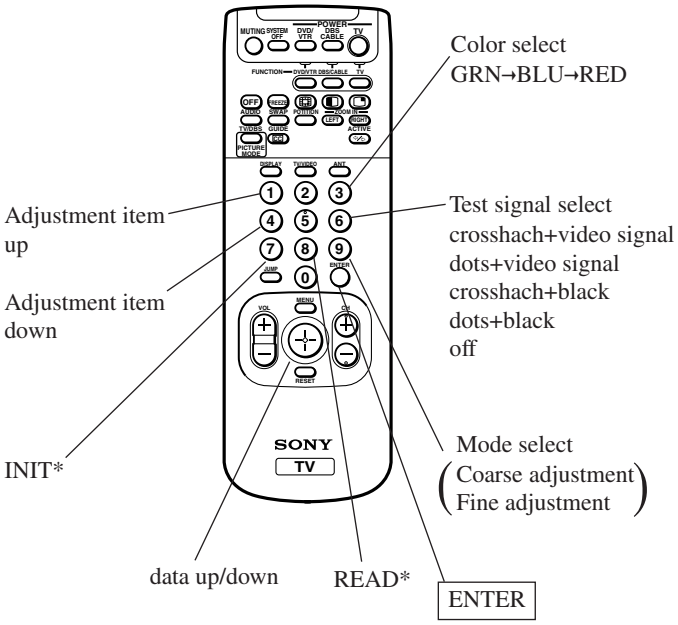
( ) : 1080I < > 16 :9

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
	09	DFHP	00(251)	0–255	DF H PHASE	
	10	DFHG	95	-128–+127	DF H GAIN	
	11	DFVG	15	-128–+127	DF V GAIN	
	12	PWM1	00	0–255	PWM1	
	13	PWM2	29	0–255	PWM2	
	14	HBLD	222(217)	0–255	HBLKOUT H DELAY	
	15	HBLW	00(10)<10>	0–63	HBLKOUT PULSE WIDTH	
	16	BLKP	44(75)<49>	0-255	V BLANKING PULSE	
	17	COGV	00	-127–+127	GV CENTER OFFSET OF AUTO REGI	
	18	CORV	00	-127–+127	RV CENTER OFFSET OF AUTO REGI	
	19	COBV	00	-127–+127	BV CENTER OFFSET OF AUTO REGI	
	20	COGH	00	-127–+127	GH CENTER OFFSET OF AUTO REGI	
	21	CORH	00	-127–+127	RH CENTER OFFSET OF AUTO REGI	
	22	COBH	00	-127–+127	BH CENTER OFFSET OF AUTO REGI	
	23	SOGV	00	-127–+127	GV SKEW OFFSET OF AUTO REGI	
	24	SORV	00	-127–+127	RV SKEW OFFSET OF AUTO REGI	
	25	SOBV	00	-127–+127	BV SKEW OFFSET OF AUTO REGI	
	26	SOGH	00	-127–+127	GH SKEW OFFSET OF AUTO REGI	
	27	SORH	00	-127–+127	RH SKEW OFFSET OF AUTO REGI	
	28	SOBH	00	-127–+127	BH SKEW OFFSET OF AUTO REGI	
	29	ERR	00		AUTO REGI ERROR CODE	
	30	ADTM	144	0-255	AUTO REGI AD TIMING	
	31	VUP	01	0-255	AUTO REGI VUP POS	
	32	VMID	114(120)<120>	0-255	AUTO REGI VMID POS	
	33	VLOW	224(238)<240>	0-255	AUTO REGI VLOW POS	
	34	HPR	01	0-255	AUTO REGI H POS REGIS	
	35	SFTF	00	0,1	V SIZE SHIFT FAST	
	36	ACTL	00	0-255	ACTIVE CRT TIME(LOW BYTE)	
	37	ACTH	00	0-255	ACTIVE CRT TIME(HIGH BYTE)	
		CENT	000 / 000	-512 - +511	COARSE GREEN H/V CENT	
		SKEW	000 / 000	-512 - +511	COARSE GREEN H/V SKEW	
	GRN	SIZE	000 / 000	-512 - +511	COARSE GREEN H/V SIZE	
		LIN	XXXX / XXXX	-	COARSE GREEN H/V LIN	
		KEY	XXXX / XXXX	-	COARSE GREEN H/V KEY	
		PIN	XXXX/ 000	-512 - +511	COARSE GREEN H/V PIN	
		CENT	000 / 000	-512 - +511	COARSE BLUE H/V CENT	
		SKEW	000 / 000	-512 - +511	COARSE BLUE H/V SKEW	
	BLU	SIZE	000 / 000	-512 - +511	COARSE BLUE H/V SIZE	
		LIN	000 / XXXX	-512 - +511	COARSE BLUE H/V LIN	
		KEY	000 / 000	-512 - +511	COARSE BLUE H/V KEY	
		PIN	XXXX / 000	-512 - +511	COARSE BLUE H/V PIN	

Category	Item number	Adjustment item	Standard data	Data range	Note	Device
		CENT	000 / 000	-512 - +511	COARSE RED H/V CENT	
		SKEW	000 / 000	-512 - +511	COARSE RED H/V SKEW	
	RED	SIZE	000 / 000	-512 - +511	COARSE RED H/V SIZE	
		LIN	000 / XXXX	-512 - +511	COARSE RED H/V LIN	
		KEY	XXXX / 000	-512 - +511	COARSE RED H/V KEY	
		PIN	XXXX / 000	-512 - +511	COARSE RED H/V PIN	

3-10. REGISTRATION ADJUSTMENT (PJE)

• FUNCTION OF BUTTONS OF REMOTE COMMANDER FOR PJE MODE.



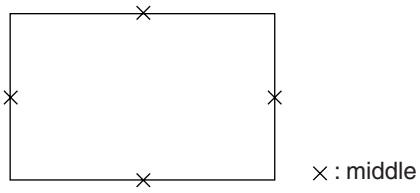
INIT*: Press 7, "INIT" green letters appear on the screen. Then press ENTER, all the PJE data are reset.

READ*: Press 8, "READ" green letters appear on the screen. Then press ENTER, all the PJE default data are restored.

Note : Internal patterns are used for geometry and convergence adjustments. However, sizing and centering must be done with the use of an external generator. The recommended pattern would be a monoscope, or equivalent pattern, which would provide the means to adjust both the linearity and sizing of the picture.

[SETUP FOR ADJUSTMENT]

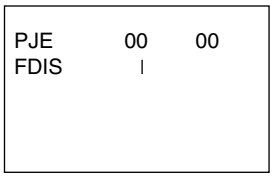
- Current flow in circuit should be stable before attempting adjustment. So wait 5 minutes after turning on the TV power.
- At the 4 insides of the screen, locate the middle. Use a tape measure to identify the middle.



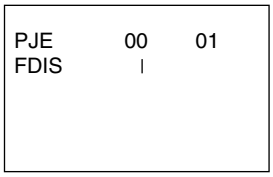
- Separate adjustments are required for multiple modes and should be done in the following order (as each mode requires a separate adjustment):
  - 4 : 3 mode
  - 16 : 9 mode
  - 1080i (Video 5 input mode)

  In all these modes, both color convergence and geometry adjustments are required.
- In order to do the 16 : 9, 1080i (Video 5) mode adjustment, you must follow this procedure:
  Forced 16 : 9 mode setting:
  In the service mode, set OP 01 16 : 9 to 001.
  VIDEO 5 forced 1080i mode setting:
  Connect RCA pin plug to VIDEO IN 5 red pin jack, and set OP 03 1080 to 001 in the service mode.

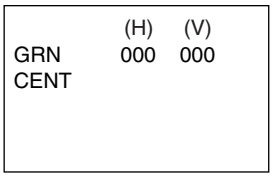
1. Set to the service mode by pressing quickly keys on the remote commander in the standby mode in the following order:
   [DISPLAY] → [5] → [VOL+] → [TV POWER]
2. Change TV mode to the video input mode.
3. Change the VDSP mode to the PJE 00 FDIS.



4. Set FDIS data to “01” to display the registration data of each spot in the fine adjustment.



5. Press [6] to display the test signal (crosshatch) on the screen.
6. Select GRN CENT(*) with the [1] and [4] keys on the remote commander and check that the adjustment data is now “000” both vertically and horizontally.



*: In the factory preset, “GRN CENT” appears on the screen first. In case of other colors “RED” or “BLU”, change color by every pressing [3] key.

7. Cover the both red and blue picture lenses with the lens caps to show only the green color.

SUB DEFLECTION ADJUSTMENT ITEM

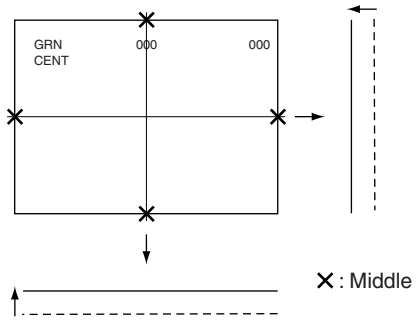
Adjustment O : Yes – : No

Display	Adjustment item	Adjustment type		
		G	R	B
		H/V	H/V	H/V
CENT	CENT	O/O	O/O	O/O
SKEW	SKEW	O/O	O/O	O/O
SIZE	SIZE	O/O	O/O	O/O
LIN	LIN	–/–	O/–	O/–
KEY	KEY	–/–	–/O	–/O
PIN	PIN	–/O	–/O	–/O

[GREEN REGISTRATION ADJUSTMENT]

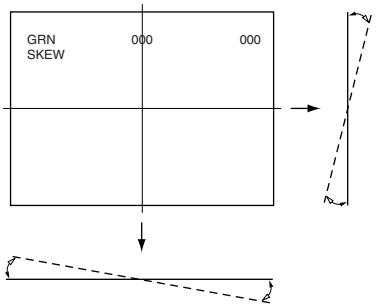
<GREEN CENTER, SIZE>

1. Select GRN CENT or GRN SIZE with the 1 and 4 keys on the remote commander.
2. Adjust the center of crosshatch line goes the middle vertically and horizontally (GRN CENT) and set the size correctly (GRN SIZE) with the joystick on the remote commander.



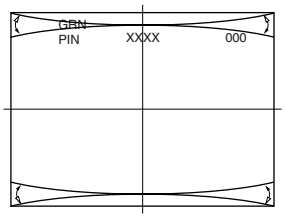
<GREEN SKEW>

1. Select GRN SKEW with the 1 and 4 keys on the remote commander.
2. Adjust the crosshatch line goes straight vertically and horizontally with the joystick on the remote commander.



<GREEN PINCUSHION>

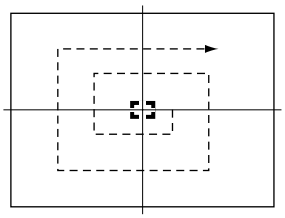
1. Select GRN PIN with the 1 and 4 keys on the remote commander.
2. Adjust the crosshatch line goes straight horizontally with the joystick on the remote commander.



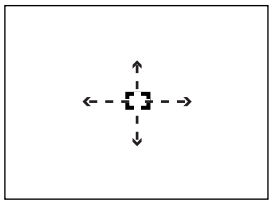
Note : These are required when either severe miss-adjustment or data loss occurred.

<FINE ADJUSTMENT>

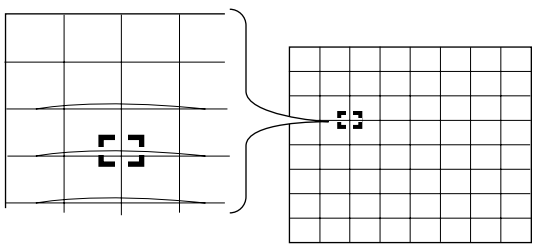
1. Press 9 key on the remote commander to shift to the fine adjustment mode.
   The green cursor (in the GRN mode) appears on the center of the screen.
2. Use the 1 and 4 keys or the joystick on the remote commander, move the cursor (see below) everywhere you want to adjust and adjust with the joystic keys on the remote commander.
   Marker movement by the 1 and 4 keys:



   Press once the joystick the cursor turns green to white.
   Then you can move the cursor up and down left and right every where you want.



   Press once again the joystick the cursor stops and returns green, you can adjust around the cursor.



3. Press 9 key on the remote commander to shift to the coarse adjustment mode.

[RED REGISTRATION ADJUSTMENT]

<RED CENTER, SKEW>

1. Cover the blue picture lens with the lens cap to show the green and red colors.
2. Press [3] key on the remote commander to shift the GRN mode to the RED mode.
3. Select RED CENT or RED SKEW with the [1] and [4] keys on the remote commander and adjust while tracking each other alternately.
4. Adjust the red crosshatch lines go straight vertically and horizontally and overlaps the green lines with the joystick on the remote commander.

<RED SIZE, LINEARITY>

1. Select RED SIZE (vertically and horizontally) or RED LIN (vertically) with the [1] and [4] keys on the remote commander and adjust while tracking each other alternately.
2. Adjust the red crosshatch lines go straight vertically and horizontally and overlaps the green lines with the joystick on the remote commander.

<RED KEY, PINCUSHION>

1. Select RED KEY or PINCUSHION with the [1] and [4] keys on the remote commander and adjust while tracking each other alternately.
2. Adjust the red crosshatch lines go straight horizontally and overlaps the green lines
   with the joystick on the remote commander.

<FINE ADJUSTMENT>

1. Press [9] key on the remote commander to shift to the fine adjustment mode.
   The red cursor (in the RED mode) appears on the center of the screen.
2. Use the [1] and [4] keys or the joystick on the remote commander, move the cursor everywhere you want to adjust and adjust with the joystick on the remote commander.

[BLUE REGISTRATION ADJUSTMENT]

1. Remove the lens cap from the blue picture lens to show full color.
2. Press [3] key on the remote commander to shift the RED mode to the BLU mode.
3. Adjust BLU CENT, BLU SKEW, BLU SIZE, BLU LIN, BLU KEY and BLU PIN in the same procedure of the red registration adjustment.

[FINAL CHECK]

1. Store the new adjustment (offset) value on the remote control by pressing [MUTING] and [ENTER].
2. Press the FLASH FOCUS button on the front panel.
   (The Offset value is now automatically stored.)
3. Check that no error message appears.
   If an error message appears, recheck.

Note : In case of replacing CRTs, adjust the set-up adjustments (items 3-1 to 3-8) and the registration adjustment (item 3-10). In case of replacing two or three CRTs at the same time, replace and adjust one by one.

3-11. AUTO REGISTRATION ERROR CODE LIST

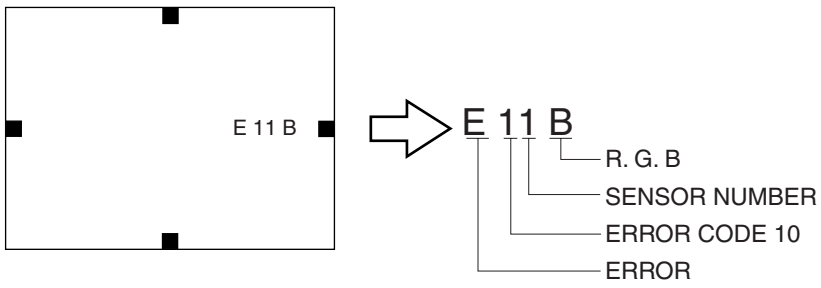
If an error code is displayed after the set has been fully adjusted, correctly, please check the following items: position, tilt and sizing. If either of these adjustments are off, even slightly, the auto-registration pattern will not hit the four sensors properly. This occurs when the internal generator patterns is being flashed on the screen for the sensors to read. Therefore, auto registration (called auto-focus) cannot operate properly causing an error code to be displayed. In order for this function to operate properly, correct position, tilt and size must be adjusted properly.

[ERROR CODE LIST]

ERROR CODE	DISCRIPTION	NOTE
00	No Error	
10	Sensor Output Level Low	* Check wiring, beam position, sensor. 0 : Upper Center 1 : Middle Left 2 : Middle Right 3 : Lower Center
20	Sensor Output Level High	* Check OP-amp circuit. 0 : Upper Center 1 : Middle Left 2 : Middle Right 3 : Lower Center
30	Adjustment Loop Counter Overflow	* Check the registring information on the convergence board.
40	Regi Data Overflow	* Check the convergence yoke driver ICs.
50	Regi Data Overflow	
60	Offset Overflow	* Convergence patterns displayed are out of normal range.
70	Offset Overflow	

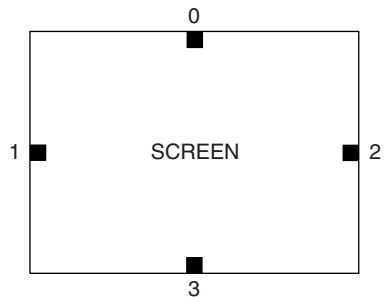
* In case of multiple error, last error is displayed.

• ERROR CODE SCREEN DISPLAY



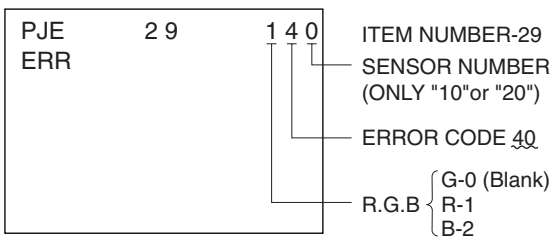
* Error code will be displayed on center of screen for 3 seconds.

[SENSOR POSITION]



0 : UPPER SENSOR
1 : LEFT SENSOR
2 : RIGHT SENSOR
3 : LOWER SENSOR

• ERROR CODE DISPLAY IN REGI SERVICE MODE



SECTION 4
SAFETY RELATED ADJUSTMENTS

[D BOARD]

4-1. HV REGULATION CIRCUIT CHECK AND ADJUSTMENT

When replacing the following components marked with ◪ on the schematic diagram always check HV regulation, and if necessary re-adjust.

⊠: R8196, R8201
◪: C8018,C8064, C8066, C8070, C8074, C8076,C8082
D8042
IC8002, IC8007, IC8008
Q8022
R8093, R8095, R8096, R8105, R8108
R8112, R8113, R8114, R8115, R8126
R8128, R8136, R8138, R8139, R8154
R8157, R8168, R8173, R8174, R8177
R8178, R8195, R8196, R8201
T8002 (LOT), T8003 (FBT)
HV BLOCK, D BOARD

OPERATION CHECK

1. Connect a HV static voltmeter to the unconnected plug of the high-voltage block.
2. Connect a 33kΩ variable resistor, set to maximum value, across CN8008.
3. Power on the set.
4. Receive dot signal pattern.
5. Gradually lower the value of the variable resistor and check that the hold-down circuit operates at a static voltmeter reading of 31.0 ± 0.5kV dc when the raster disappears.

HV HOLD-DOWN ADJUSTMENT

1. REPART STEPS ① ~ ⑤ as above.
2. Just at the point hold-down circuit begins to operate switch off the set.
3. Remove the VR connected across CN8008, and measure it's resistance.
4. Solder a resistor value, nearest to the measured value, across CN8008.
5. Reconfirm operation check.

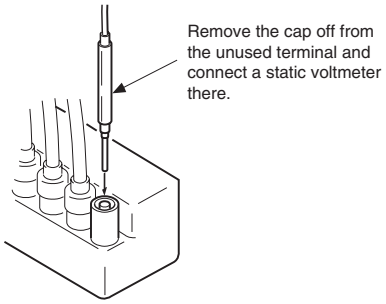


Fig. 4-1

4-2. HV HOLD DOWN CIRCUIT OPERATION CHECK AND ADJUSTMENT

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

⊠: R8194, R8202
◪: C8018, D8026, D8032, D8035, D8050
IC8006, IC8009, IC8010
Q8021, Q8031
R8092, R8094, R8097, R8109, R8110,R8117, R8118, R8121, R8123, R8125, R8129, R8135, R8140, R8155, R8190, R8191, R8192, R8193, R8194, R8198, R8202
T8002 (LOT), T8003(FBT)
HV BLOCK, D BOARD

OPERATION CHECK

1. Connect a HV static voltmeter to the unconnected plug of the high-voltage block.
2. Power on the set.
3. Receive dot signal patterm.
4. Check that the HV static voltmeter is readind 34.0 ± 0.5V dc.

HV Regulation ADJUSTMENT

1. Repart step ① as above.
2. Connect 33kΩ variable resistor, set to maximum value, to CN8008.
3. Power on the set.
4. Receive dot signal pattern.
5. Gradually lower the value of the variable resistor until the static voltmeter is reading 34.0 ± 0.5 kVdc.
6. Switch off the swt.
7. Remove the VR connected across CN8008, and measure its value.
8. Solder a resistor value, nearest to the measured value, across CN8008.
9. Reconfirm operation check.

[G BOARD]

4-3. +B MAX VOLTAGE CONFIRMATION

The following adjustments should always be performed when replacing IC6101.

1. Supply 220 ± 2.0VAC to variable autotransformer.
2. Receive dot signal pattern and set the PICTURE and BRIGHTNESS settings to their minimum.
3. Confirm the voltage of TP +B 135V is less than 137.0Vdc.
4. If step 4 not satisfied , replace IC6101 and repeat above steps.

4-4. +B OVP CONFIRMATION

1. Connect a voltmeter to TP. OVP and ground.
2. Supply 220VAC to variable autotransformer.
3. Power on the Set.
4. Supply 150VDC to TP. OVP.
5. Check the OVP is activated.

SECTION 5
CIRCUIT ADJUSTMENTS

[MCD MODE]

5-1. TV INPUT SUB CONTRAST ADJUSTMENT (MCD1-SCON)

1. Receive the color-bar signal.
2. Set to service mode.
3. Connect an oscilloscope between pin ② of CN511 (A board) and ground.
4. Select " MCD1-SCON ", and adjust so that the waveform level is 0.525 ± 0.015Vp-p.
5. Write the data into memory.
   MUTING → ENTER

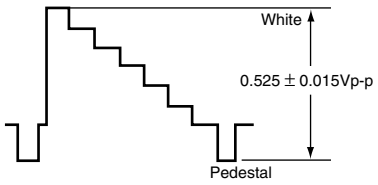


Fig. 5-1

5-2. VIDEO INPUT SUB CONTRAST ADJUSTMENT (MCD3-SCON)

1. VIDEO 1 input the color-bar signal.
2. Set to service mode.
3. Connect an oscilloscope between pin ② of CN511 (A board) and ground.
4. Select " MCD3-SCON ", and adjust so that the waveform level is 0.525 ± 0.015Vp-p.
5. Write the data into memory.
   MUTING → ENTER

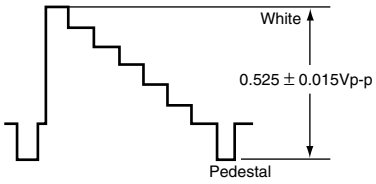


Fig. 5-2

5-3. P & P SUB CONTRAST ADJUSTMENT (MCD2-SCON)

1. Receive the signal.
   TV terminal (main) : color-bar signal
   VIDEO terminal (sub) : no signal
2. Set to P & P mode, set to service mode.
3. Connect an oscilloscope between pin ⑳ of CN513 (A board) and ground.
4. Select " MCD2-SCON ", and adjust so that the waveform level is 0.525 ± 0.015Vp-p.
5. Write the data into memory.
   MUTING → ENTER

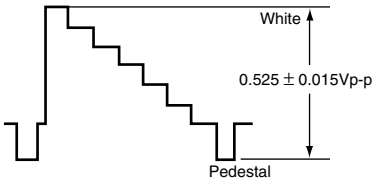


Fig. 5-3

5-4. P & P SUB CONTRAST ADJUSTMENT (MCD4-SCON)

1. Receive the signal.
   TV terminal (sub) : no signal
   VIDEO terminal (main) : color-bar signal
2. Set to P & P mode, and set to service mode.
3. Connect an oscilloscope between pin ⑳ of CN513 (A board) and ground.
4. Select " MCD4-SCON ", and adjust so that the waveform level is 0.525 ± 0.015Vp-p.
5. Write the data into memory.
   MUTING → ENTER

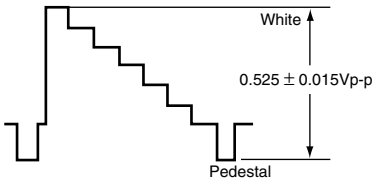


Fig. 5-4

5-5. SUB-CONTRAST ADJUSTMENT (MCP2-SCON)

1. Receive the color-bar signal.
2. VIDEO MODE : PRO
   PICTURE : maximum
   COLOR : minimum
   BRIGHTNESS : center
   TRINITONE : medium
   SERVICE DATA MCP2-SBRT : 25
3. Set to service mode.
4. Connect an oscilloscope between pin ③ of CN503 (A board) connecter and ground.
5. Select " MCP 2-SCON ", and adjust so that the waveform level is 1.750 ± 0.030Vp-p.
6. Write the data into memory.
   MUTING → ENTER

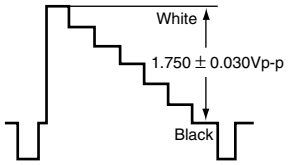


Fig. 5-5

5-6. VIDEO 5 INPUT SUB-CONTRAST ADJUSTMENT (MCP3-SCON)

1. VIDEO 5 input the color-bar signal.
2. PICTURE : maximum
   COLOR : minimum
   BRIGHTNESS : center
   TRINITONE : medium
   SERVICE DATA MCP3-SBRT : 25
3. Set to service mode.
4. Connect an oscilloscope between pin ③ of CN503 (A board) connecter and ground.
5. Select " MCP 3-SCON ", and adjust so that the waveform level is 1.750 ± 0.030Vp-p.
6. Write the data into memory.
   MUTING → ENTER

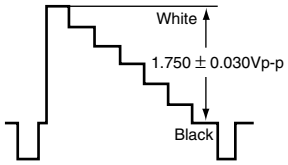


Fig. 5-6

5-7. SUB-HUE AND SUB-COLOR ADJUSTMENT (MCD1-SHUE, SCOL)

1. Receive the color-bar signal.
2. VIDEO MODE : PRO
   PICTURE : maximum
   COLOR : center
   HUE : HUE
   BRIGHTNESS : center
   TRINITONE : medium
   SERVICE DATA MCP1-SBRT : 25
   MCP1-SHUE : 7
   MCP1-SCOL : 12
3. Set to service mode.
4. Connect an oscilloscope between pin ⑤ of CN503 (A board) connecter and ground.
5. Select " MCD 1-SHUE, SCOL ", and adjust them to have VB1 = VB4 and VB2 = VB3 in the waveform levels.
6. Write the data into memory.
   MUTING → ENTER

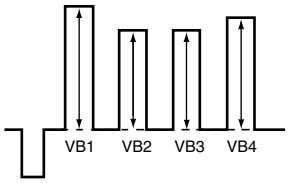


Fig. 5-7

5-8. VIDEO INPUT SUB-HUE AND SUB-COLOR ADJUSTMENT (MCD3-SHUE, SCOL)

1. VIDEO input the color-bar signal.
2. VIDEO MODE : PRO
   PICTURE : maximum
   COLOR : center
   HUE : HUE
   BRIGHTNESS : center
   TRINITONE : medium
   SERVICE DATA MCP1-SBRT : 25
   MCP1-SHUE : 7
   MCP1-SCOL : 12
3. Set to service mode.
4. Connect an oscilloscope between pin ⑤ of CN503 (A board) connecter and ground.
5. Select " MCD 3-SHUE, SCOL ", and adjust them to have VB1 = VB4 and VB2 = VB3 in the waveform levels.
6. Write the data into memory.
   MUTING → ENTER

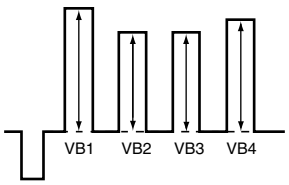


Fig. 5-8

5-9. P & P SUB-HUE AND SUB-COLOR ADJUSTMENT (MCD2-SHUE, SCOL)

1. Receive the signal.
   TV terminal (main) : color-bar signal
   VIDEO terminal (sub) : no signal
2. VIDEO MODE : PRO
   PICTURE : maximum
   COLOR : center
   HUE : HUE
   BRIGHTNESS : center
   TRINITONE : medium
   SERVICE DATA MCP1-SBRT : 25
   MCP1-SHUE : 7
   MCP1-SCOL : 12
3. Set to P & P mode, set to service mode.
4. Connect an oscilloscope between pin ⑤ of CN503 (A board) connecter and ground.
5. Select " MCD 2-SHUE, SCOL ", and adjust them to have VB1 = VB4 and VB2 = VB3 in the waveform levels.
6. Write the data into memory.
   MUTING → ENTER

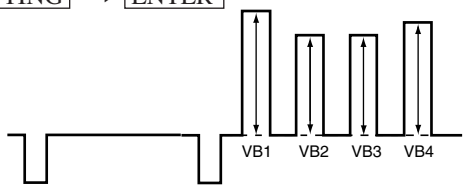


Fig. 5-9

5-10. P & P SUB-HUE AND SUB-COLOR ADJUSTMENT (MCD4-SHUE, SCOL)

1. Receive the signal.
   VIDEO terminal (main) : color-bar signal
   VIDEO terminal (sub) : no signal
2. VIDEO MODE : PRO
   PICTURE : maximum
   COLOR : center
   HUE : HUE
   BRIGHTNESS : center
   TRINITONE : medium
   SERVICE DATA MCP1-SBRT : 25
   MCP1-SHUE : 7
   MCP1-SCOL :12
3. Set to P & P mode, set to service mode.
4. Connect an oscilloscope between pin ⑤ of CN503 (A board) connecter and ground.
5. Select " MCD 4-SHUE, SCOL ", and adjust them to have VB1 = VB4 and VB2 = VB3 in the waveform levels.
6. Write the data into memory.
   MUTING → ENTER

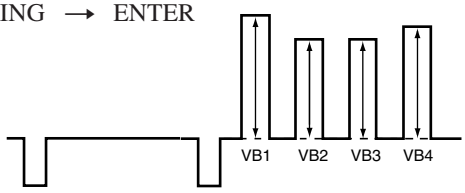


Fig. 5-10

[SCD MODE]

5-11. P & P SUB CONTRAST ADJUSTMENT (SCD1-SCON)

1. Receive the signal.
   TV terminal (sub) : color-bar signal
   VIDEO terminal (main) : no signal
2. Set to P & P mode, and set to service mode.
3. Connect an oscilloscope between pin ⑳ of CN513 (A board) and ground.
4. Select " SCD1-SCON ", and adjust so that the wave from level is 0.525 ± 0.015Vp-p.
5. Write the data into memory.
   MUTING → ENTER

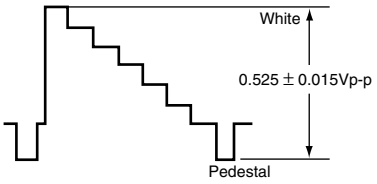


Fig. 5-11

5-12. P & P SUB CONTRAST ADJUSTMENT (SCD2-SCON)

1. Receive the signal.
   TV terminal (main) : no signal
   VIDEO terminal (sub) : color-bar signal
2. Set to P & P mode, and set to service mode.
3. Connect an oscilloscope between pin ⑳ of CN513 (A board) and ground.
4. Select " SCD2-SCON ", and adjust so that the wave from level is 0.525 ± 0.015Vp-p.
5. Write the data into memory.
   MUTING → ENTER

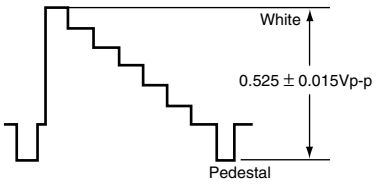


Fig. 5-12

5-13. P&P SUB-HUE AND SUB-COLOR ADJUSTMENT (SCD1-HUE, SCOL)

1. Receive the signal.
   VIDEO terminal (main) : no signal
   VIDEO terminal (sub) : color-bar signal
2. VIDEO MODE : PRO
   PICTURE : maximum
   COLOR : center
   HUE : HUE
   BRIGHTNESS : center
   TRINITONE : medium
   SERVICE DATA MCP1-SBRT : 25
   MCP1-SHUE : 7
   MCP1-SCOL : 12
3. Set to service mode.
4. Connect an oscilloscope between pin ⑤ of CN503 (A board) connecter and ground.
5. Select " SCD1-SHUE, SCOL ", and adjust them to have VB1 = VB4 and VB2 = VB3 in the waveform levels.
6. Write the data into memory.
   MUTING → ENTER

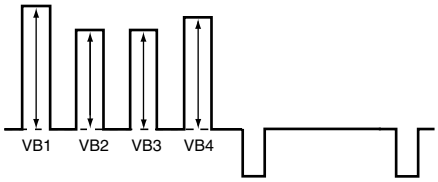


Fig. 5-11

5-14. P&P SUB-HUE AND SUB-COLOR ADJUSTMENT (SCD2-HUE, SCOL)

1. Receive the color-bar signal.
   VIDEO terminal (main) : no signal
   VIDEO terminal (sub) : color-bar signal
2. VIDEO MODE : PRO
   PICTURE : maximum
   COLOR : center
   HUE : HUE
   BRIGHTNESS : center
   TRINITONE : medium
   SERVICE DATA MCP1-SBRT : 25
   MCP1-SHUE : 7
   MCP1-SCOL : 12
3. Set to service mode.
4. Connect an oscilloscope between pin ⑤ of CN503 (A board) connecter and ground.
5. Select " SCD2-HUE, SCOL ", and adjust them to have VB1 = VB4 and VB2 = VB3 in the waveform levels.
6. Write the data into memory.
   MUTING → ENTER

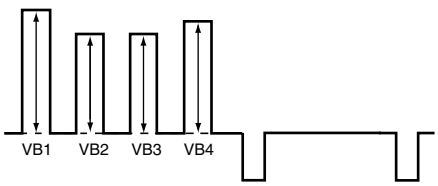


Fig. 5-12

5-15. VIDEO 5 INPUT SUB-HUE AND SUB-COLOR ADJUSTMENT (MCP3-SHUE, SCOL)

1. VIDEO 5 input the color-bar signal.
2. PICTURE : maximum
   COLOR : minimum
   HUE : HUE
   BRIGHTNESS : center
   TRINITONE : medium
   SERVICE DATA MCP3-SBRT : 25
3. Set to service mode.
4. Connect an oscilloscope between pin ③ of CN503 (A board) connecter and ground.
5. Select " MCP 3-SHUE, SCOL ", and adjust them to have VB1 = VB4 and VB2 = VB3 in the waveform levels.
6. Write the data into memory.
   MUTING → ENTER

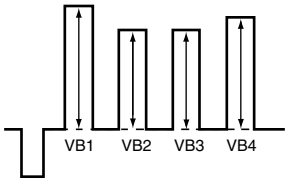
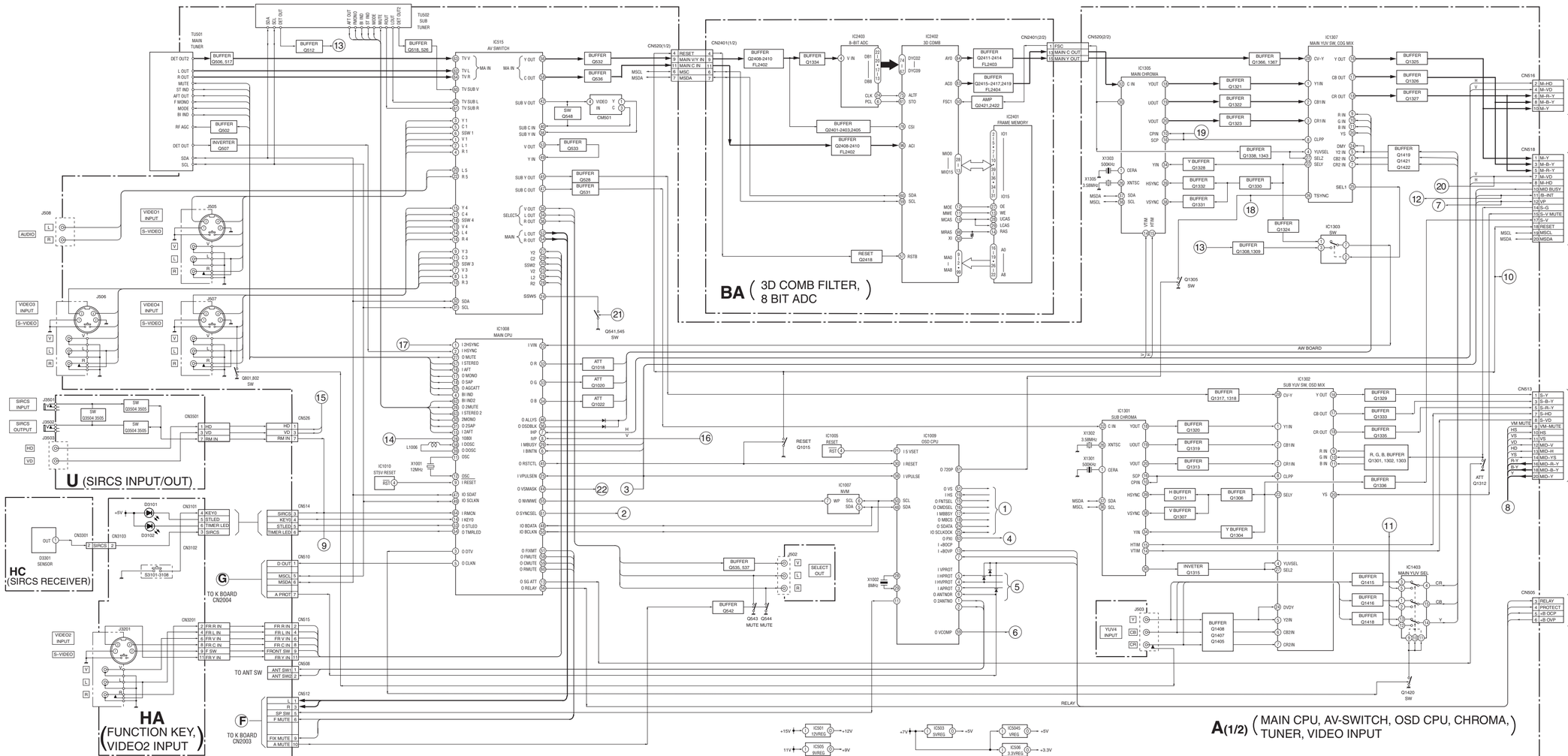


Fig. 5-15

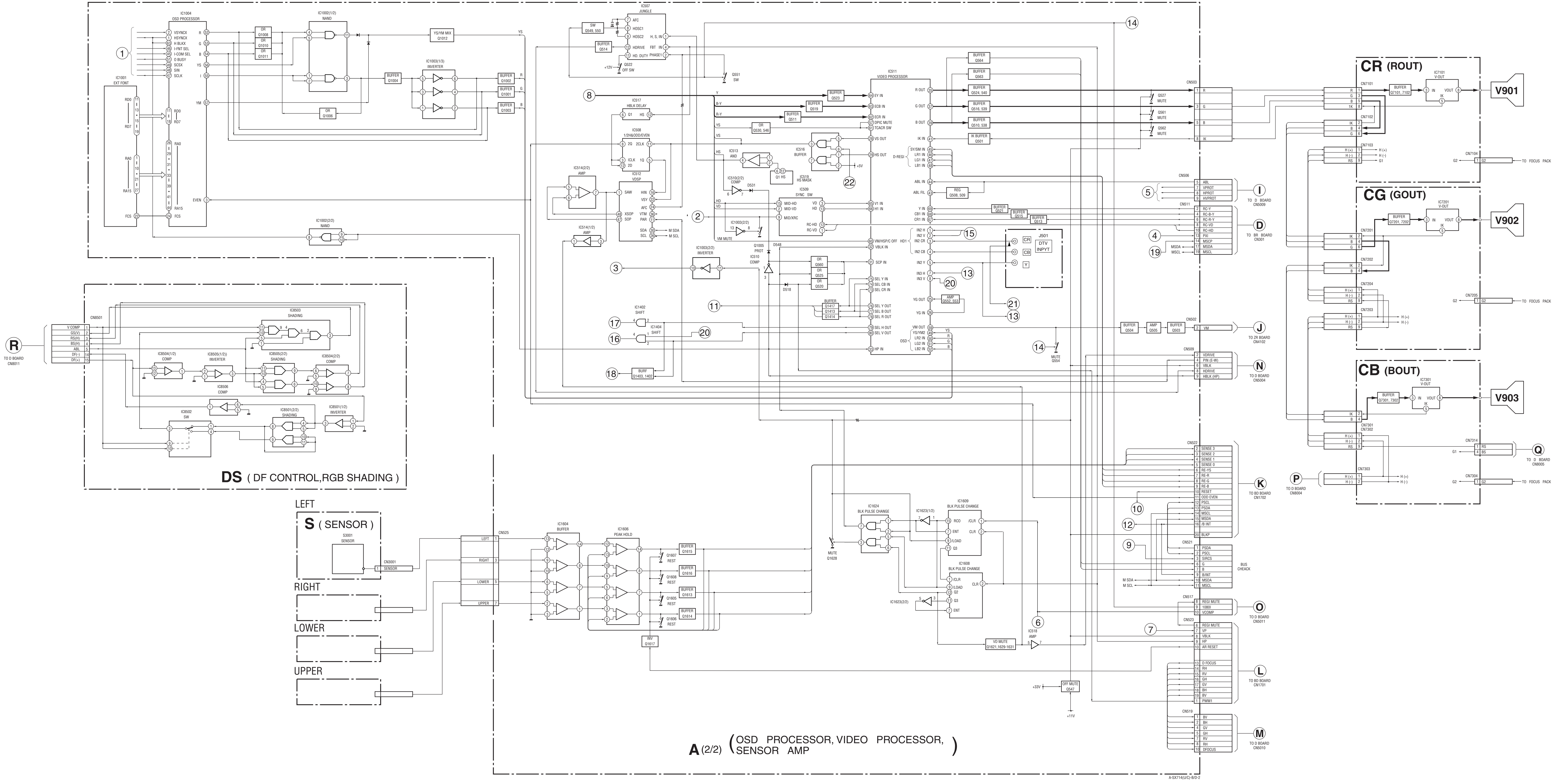
MEMO

SECTION 6
DIAGRAMS

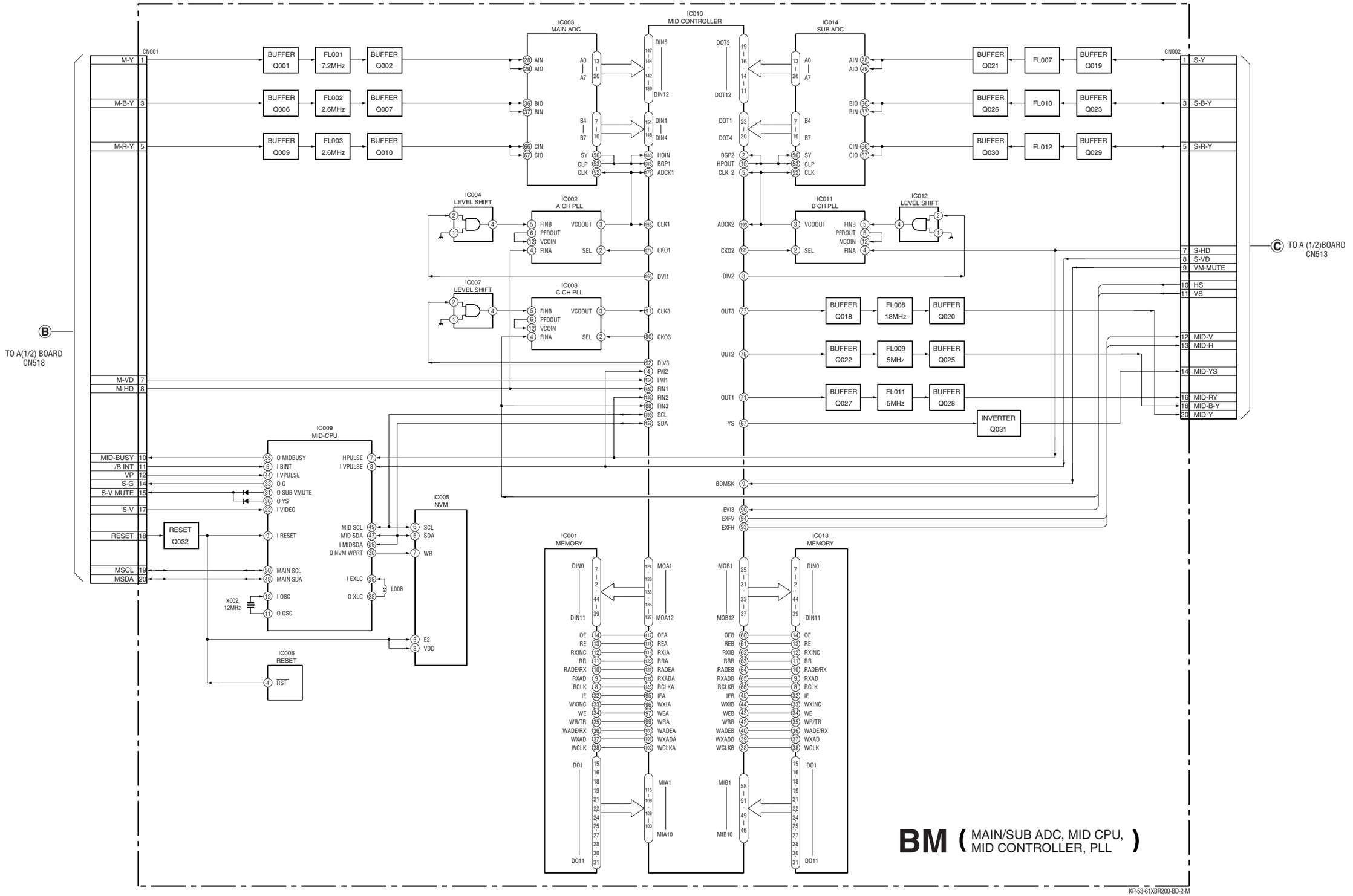
6-1. BLOCK DIAGRAM (1)



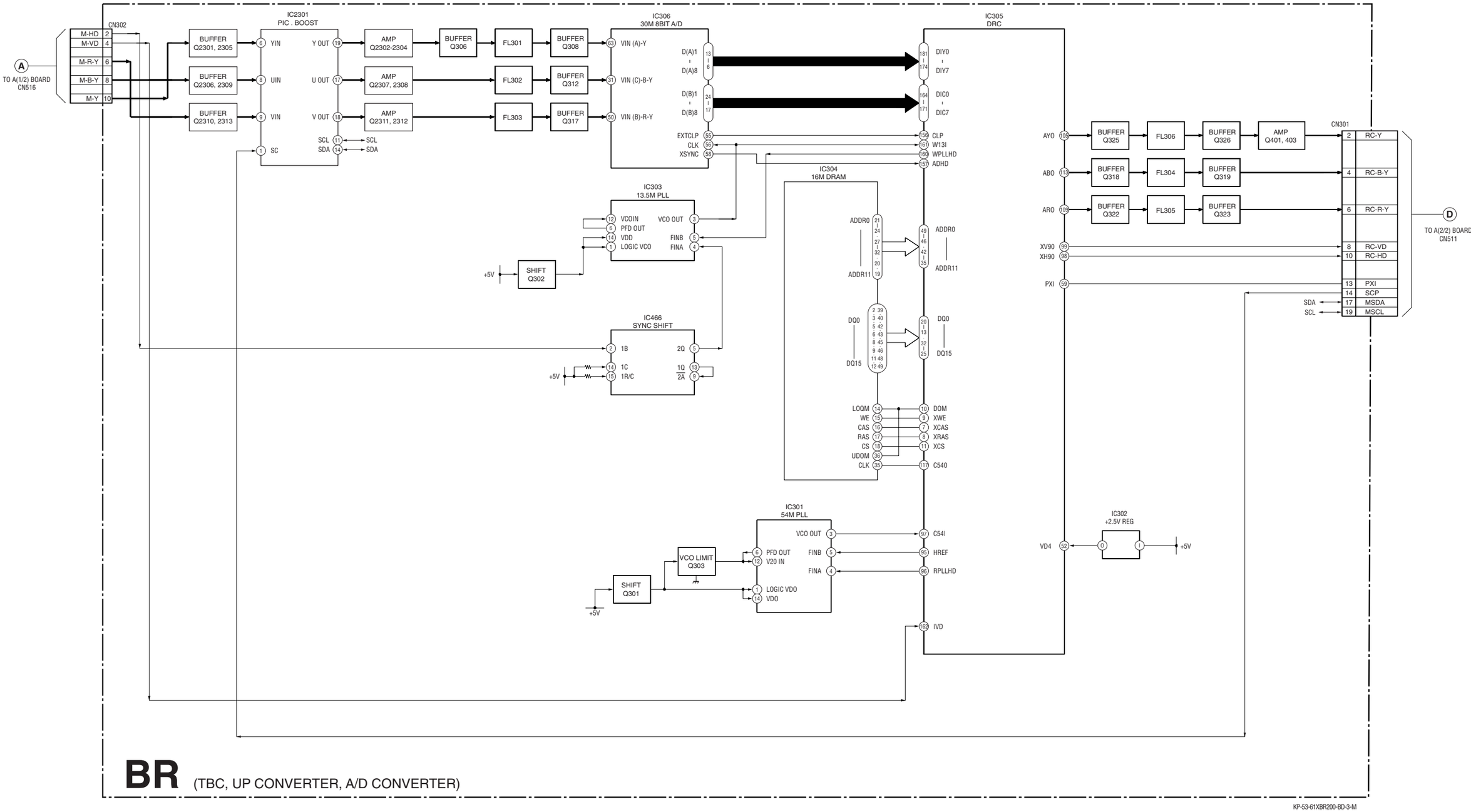
BLOCK DIAGRAM (2)



BLOCK DIAGRAM (3)



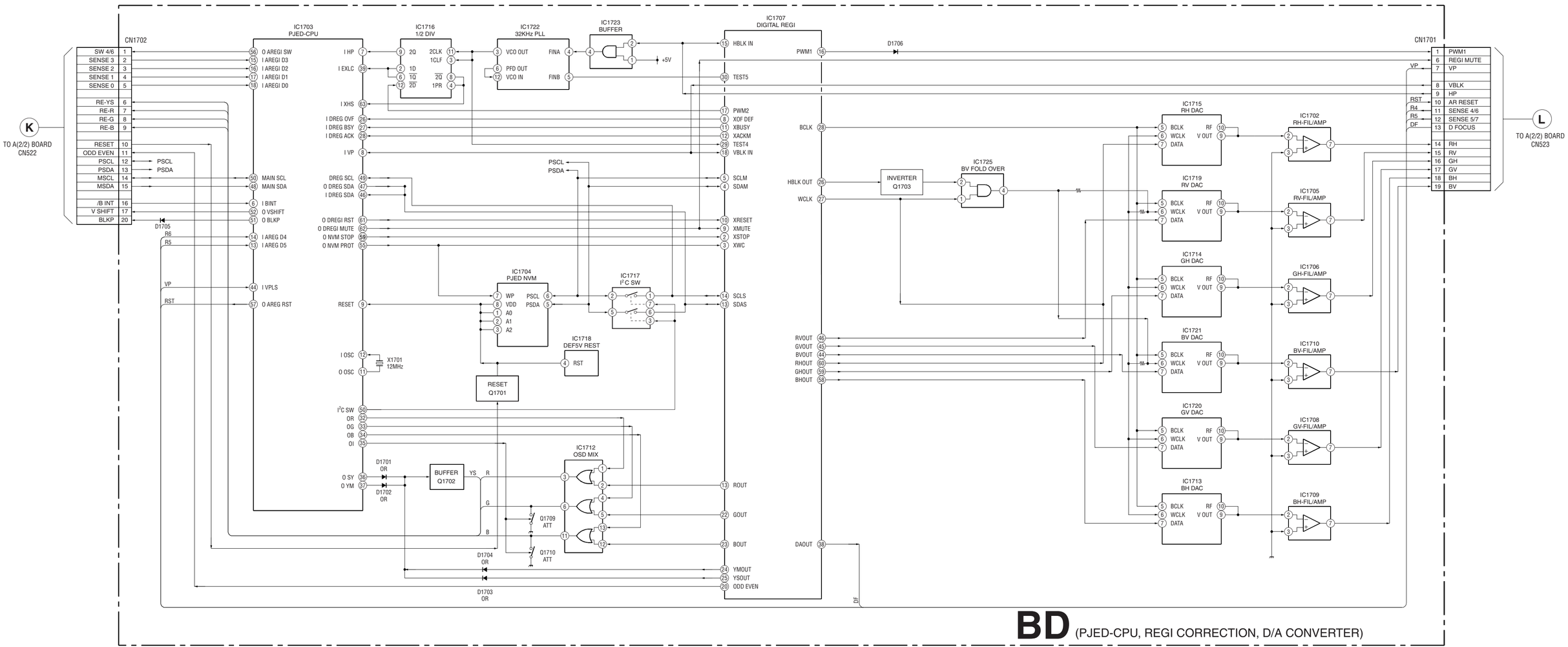
BLOCK DIAGRAM (4)



BR (TBC, UP CONVERTER, A/D CONVERTER)

KP-53-61XBR200-BD-3-M

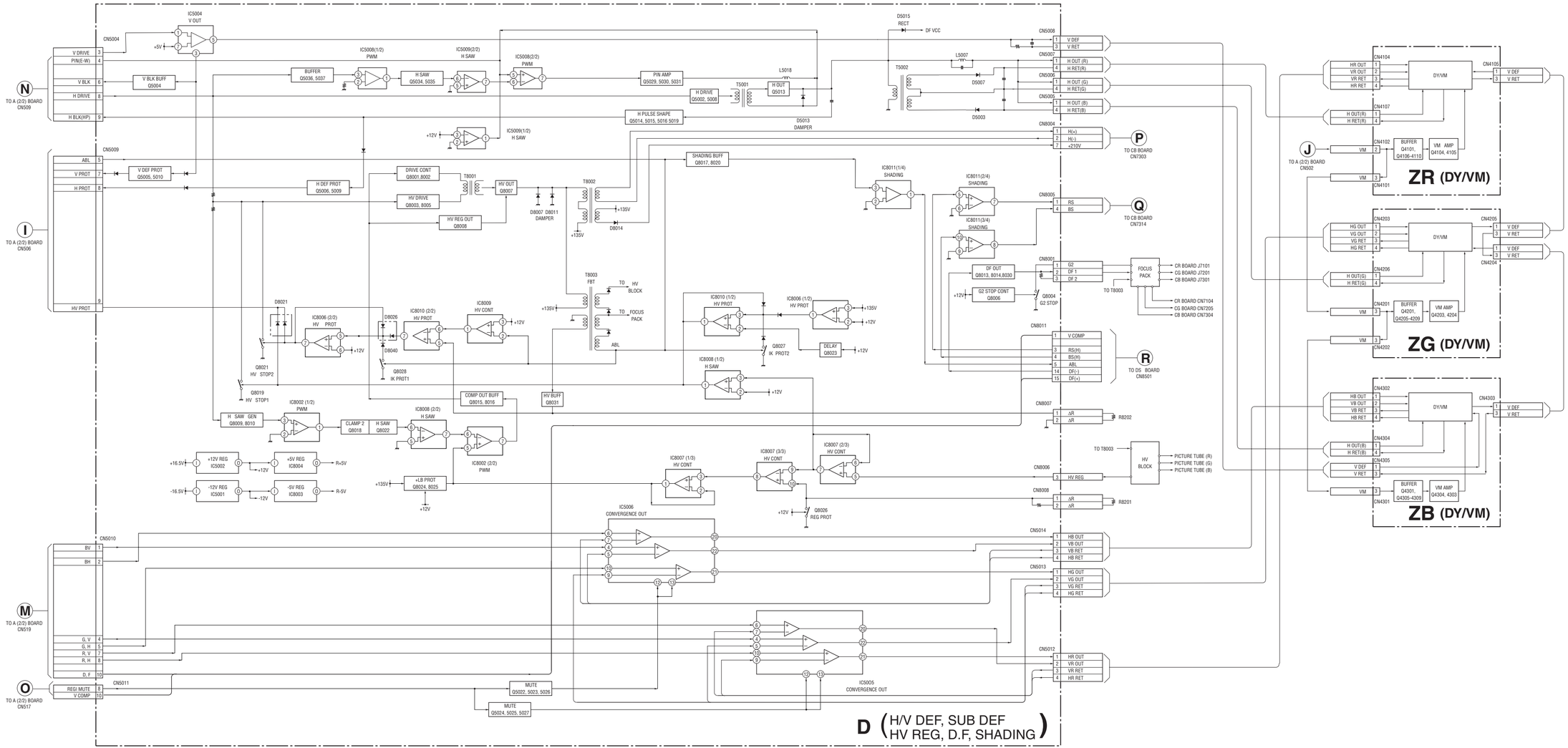
BLOCK DIAGRAM (5)



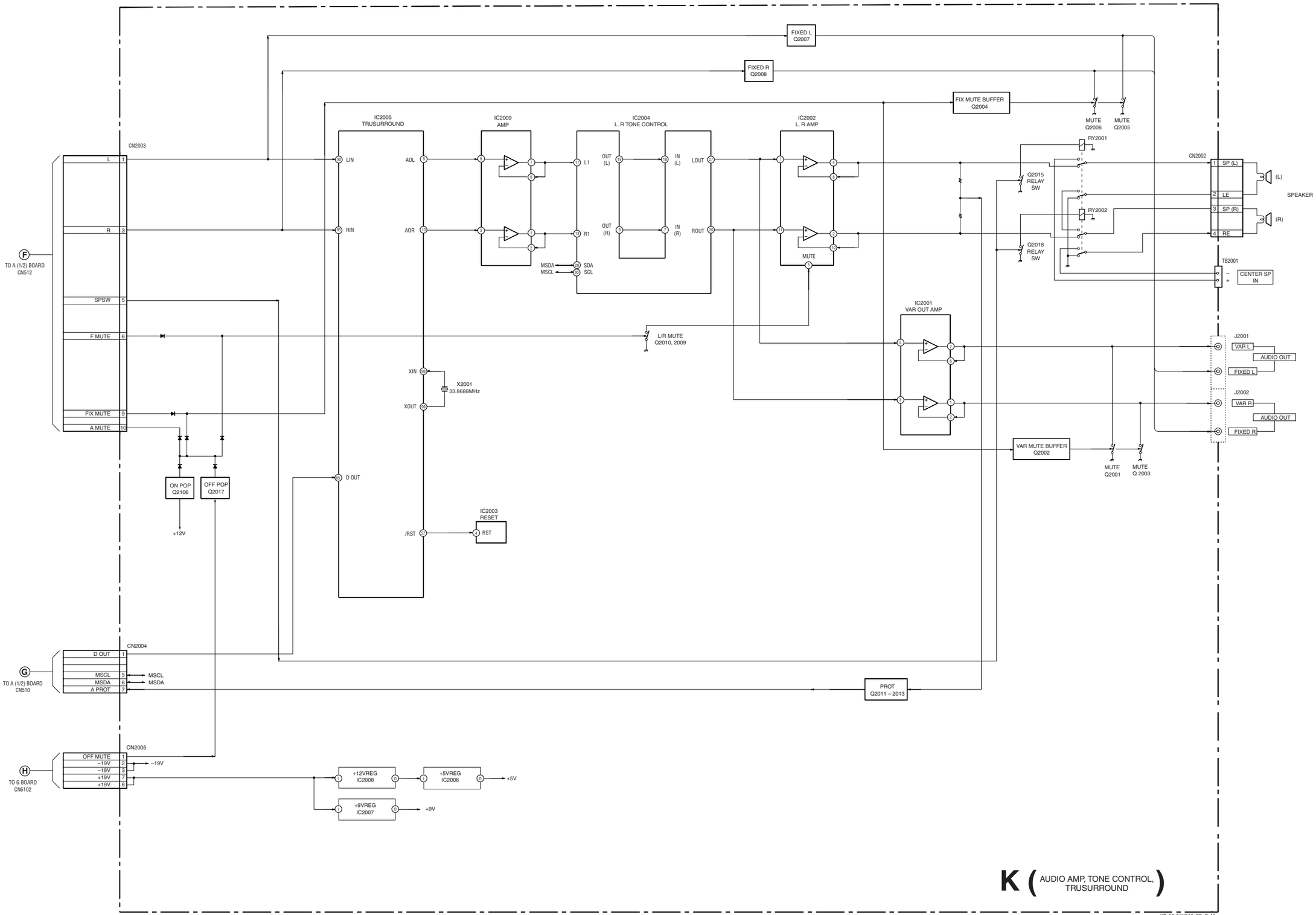
BD (PJED-CPU, REGI CORRECTION, D/A CONVERTER)

KP-53-61XBR200-BD-6-M

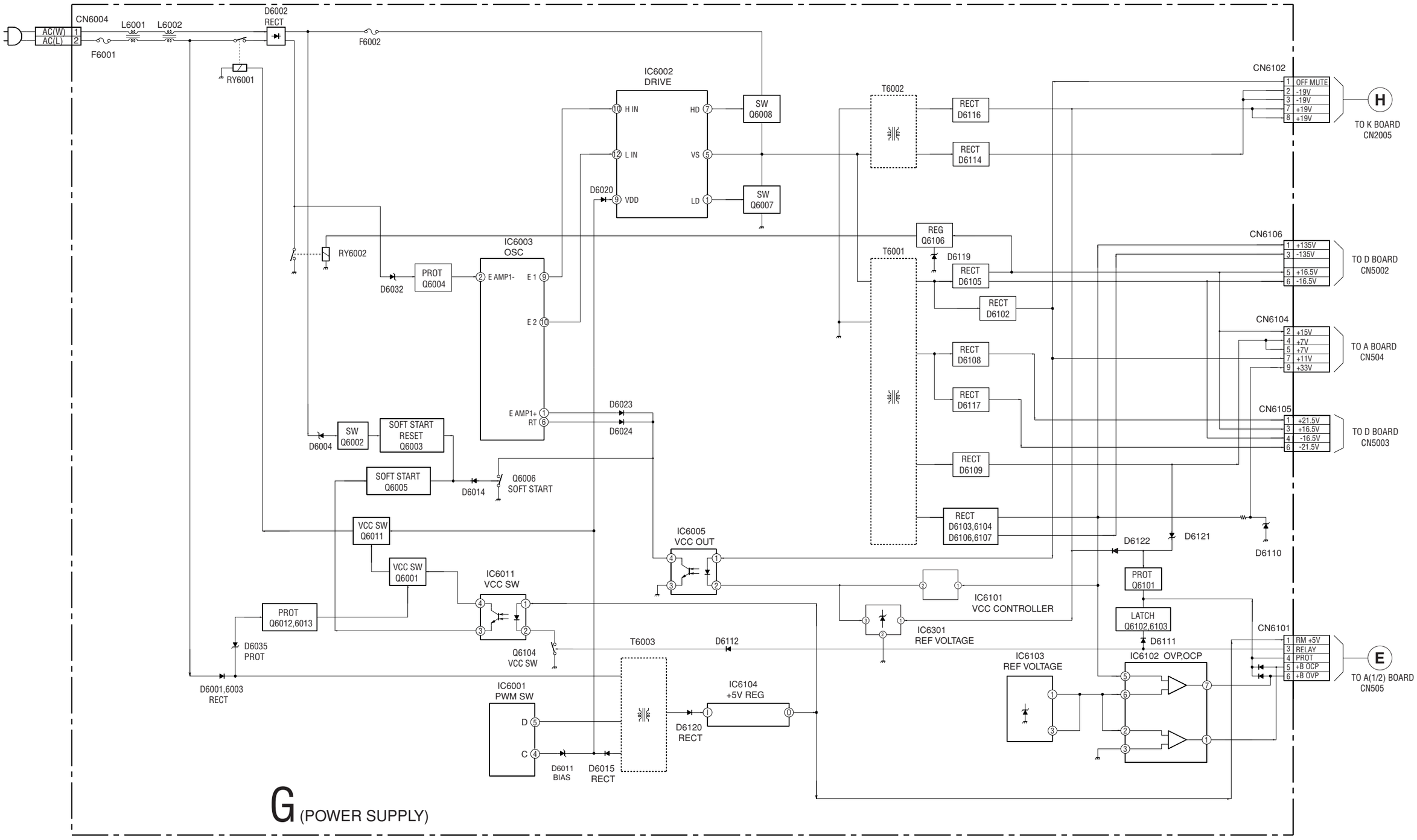
BLOCK DIAGRAM (6)



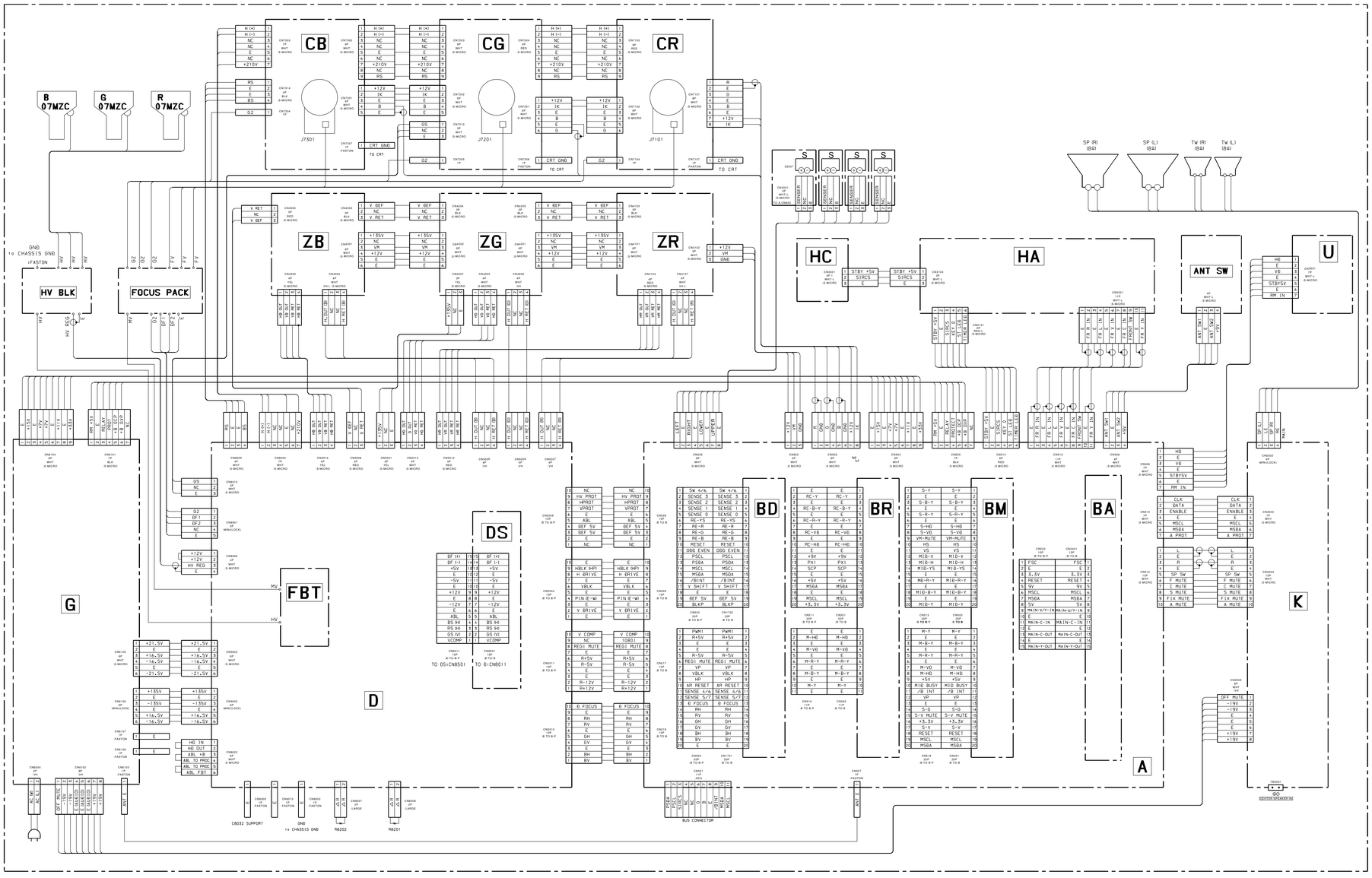
BLOCK DIAGRAM (7)



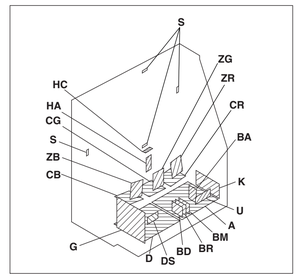
BLOCK DIAGRAM (8)



6-2. FRAME SCHEMATIC DIAGRAM



6-3. CIRCUIT BOARDS LOCATION



6-4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note:

- Capacitors without voltage indication are all 50V.
- All resistors are in ohms.
  kΩ=1000Ω, MΩ=1000kΩ
- Indication of resistance, which dose not have one for rating electrical power, is as follows.

  Pitch : 5mm
  Rating electrical power : 1/4W
- : nonflammable resistor.
- : fusible resistor.
- △ : internal component.
- : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : earth-chassis.
- The components identified by in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation.
  Should replacement be required, replace only with the value originally used.
- When replacing components identified by make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by and repeat the adjustment until the specified value is achieved.
  (Refer to R8194, R8196, R8201 and R8202 adjustment on Page 49.)
- When replacing the part in below table, be sure to perform the related adjustment.

Part replaced ( )	Adjustment ( )
C8018, C8064, C8066, C8070, C8074, C8076, C8082, D8042, IC8002, IC8007, IC8008, Q8022, R8093, R8095, R8096, R8105, R8108, R8112, R8113, R8114, R8115,R8126, R8128, R8136, R8138, R8139, R8154, R8157, R8168,R8173, R8174, R8177, R8178, R8195, R8196, R8201, T8002 (LOT), T8003 (FBT), HV BLOCK, D BOARD	HV Reagurator (R8196, R8201)
C8018, D8026, D8032, D8035, D8050, IC8006, IC8009, IC8010, Q8021, Q8031, R8092, R8094, R8097, R8109, R8110,R8117, R8118, R8121, R8123, R8125, R8129, R8135, R8140, R8155, R8190, R8191,R8192, R8193, R8194, R8198, R8202, T8002 (LOT),T8003(FBT) HV BLOCK, D BOARD	HV HOLD-DOWN (R8194, R8202)

- Readings are taken with a color-bar signal input.
- Readings are taken with a 10MΩ digital multimeter.
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
  - : Measurement impossibility.
- Circled numbers are waveform references.
- : B+ bus.
- : B– bus.
- : signal path.(RF)

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: ※	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

Note: The symbol display is on the component side.

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

The symbol indicate fast operating fuse. Replace only with fuse of same rating as maked.

Terminal name of semiconductors in silk screen printed circuit (✻)

	Device	Printed symbol	Terminal name	Circuit
①	Transistor		Collector / Base / Emitter	
②	Transistor		Collector / Base / Emitter	
③	Diode		Cathode / Anode	
④	Diode		Cathode / Anode (NC)	
⑤	Diode		Cathode / Anode (NC)	
⑥	Diode		Common / Anode / Cathode	
⑦	Diode		Common / Anode / Cathode	
⑧	Diode		Common / Anode / Anode	
⑨	Diode		Common / Anode / Anode	
⑩	Diode		Common / Cathode / Cathode	
⑪	Diode		Common / Cathode / Cathode	
⑫	Diode		Anode / Cathode / Anode / Cathode / Anode / Anode	
⑬	Transistor (FET)		Drain / Source / Gate	
⑭	Transistor (FET)		Drain / Source / Gate	
–	Discrete semiconductor			

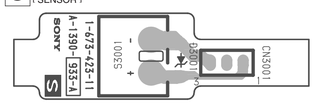
(Chip semiconductors that are not actually used are included.)

Ver.1.5

A (1/4) [TUNER, AV SW, JUNGLE, VIDEO PROCESSOR] **A (2/4)** [YUV SW, CHROMA DECODER] **A (3/4)** [U COM OSD] **A (4/4)** [REGI SENSOR I/F]

– A Board –

S [SENSOR]



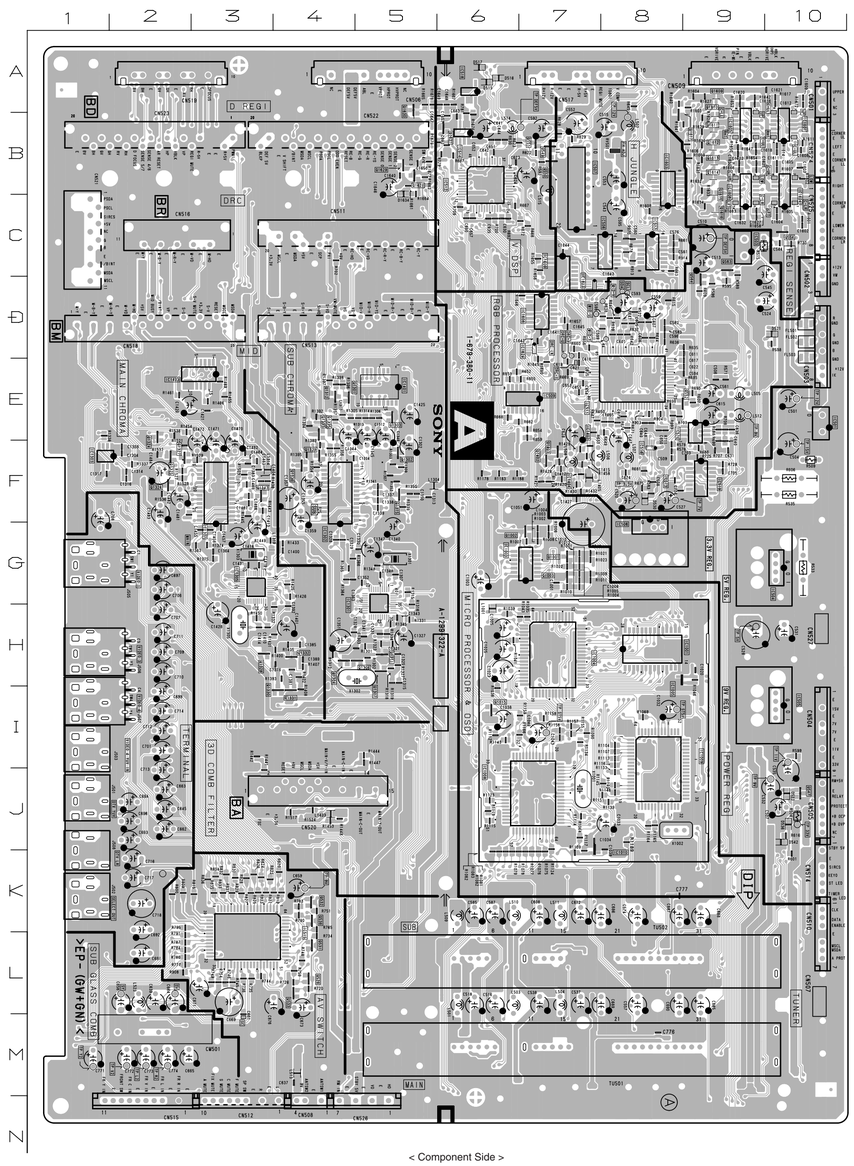
A BOARD

DIODE			
	L	R	✳
D501		D-2	③
D502		L-1	③
D503		B-4	③
D504		L-4	③
D505		M-3	③
D506		E-3	③
D508		D-3	③
D509		D-3	③
D511		K-4	③
D512		B-4	③
D513		K-3	③
D514		B-4	③
D515	A-6		③
D516	A-6		③
D517	A-6		③
D518		E-3	③
D519		K-9	③
D520		K-9	③
D521	D-10		③
D522		J-9	③
D523	J-10		③
D524		G-9	③
D525		F-10	③
D526		H-9	③
D527		H-9	③
D528		I-9	③
D529		I-9	③
D530	F-8		③
D531		F-3	③
D532		G-9	③
D533		H-9	③
D534		I-9	③
D535		J-9	③
D536	J-10		③
D537		G-9	③
D538		H-9	③
D539		I-9	③
D540		K-10	③
D541		K-10	③
D542	J-10		③
D543		F-10	③
D544		H-9	③
D545		I-9	③
D546		J-9	③
D547		J-9	③
D548		F-3	③
D549		I-5	③
D550		G-10	③
D551		H-9	③
D552		I-9	③
D555		K-9	③
D556		K-9	③
D557		J-9	③
D558		J-1	③
D559		K-10	③
D560		K-10	③
D1001		H-4	③
D1002		H-4	③
D1003		G-5	③
D1005		I-3	③
D1006		I-3	③
D1007		I-3	③
D1008		I-5	③
D1009		I-5	③
D1011		I-3	③
D1601		B-3	③
D1602		C-3	③
D1603		B-3	③
D1615		B-3	③
D1616		C-3	③
D1626		B-2	③
D1628		B-2	③
D1630		B-2	③
D1632		C-2	③
D1634	B-5		③

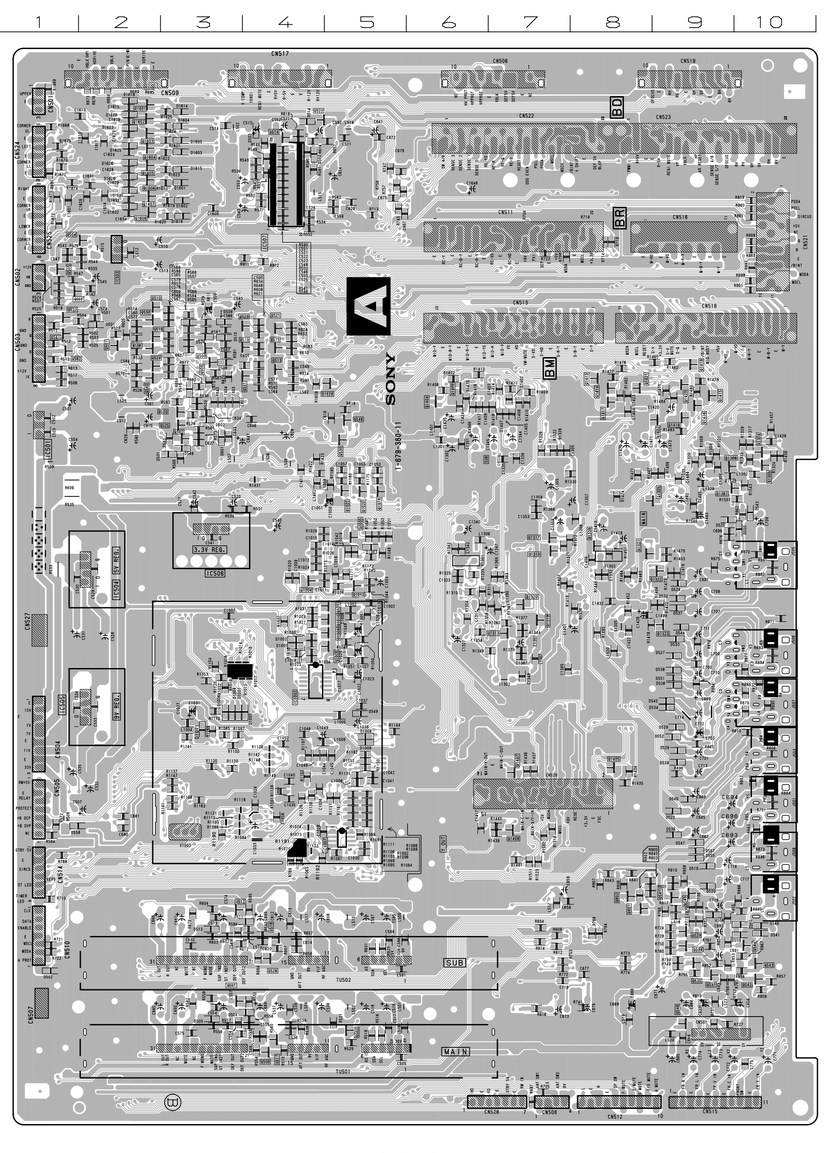
TRANSISTOR			
	L	R	✳
Q501		D-2	①
Q502		M-5	①
Q503		D-1	①
Q504		C-1	①
Q505		C-1	①
Q506		M-4	①
Q507		L-3	①
Q508		E-3	①
Q509		D-3	①
Q510		D-2	①
Q511		E-4	①
Q512		K-4	①
Q513		E-4	①
Q514		B-4	①
Q515		D-4	①
Q516		D-2	①
Q517		M-4	①
Q518		L-4	①
Q519		D-4	①
Q520		E-3	①
Q521		D-4	①
Q522		A-4	①
Q523		D-4	①
Q524		E-2	①
Q525		E-3	①
Q526		L-4	①
Q527		D-1	①
Q528	L-4		②
Q530		E-5	①
Q531	L-4		②
Q532	K-4		②
Q533	L-4		②
Q535		L-9	①
Q536	K-4		②
Q537		L-9	①
Q538		D-2	①
Q539		D-2	①
Q540		F-2	①
Q541		K-9	①
Q542		L-10	①
Q543		L-10	①
Q544		L-10	①
Q545		K-9	①
Q546		E-5	①
Q547	J-10		②
Q548		M-9	①
Q549	B-7		②
Q550	B-7		②
Q551	B-7		②
Q552	E-9		②
Q554	C-10		②
Q560		E-3	①
Q561		D-1	①
Q562		D-1	①
Q563	C-9		②
Q564	C-9		②
Q801		K-8	①
Q802		K-8	①
Q1001	G-7		②
Q1002	G-7		②
Q1003	G-7		②
Q1004		G-4	①
Q1005		G-5	①
Q1006		H-5	①
Q1008		H-5	①
Q1010		H-5	①
Q1011		H-5	①
Q1012		G-5	①
Q1015	I-9		②
Q1018		F-5	①
Q1020		F-5	①
Q1022		F-5	①
Q1301	E-4		②
Q1302	F-5		②
Q1303	E-5		②
Q1304	H-4		②
Q1305		F-9	①
Q1306	H-5		②
Q1307	H-5		②
Q1308		F-10	①
Q1309		F-10	①
Q1311	H-5		②
Q1312	E-4		②
Q1313		H-7	①
Q1315	F-5		②
Q1317		G-7	①
Q1318		G-7	①
Q1319		H-7	①
Q1320		G-7	①
Q1321		G-9	①
Q1322		G-9	①
Q1323		H-9	①
Q1324	F-2		②
Q1325	F-2		②
Q1326	F-2		②
Q1327	F-2		②
Q1328	H-3		②
Q1329	F-4		②
Q1330	I-4		②
Q1331	I-4		②
Q1332	H-4		②
Q1333	E-4		②
Q1335	E-4		②
Q1336	F-4		②
Q1338		G-8	①
Q1343	F-3		②
Q1366		F-10	①
Q1367		F-10	①
Q1402	F-7		②
Q1403	F-7		②
Q1405		J-8	①
Q1407		J-7	①
Q1408		J-7	①
Q1413		E-8	①
Q1414		E-8	①
Q1415		E-9	①
Q1416		E-9	①
Q1417		E-8	①
Q1418		E-9	①
Q1419		E-9	①
Q1420		E-9	①
Q1421		E-8	①
Q1422		E-9	①
Q1605		B-2	①
Q1606		B-2	①
Q1607		B-2	①
Q1608		C-2	①
Q1613	B-9		⑤
Q1614	B-9		⑤
Q1615	B-9		⑤
Q1616	C-9		⑤
Q1617	B-8		②
Q1621	B-5		②
Q1628		E-5	①
Q1629	B-5		②
Q1630	A-5		②
Q1631	B-6		②

IC		
	L	R
IC501	E-10	E-1
IC503	C-9	C-2
IC504	G-10	G-2
IC505	I-10	I-2
IC506	G-8	G-3
IC507	B-7	B-4
IC508	C-8	
IC509	E-7	
IC510	E-9	
IC511	E-8	
IC512	B-6	
IC513	F-8	
IC514	B-6	
IC515	L-3	
IC516	F-8	
IC517	C-8	
IC518	A-6	
IC519	F-9	
IC1001	H-8	
IC1002		I-4
IC1003	G-7	
IC1004	H-7	
IC1005	H-9	
IC1007		J-5
IC1008	J-7	
IC1009	J-8	
IC1010	K-7	
IC1301	H-5	
IC1302	F-4	
IC1303	F-1	
IC1305	G-3	
IC1307	F-3	
IC1402	F-7	
IC1403	E-3	
IC1404	F-7	
IC1604	B-10	
IC1606	B-9	
IC1608	D-7	
IC1609	C-7	
IC1623	C-7	
IC1624	D-7	

L ; component side
R ; conductor side

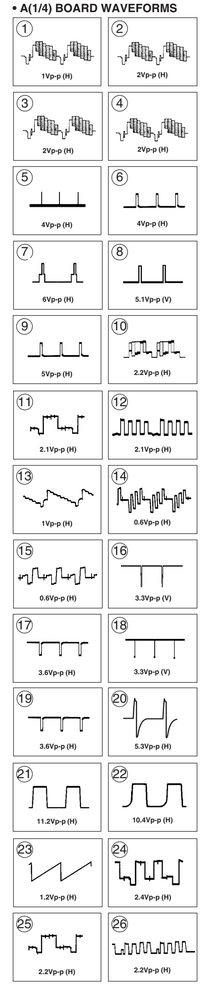


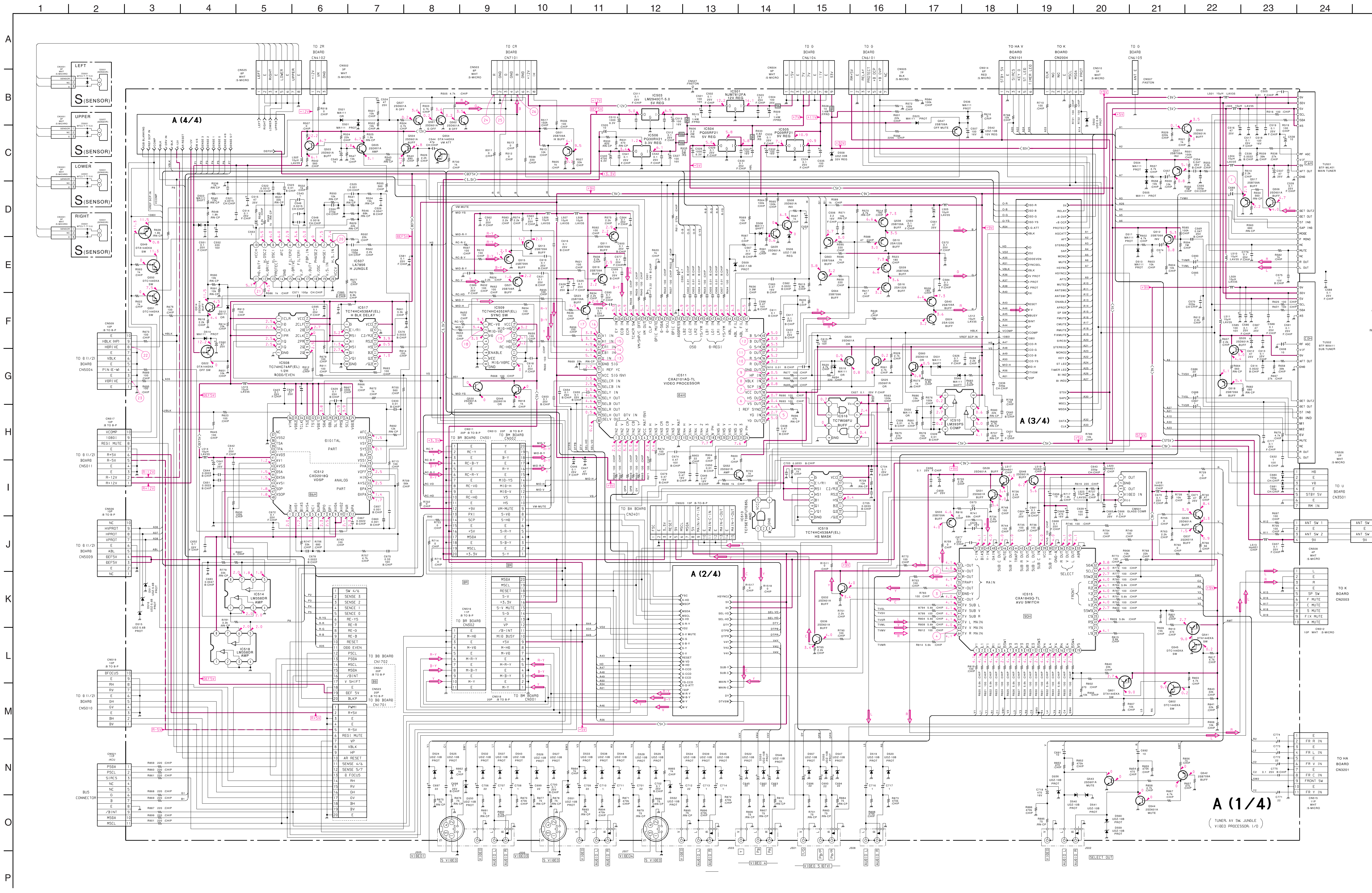
< Component Side >



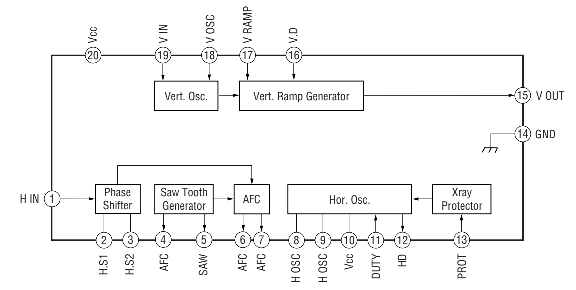
< Conductor Side >

• A(1/4) BOARD WAVEFORMS

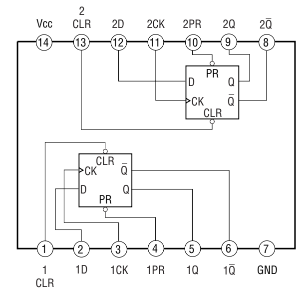




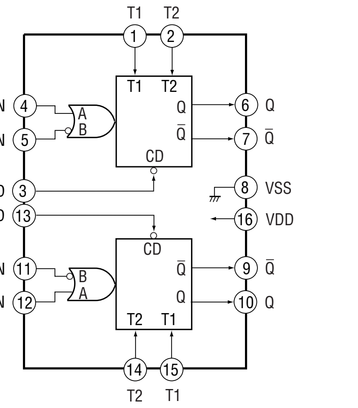
A(1/4) BOARD : IC507 LA7856



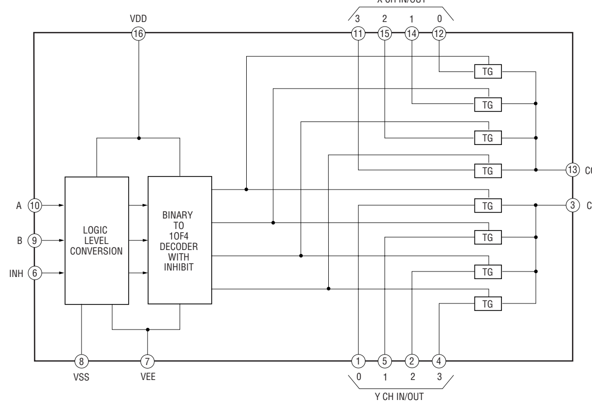
A(1/4) BOARD : IC508 TC74HC74AF (EL)



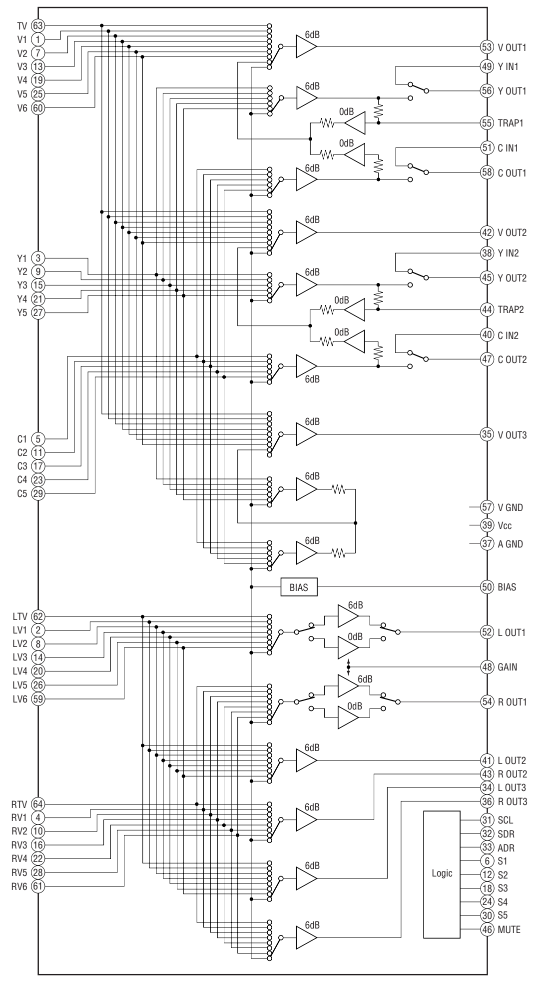
A(1/4) BOARD : IC517, 519 TC74HC4538AF (EL)



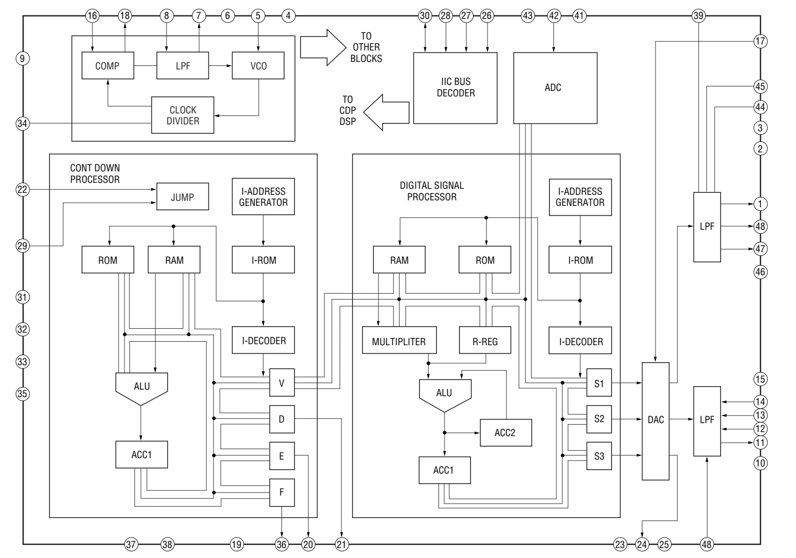
A(1/4) BOARD : IC509 MC74HC4052EL

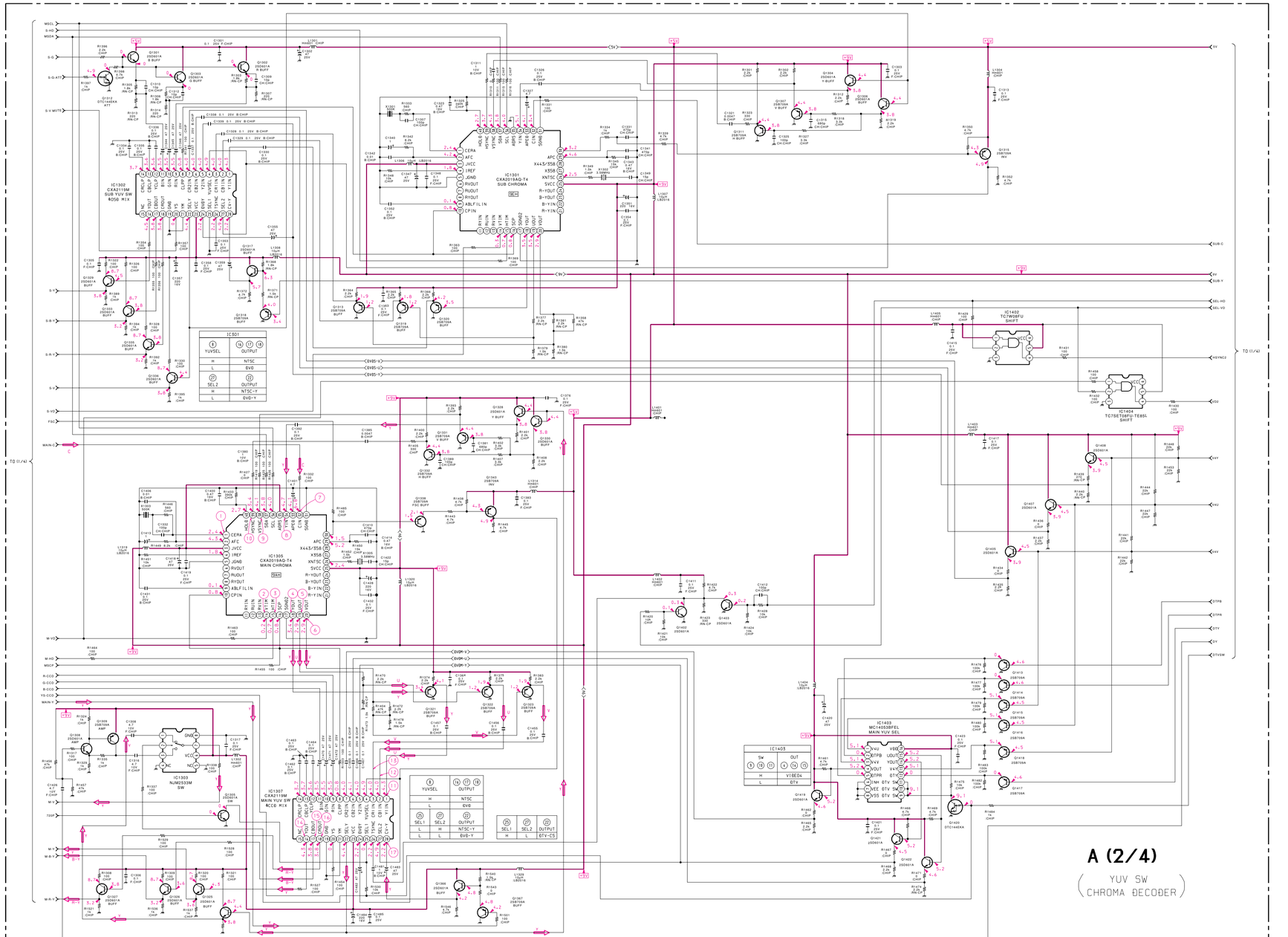


A(1/4) BOARD : IC515 CXA1845AQ

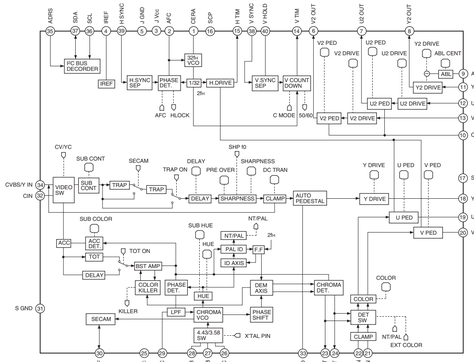


A(1/4) BOARD : IC512 CXD2018Q

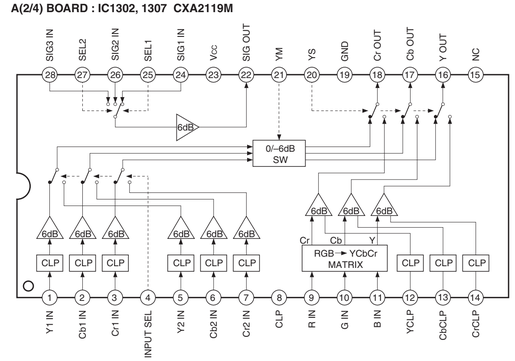




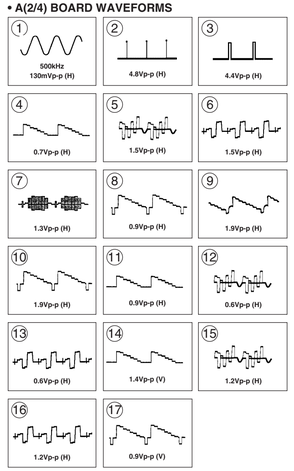
A(2/4) BOARD : IC1301, 1305 CXA2019AQ-T4



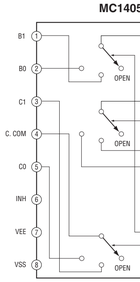
A(2/4) BOARD : IC1302, 1307 CXA2119M

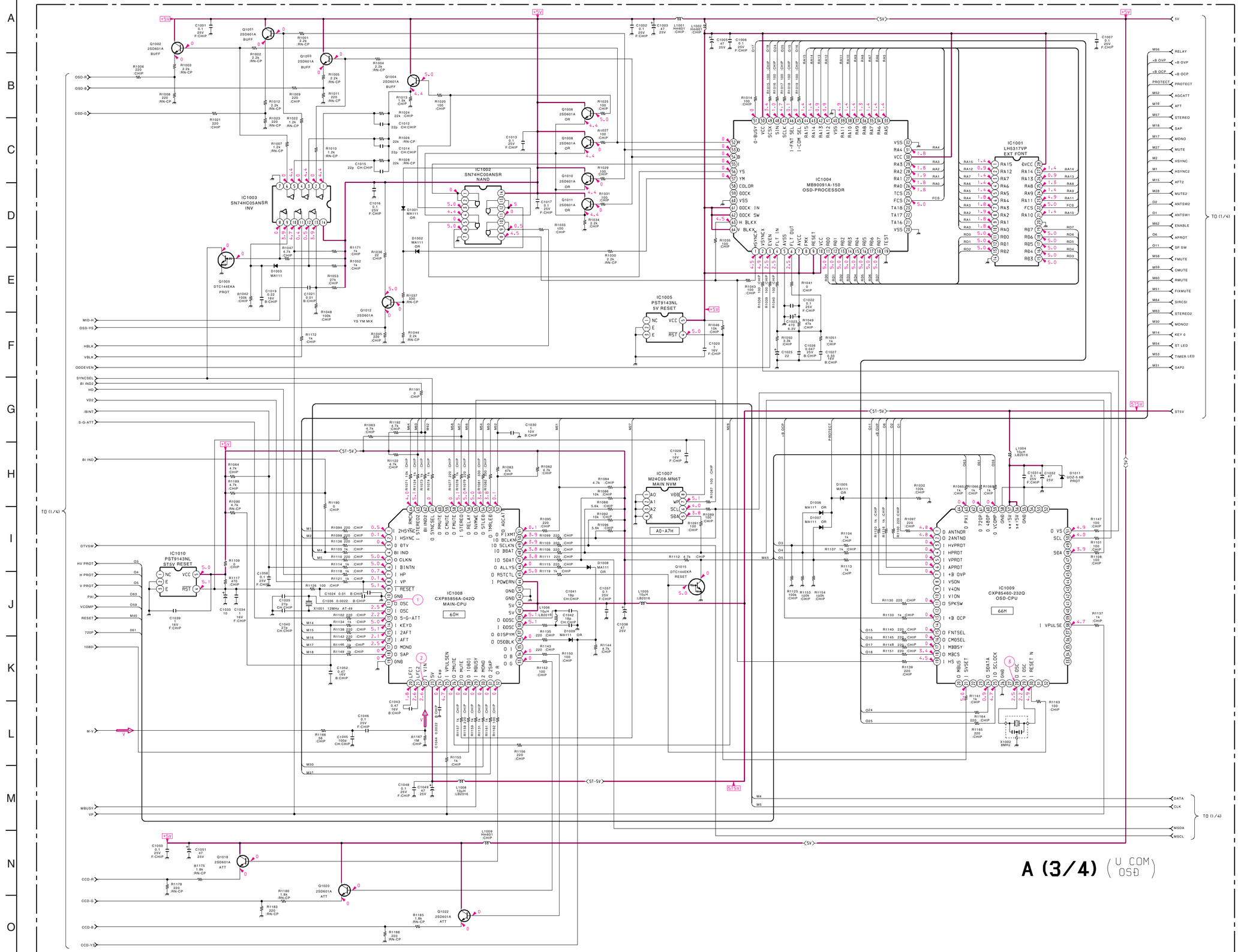


• A(2/4) BOARD WAVEFORMS



A(2/4)BOARD : IC1403 MC14053BFEL





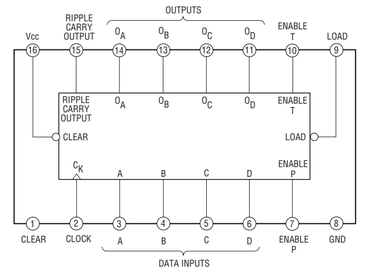
• A(3/4) BOARD WAVEFORMS

① 12MHz 5Vp-p (H)

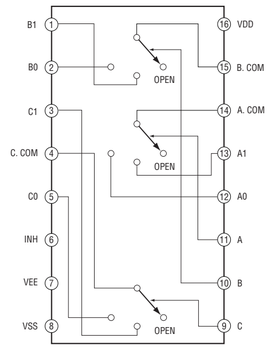
② 1.8Vp-p (H)

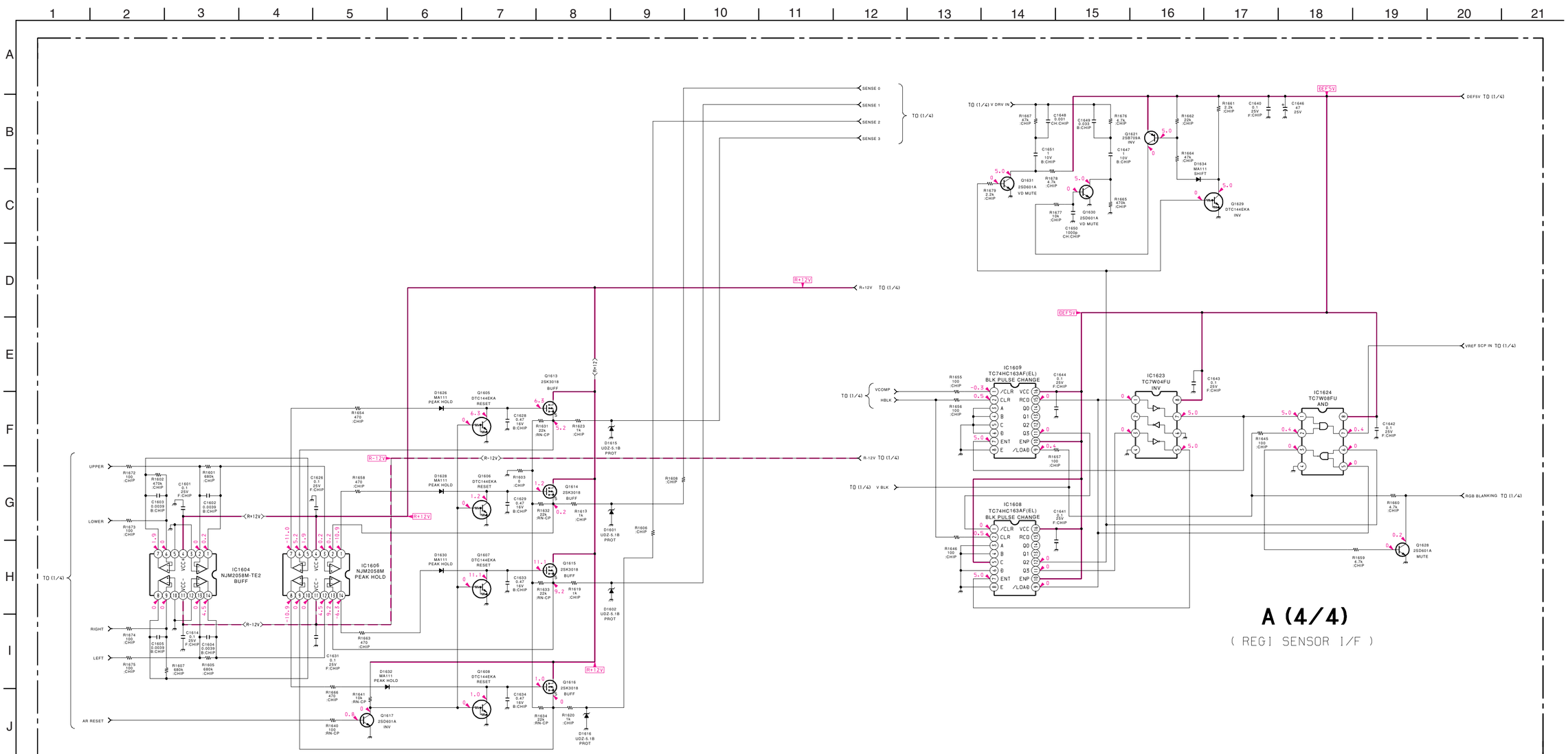
③ 8MHz 5.5Vp-p (H)

A(4/4) BOARD : IC1609, 1608 TC74HC163AF(EL)



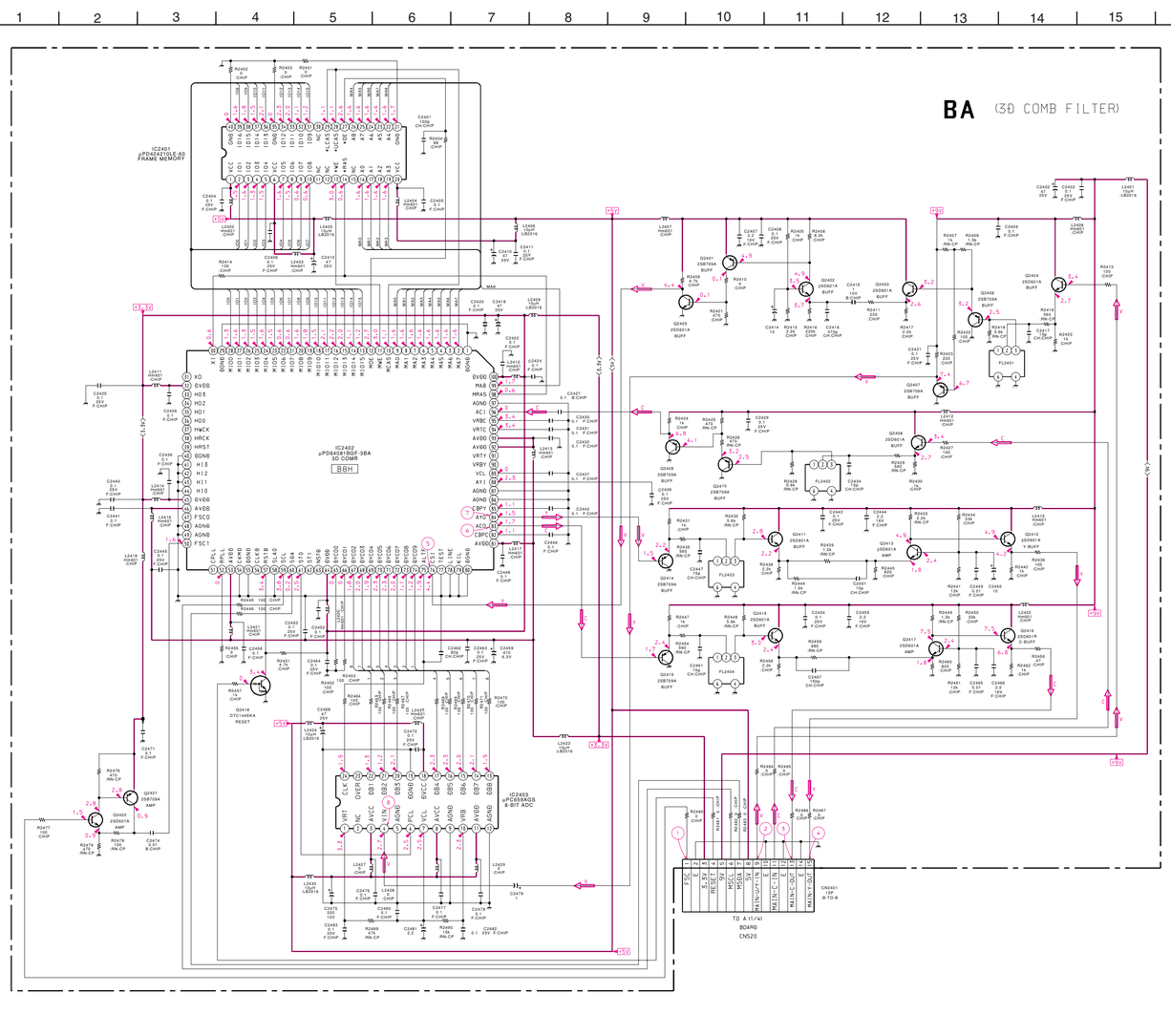
A(4/4) BOARD : IC1603 MC14053BFEL

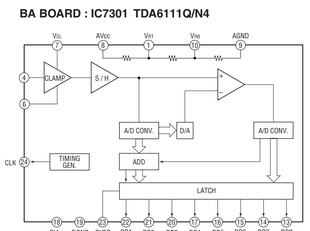




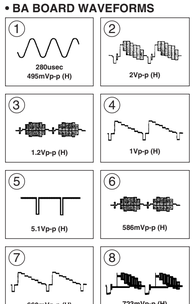
A (4/4)

(REG) SENSOR I/F)



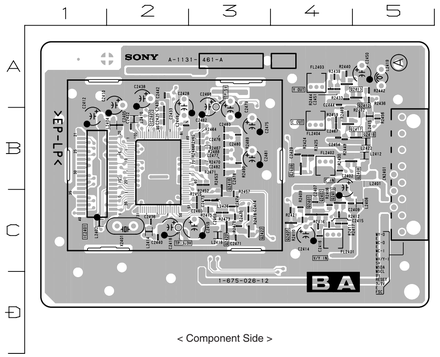


• BA BOARD WAVEFORMS

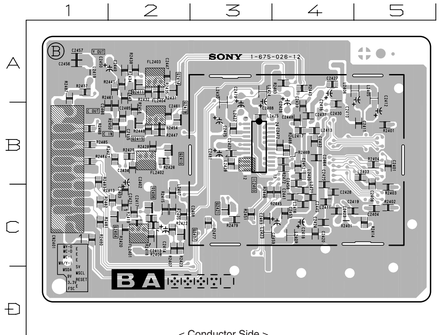


BA [3D COMB FILTER]

– BA Board –



< Component Side >



< Conductor Side >

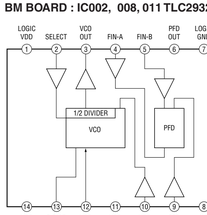
BA BOARD

TRANSISTOR	L	R	*
Q2401	C-4		②
Q2402	C-4		②
Q2403	C-4		②
Q2404		C-2	①
Q2405	C-4		②
Q2406		C-2	①
Q2407		C-2	①
Q2408	B-4		②
Q2409	B-4		②
Q2410		B-2	①
Q2411		A-2	①
Q2412	A-5		②
Q2413	A-4		②
Q2414		A-2	①
Q2415		B-2	①
Q2416	B-5		②
Q2417	B-4		②
Q2418	C-3		②
Q2419		B-2	①
Q2421		C-3	①
Q2422	C-3		②

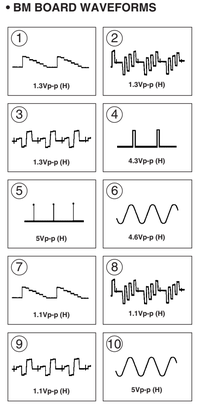
IC	L	R
IC2401	B-1	
IC2402	B-2	
IC2403	B-3	

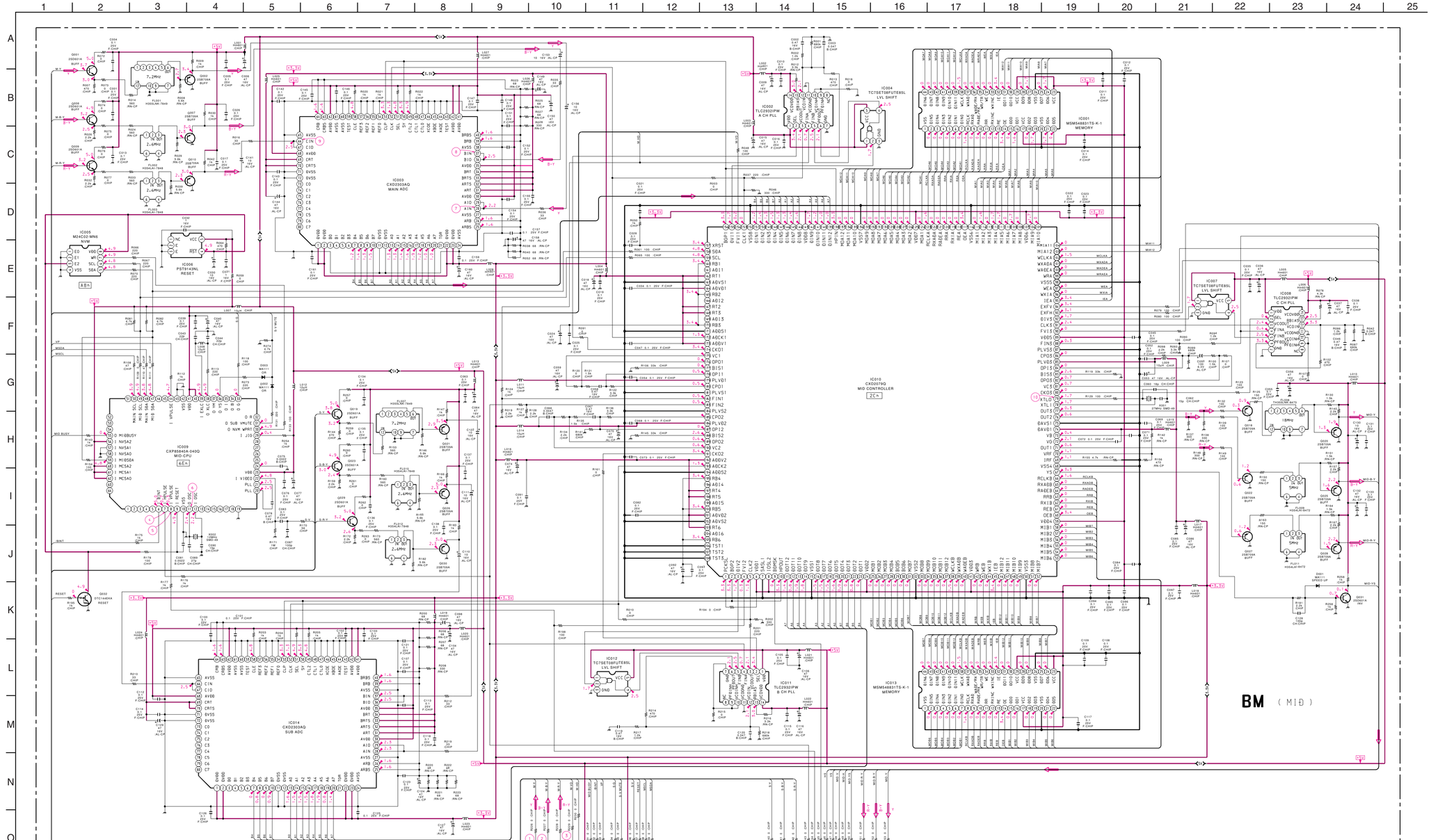
L ; component side
R ; conductor side

BM BOARD : IC002, 008, 011 TLC2932IPW



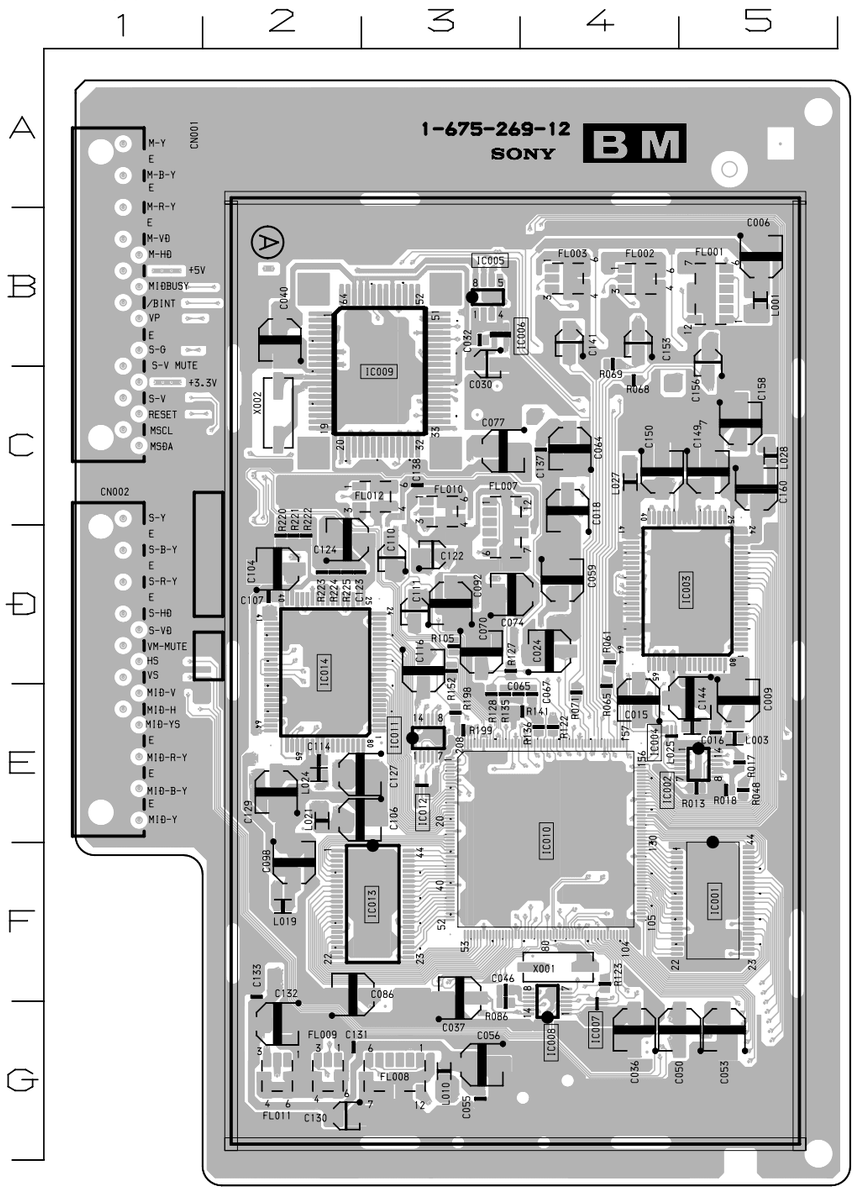
• BM BOARD WAVEFORMS



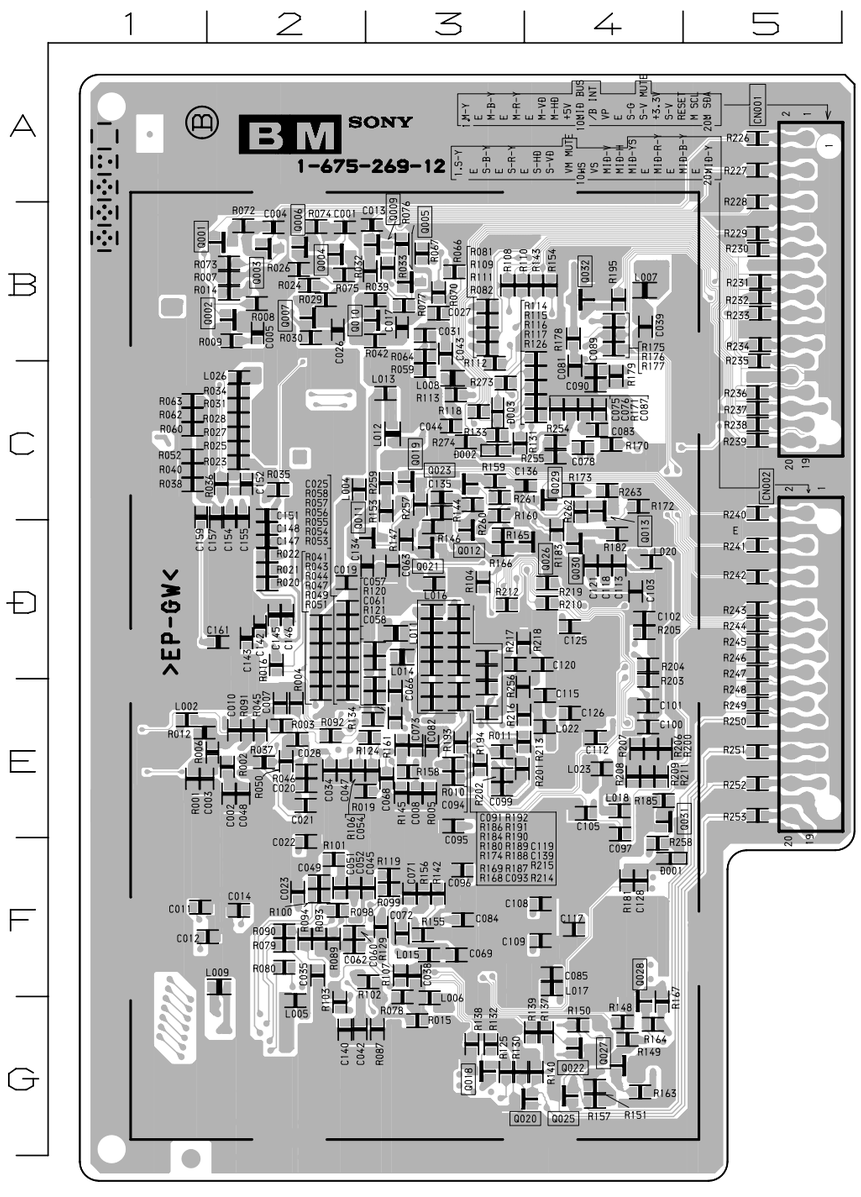


BM [MID]

– BM Board –



< Component Side >



< Conductor Side >

BM BOARD

DIODE

	L	R	*
D001		F-4	③
D002		C-3	③
D003		C-3	③

TRANSISTOR

	L	R	*
Q001		B-2	①
Q002		B-2	①
Q006		B-2	①
Q007		B-2	①
Q009		B-3	①
Q010		B-3	①
Q018		G-3	①
Q019		C-3	①
Q020		G-4	①
Q021		D-3	①
Q022		G-5	①
Q023		C-3	①
Q025		G-4	①
Q026		D-4	①
Q027		G-5	①
Q028		G-5	①
Q029		C-4	①
Q030		D-4	①
Q031		E-4	①
Q032		B-4	①

IC

	L	R
IC001	F-5	
IC002	E-5	
IC003	D-5	
IC004	E-4	
IC005	B-3	
IC006	B-3	
IC007	G-4	
IC008	G-4	
IC009	C-3	
IC010	E-4	
IC011	E-3	
IC012	E-3	
IC013	F-3	
IC014	D-2	

L ; component side
R ; conductor side

BR [DRC]

– BR Board –

BR BOARD

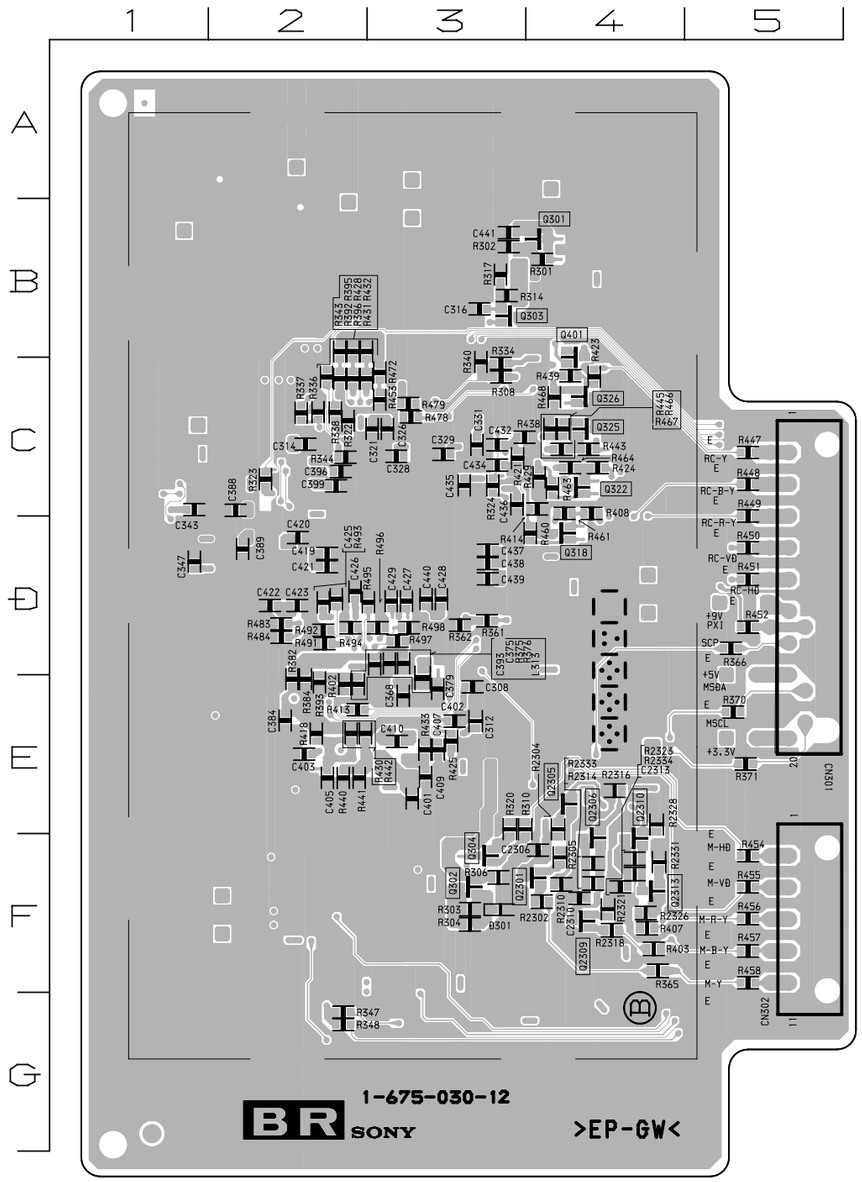
DIODE			
	L	R	*
D301		F-3	③
D2301	E-3		③

TRANSISTOR			
	L	R	*
Q301		B-4	①
Q302		F-3	①
Q303		B-3	①
Q306	F-5		②
Q308	E-4		②
Q312	F-3		②
Q317	E-4		②
Q318		D-4	①
Q319	D-2		②
Q322		C-4	①
Q323	C-2		②
Q325		C-4	①
Q326		C-4	①
Q401	B-4		①
Q403	B-2		②
Q2301		F-4	
Q2302	G-3		②
Q2303	F-3		②
Q2304	G-3		②
Q2305		E-4	①
Q2306		F-4	①
Q2307	G-3		②
Q2308	F-3		②
Q2309		F-4	①
Q2310		F-4	①
Q2311	G-3		②
Q2312	F-2		②
Q2313		F-4	①

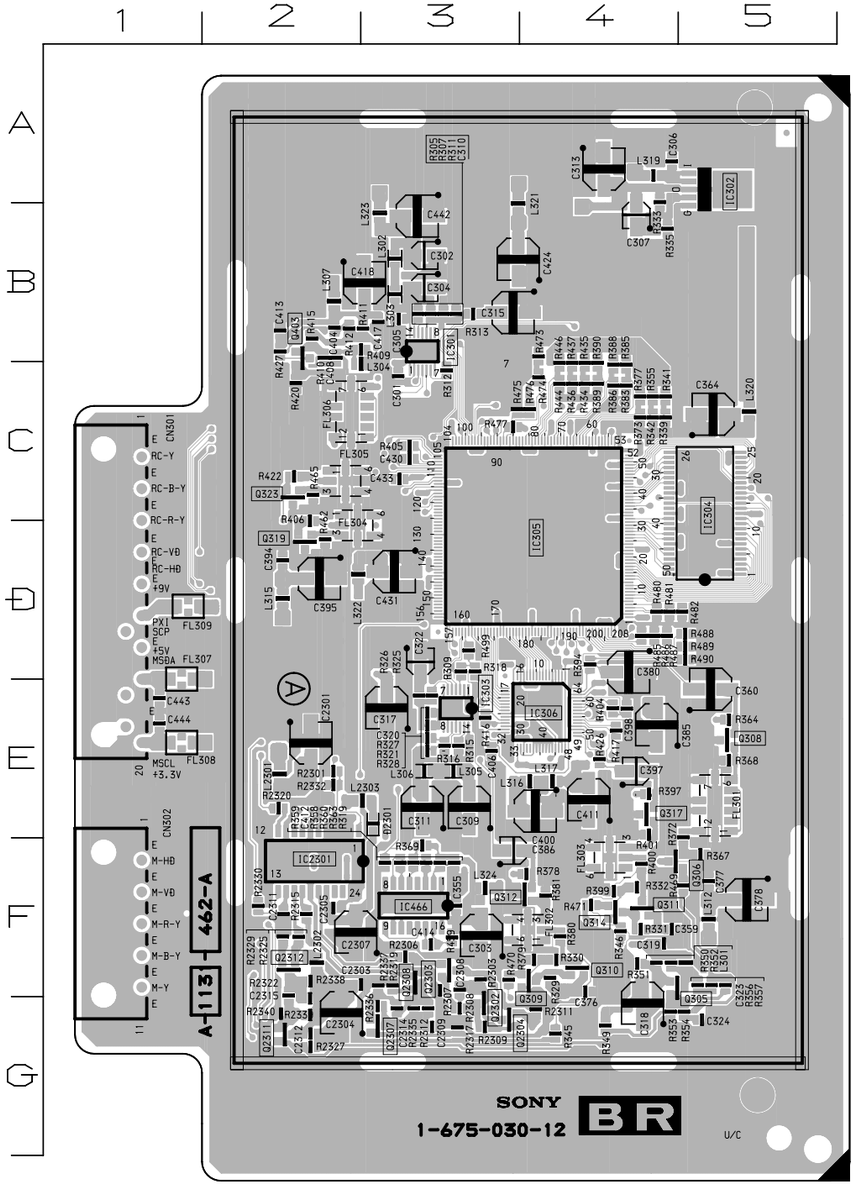
IC		
	L	R
IC301	B-3	
IC302	A-5	
IC303	E-3	
IC304	C-5	
IC305	D-4	
IC306	E-4	
IC466	F-3	
IC2301	F-2	

L ; component side

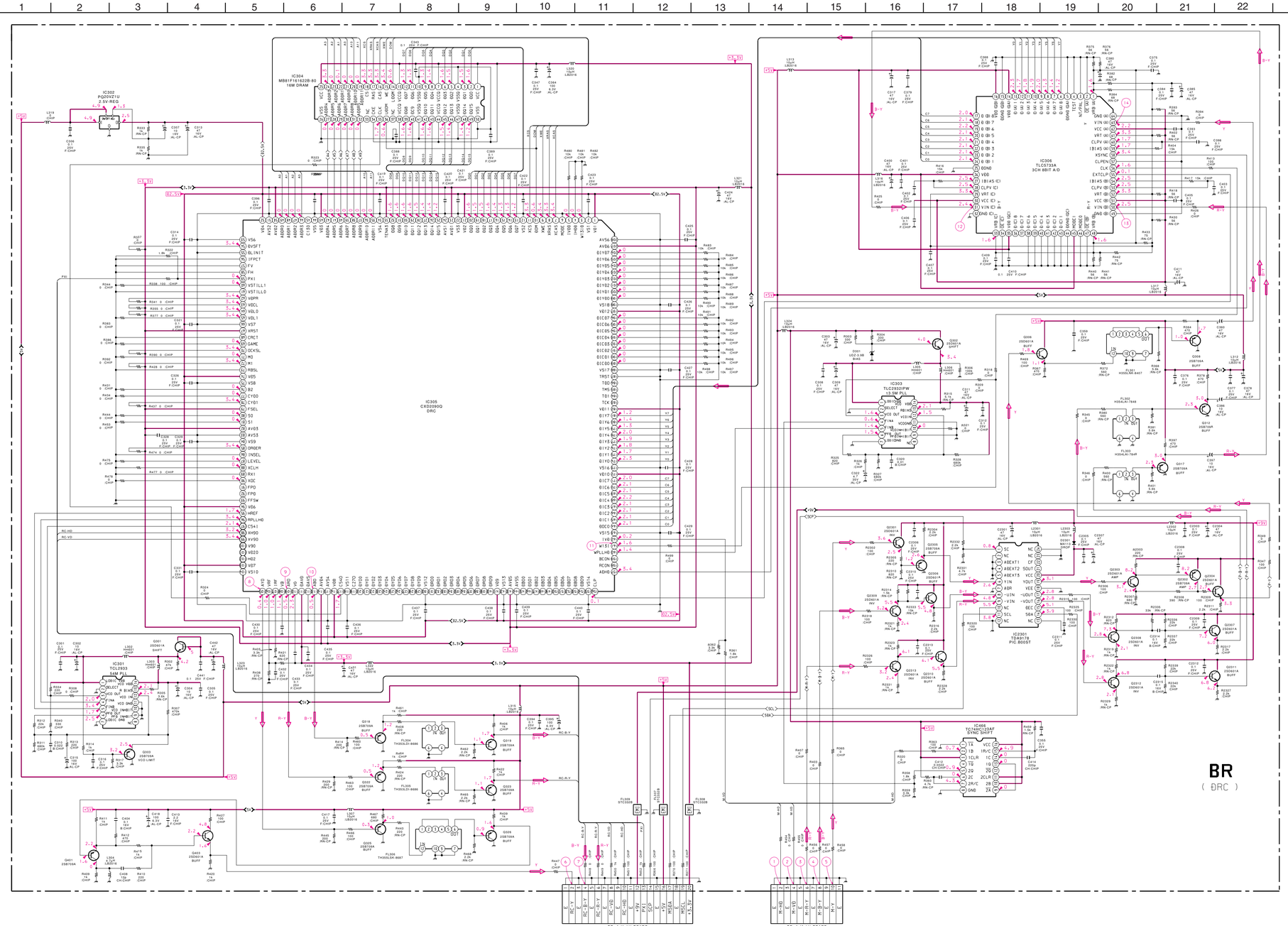
R ; conductor side



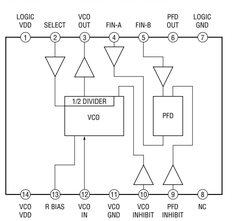
< Component Side >



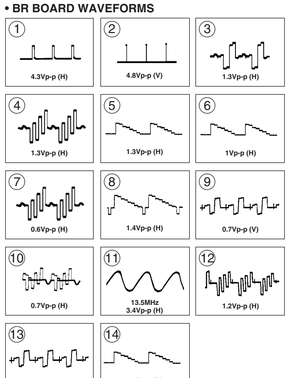
< Conductor Side >



BR BOARD : IC303 TLC2932IPW



• BR BOARD WAVEFORMS

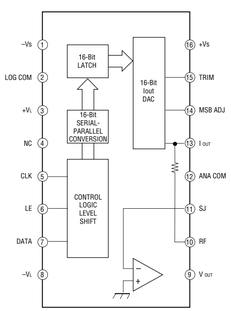


BR

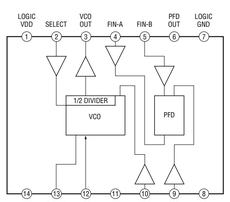
(BRC)

BD
(DIGITAL REGI)

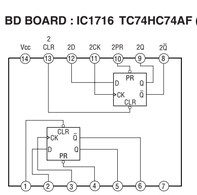
BD BOARD : IC1713, 1714, 1715, 1719, 1720, 1721 PCM56P-L



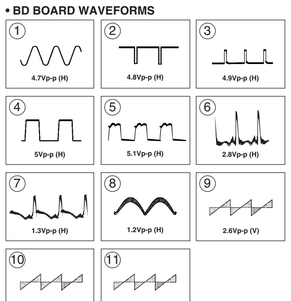
BD BOARD : IC1722 TLC2935IPW



BD BOARD : IC1716 TC74HC74AF (EL)



• BD BOARD WAVEFORMS

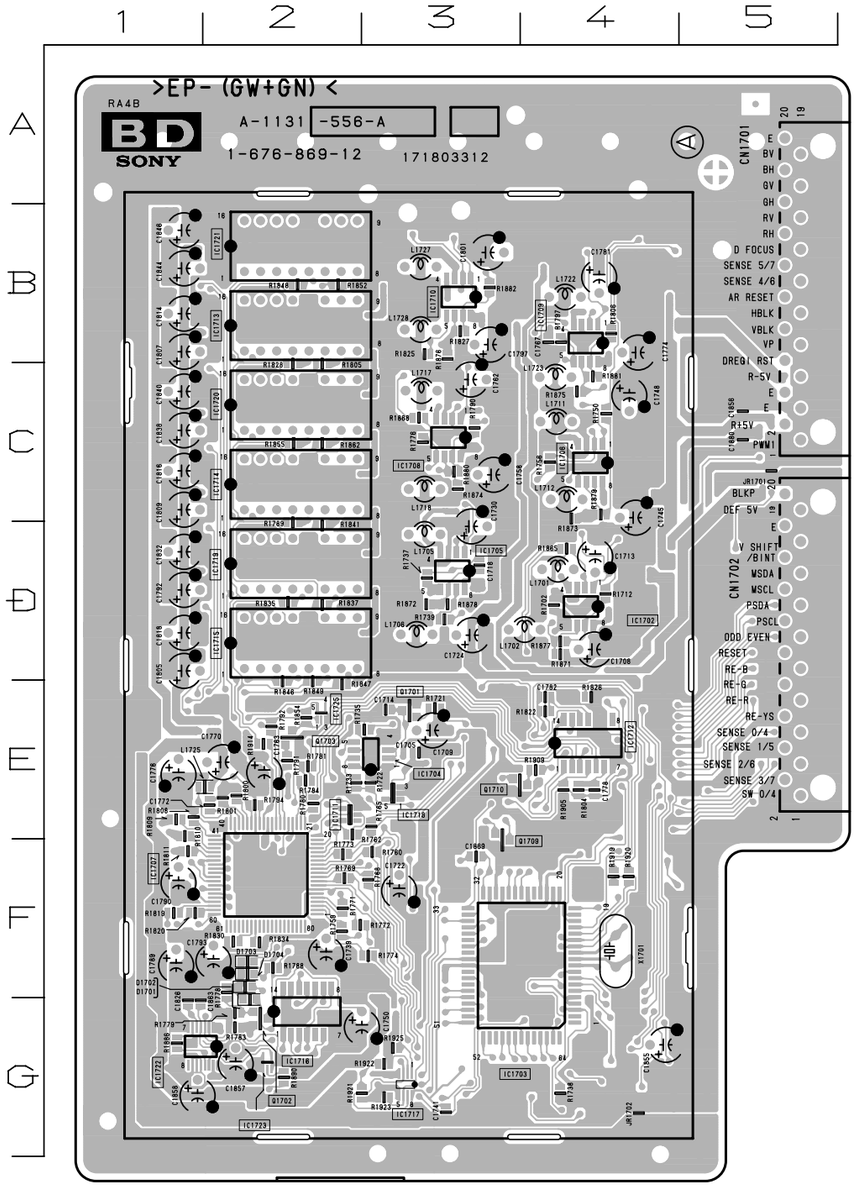


Schematic diagram ← BR board

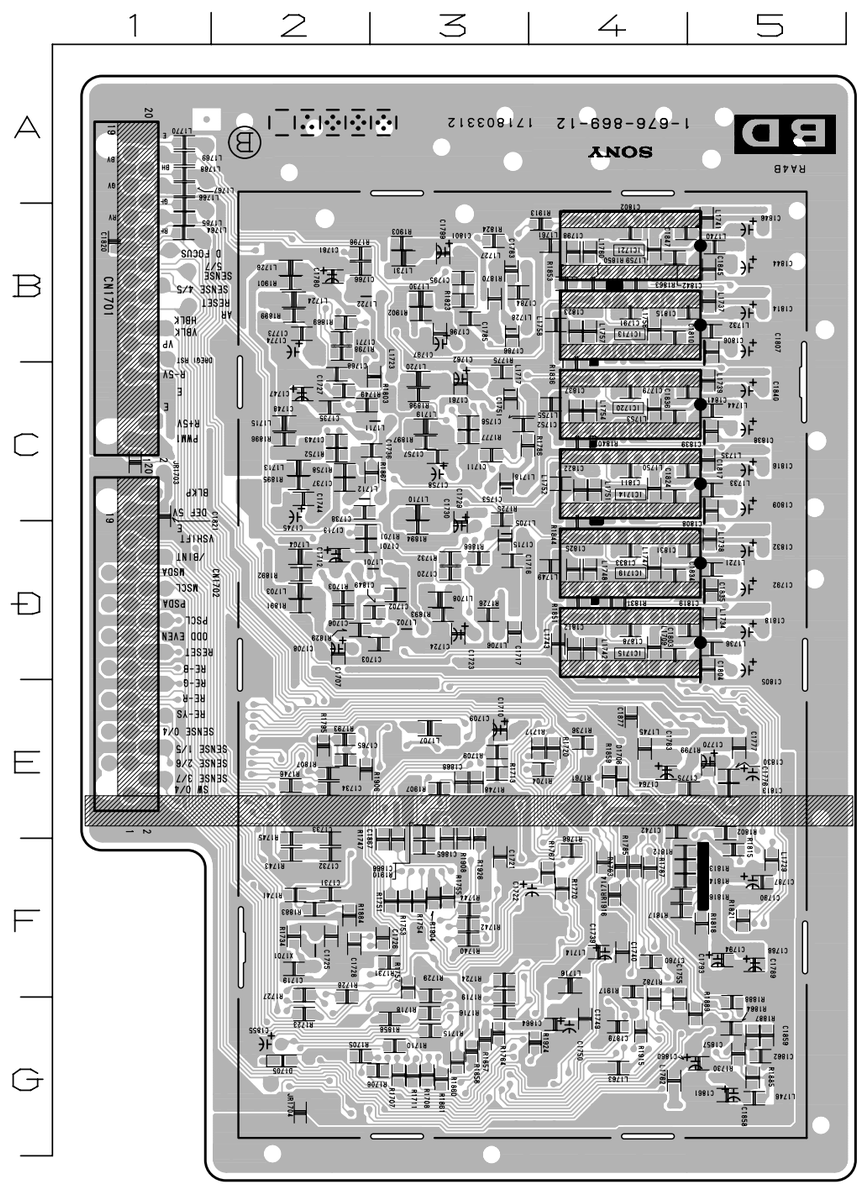
Schematic diagram BD board →

BD [DIGITAL REGI]

– BD Board –



< Component Side >



< Conductor Side >

BD BOARD

DIODE

	L	R	*
D1701	G-2		③
D1702	F-2		③
D1703	F-2		③
D1704	F-2		③
D1705		G-2	③
D1706		E-4	③

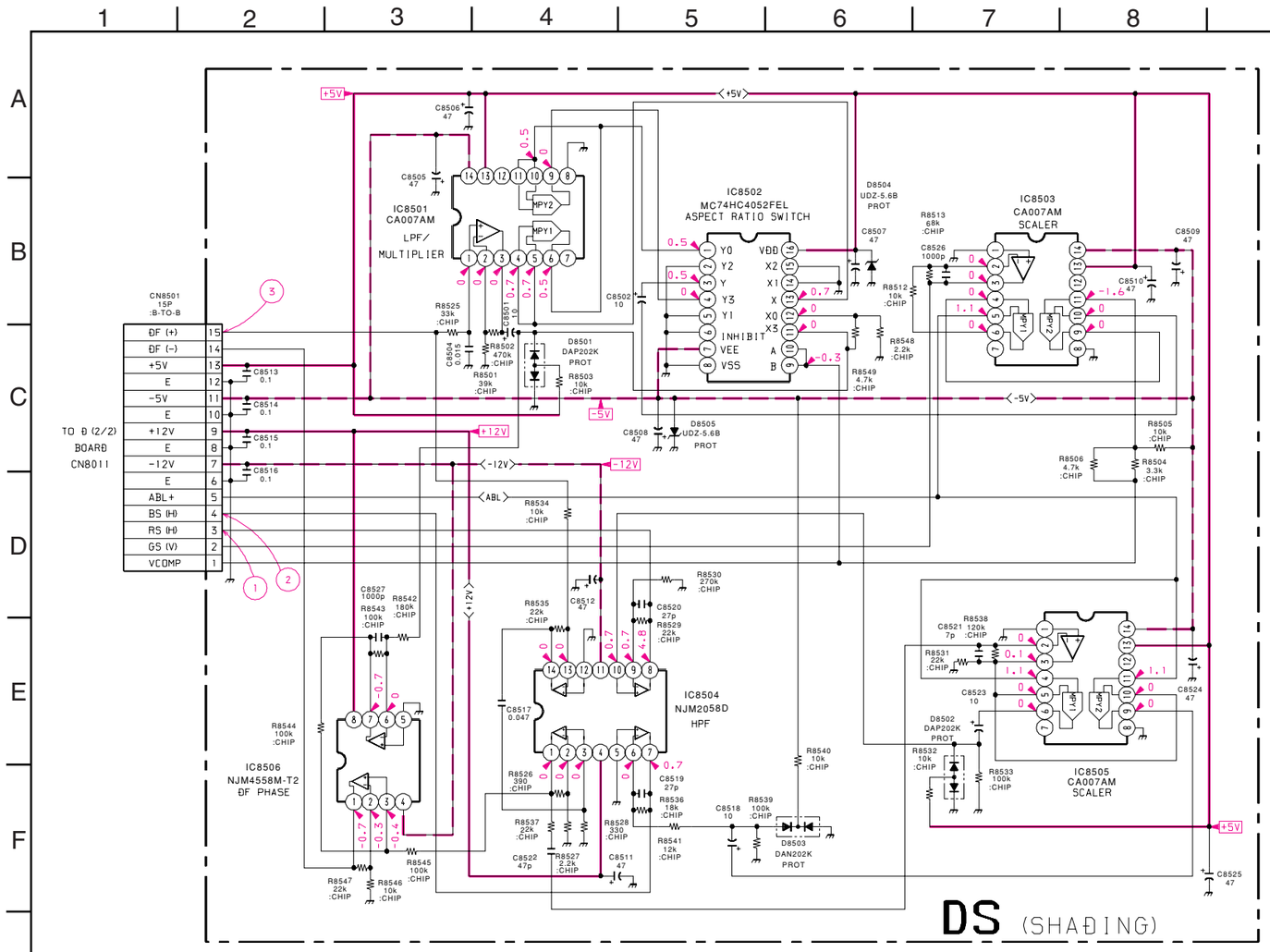
TRANSISTOR

	L	R	*
Q1701	E-3		②
Q1702	G-2		②
Q1703	E-2		②
Q1709	F-3		②
Q1710	E-3		②

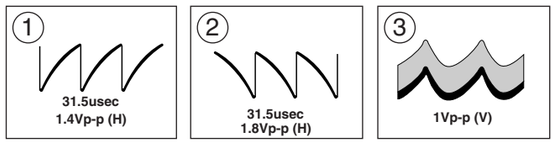
IC

	L	R
IC1702	D-4	
IC1703	F-4	
IC1704	E-3	
IC1705	D-3	
IC1706	C-4	
IC1707	F-2	
IC1708	C-3	
IC1709	B-4	
IC1710	B-3	
IC1712	E-4	
IC1713	B-2	B-4
IC1714	C-2	C-4
IC1715	D-2	D-4
IC1716	G-2	
IC1717	G-3	
IC1718	E-3	
IC1719	D-2	D-4
IC1720	C-2	C-4
IC1721	B-2	B-4
IC1722	G-1	
IC1723	G-2	
IC1725	E-2	

L ; component side
R ; conductor side

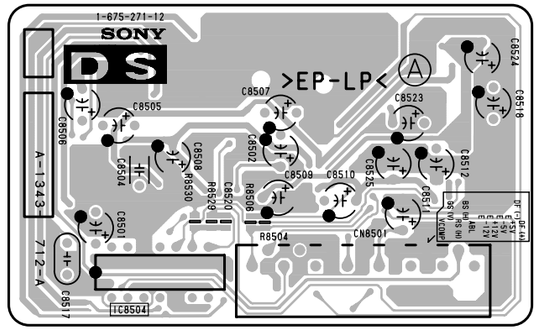


• DS BOARD WAVEFORMS

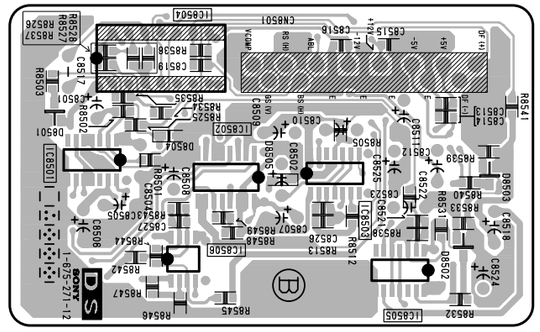


DS [SHADING]

– DS Board –

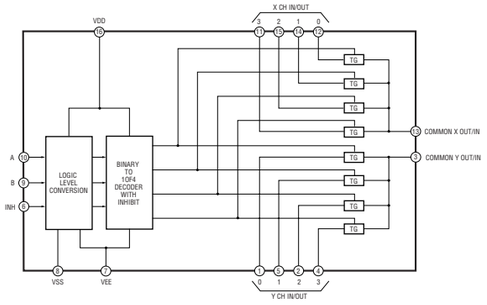


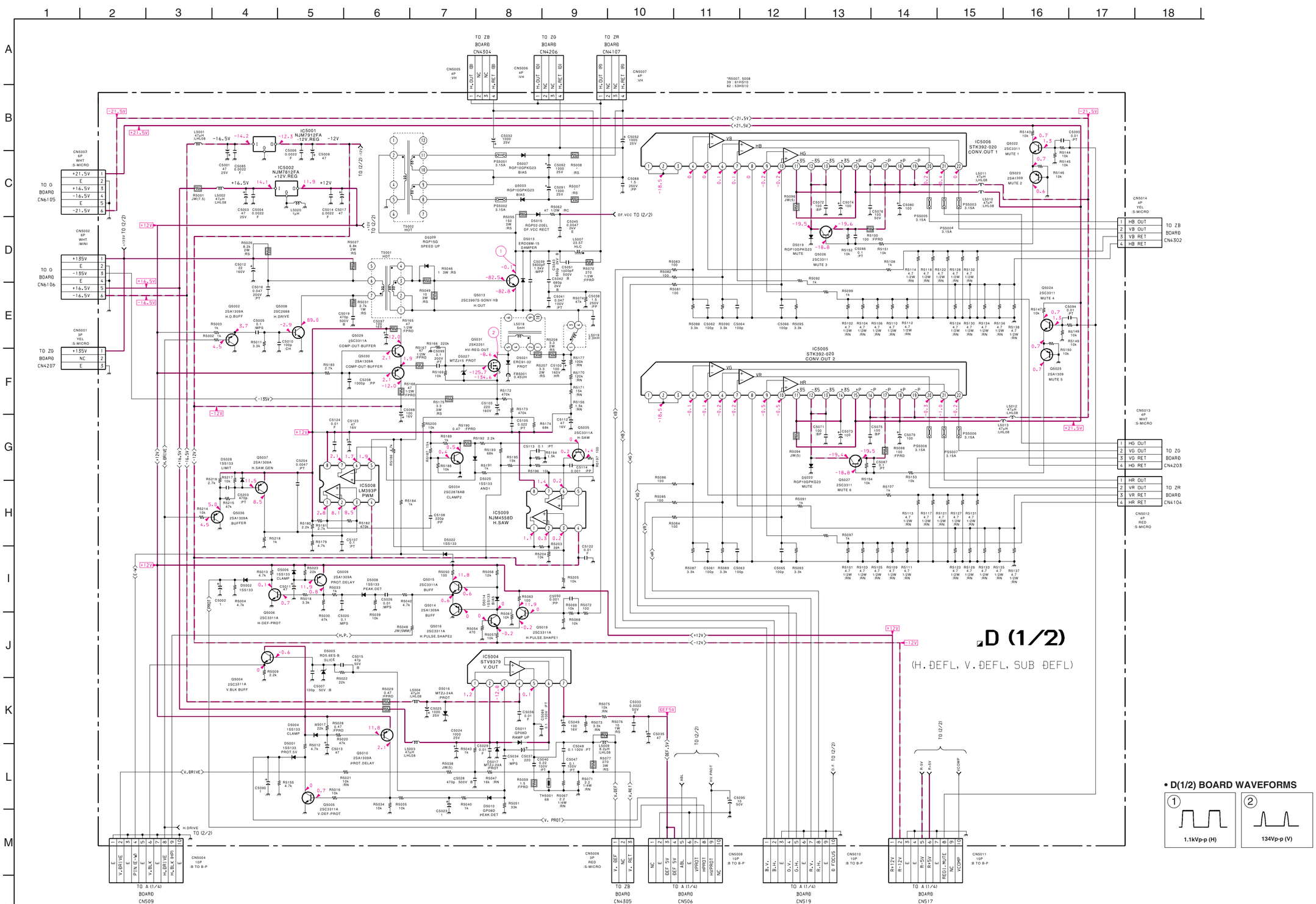
< Component Side >



< Conductor Side >

DS BOARD : IC8502 MC74HC4052FEL





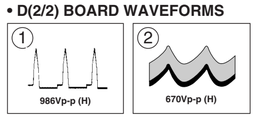
Schematic diagrm ← D (1/2) board

Schematic diagram D (2/2) board →

D (2/2)

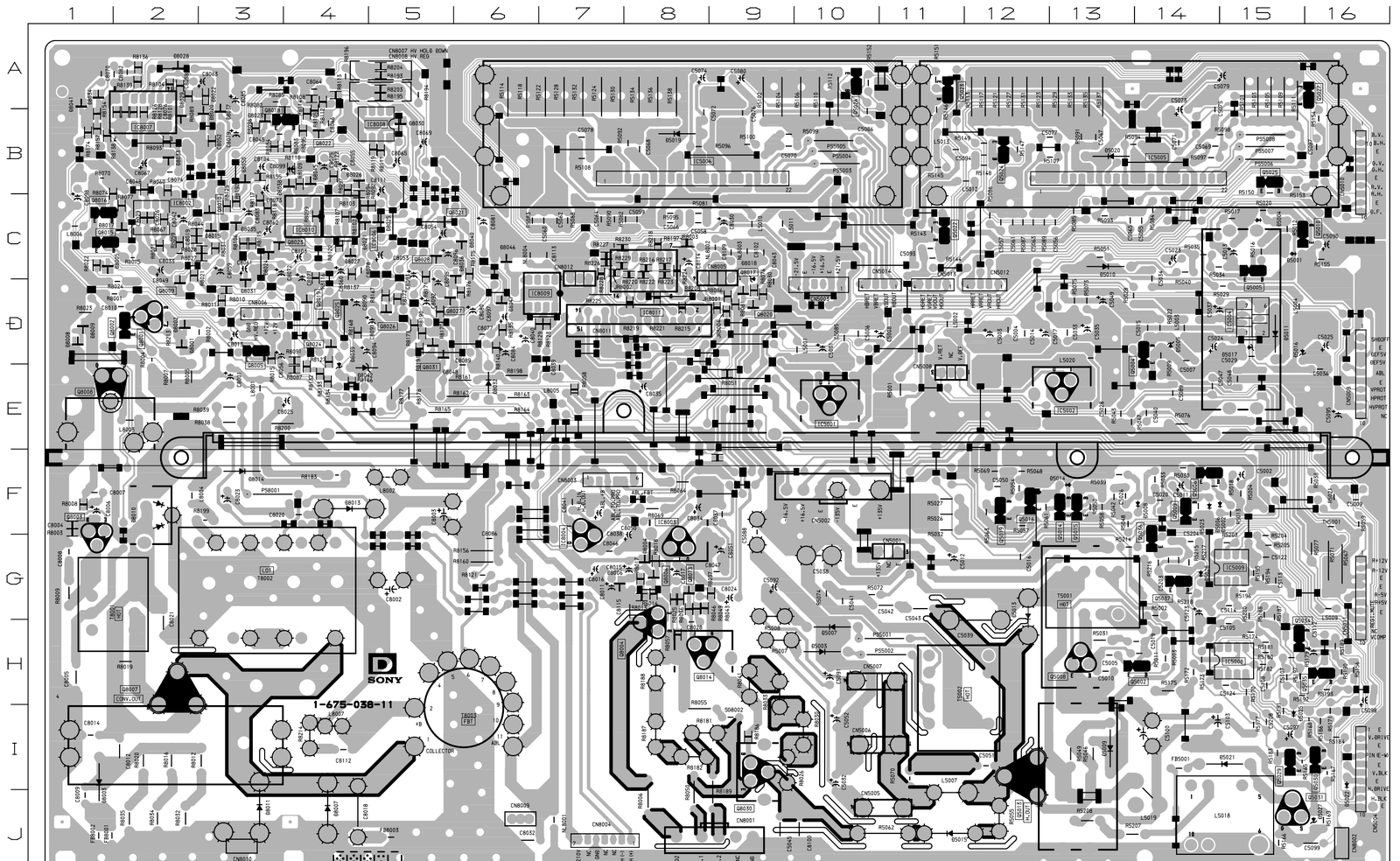
(HV REG, Ð.F., SHAÐING)

• D(2/2) BOARD WAVEFORMS



D(1/2) [H.DEFL, V.DEFL, SUB DEFL] **D(2/2)** [HV REG, D.F., SHASDING]

– D Board –



D BOARD

DIODE			D8029	B-2	⑧	Q8002	D-2	-
			D8030	B-5	④	Q8003	F-1	-
D5001	C-15	-	D8031	D-3	④	Q8004	H-8	-
D5002	F-14	-	D8032	E-6	-	Q8005	D-3	-
D5003	H-10	-	D8033	B-2	⑧	Q8006	G-8	①
D5004	C-15	-	D8034	A-1	④	Q8007	H-2	-
D5005	D-14	-	D8035	C-3	④	Q8008	E-1	-
D5006	F-14	-	D8036	C-6	⑧	Q8009	D-2	①
D5007	H-10	-	D8037	B-3	⑧	Q8010	C-3	①
D5008	F-14	-	D8038	B-4	④	Q8013	G-8	①
D5009	I-13	-	D8039	D-4	-	Q8014	H-8	-
D5010	C-13	-	D8040	C-6	⑧	Q8015	C-1	-
D5011	D-15	-	D8041	A-1	④	Q8016	C-1	-
D5013	G-12	-	D8042	E-4	-	Q8017	D-9	①
D5014	F-13	-	D8045	B-4	④	Q8018	B-3	-
D5015	J-11	-	D8046	C-6	④	Q8019	D-4	①
D5016	D-15	-	D8047	D-6	④	Q8020	D-9	①
D5017	D-15	-	D8048	D-5	⑧	Q8021	C-5	①
D5019	B-8	-	D8050	B-3	⑧	Q8022	B-4	①
D5020	B-13	-	**TRANSISTOR**			Q8023	C-3	①
D5021	I-15	-				Q8024	D-4	①
D5022	I-16	-	Q5002	H-14	-	Q8025	D-4	①
D5025	I-15	-	Q5004	D-14	-	Q8026	D-5	①
D5027	J-16	-	Q5005	C-15	-	Q8027	D-5	①
D5028	G-14	-	Q5006	F-14	-	Q8028	C-5	①
D8001	D-2	④	Q5008	H-13	-	Q8030	I-10	-
D8002	D-2	⑧	Q5009	F-14	-	Q8031	D-5	①
D8003	I-1	-	Q5010	C-15	-	**IC**		
D8004	G-8	⑧	Q5013	I-12	-			
D8005	C-1	⑧	Q5014	F-13	-	IC5001	E-10	
D8006	G-7	⑧	Q5015	F-13	-	IC5002	E-13	
D8007	J-4	④	Q5016	F-12	-	IC5004	D-15	
D8008	D-1	④	Q5019	F-12	-	IC5005	B-14	
D8009	D-1	④	Q5022	C-11	-	IC5006	B-8	
D8010	F-2	⑧	Q5023	A-11	-	IC5008	H-15	
D8011	J-3	④	Q5024	B-12	-	IC5009	G-15	
D8013	F-4	-	Q5025	B-15	-	IC8002	C-2	
D8014	F-3	-	Q5026	A-10	-	IC8003	G-8	
D8015	C-3	⑧	Q5027	A-16	-	IC8004	F-7	
D8017	C-2	⑧	Q5029	I-15	-	IC8006	C-4	
D8018	C-9	④	Q5030	I-16	-	IC8007	B-2	
D8021	C-4	⑧	Q5031	J-15	-	IC8008	B-5	
D8023	B-3	⑧	Q5034	H-15	-	IC8009	D-7	
D8024	C-3	⑧	Q5035	H-16	-	IC8010	C-4	
D8025	C-5	⑧	Q5036	F-14	-	IC8011	C-8	
D8026	B-4	⑧	Q5037	G-14	-			
D8027	C-4	⑧	Q8001	D-2	-			

K [AUDIO AMP, AP, DOLBY I/O]

– K Board –

K BOARD

DIODE

	L	R	*
D2001		A-4	④
D2002		A-4	④
D2003		A-5	④
D2004		A-5	④
D2008		C-2	③
D2009		J-3	③
D2010		C-2	③
D2012		I-3	③
D2013		J-3	③
D2014		I-3	③
D2017		I-3	③
D2019		G-1	③
D2020		I-3	③
D2021		I-3	③
D2022		I-3	③
D2023		I-3	③
D2024		G-1	③
D2025		A-3	④
D2026		A-3	④
D2027		B-3	④
D2028		A-3	④
D2029		D-3	④
D2030		D-3	④
D2031	F-4		③
D2032	F-4		③
D2033		B-5	③
D2034		B-5	③
D2050		A-2	④
D2051		A-2	④
D2052		A-2	④
D2053		A-2	④
D2054		H-1	④
D2055		H-1	④
D2056		I-1	④
D2057		I-1	④
D2058		J-4	③
D2059		J-4	③

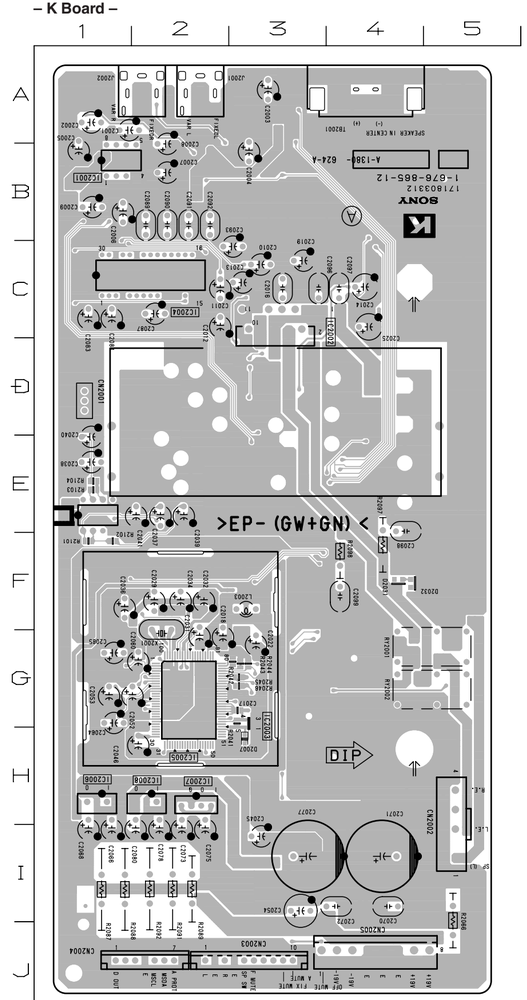
TRANSISTOR

	L	R	*
Q2001		A-4	①
Q2002		B-4	①
Q2003		A-5	①
Q2004		B-3	①
Q2005		A-3	①
Q2006		B-4	①
Q2007		A-3	①
Q2008		A-3	①
Q2009		C-3	①
Q2010		B-2	①
Q2011		C-2	①
Q2012		B-2	①
Q2013		C-2	①
Q2015		G-1	①
Q2016		I-3	①
Q2017		I-3	①
Q2018		G-1	①

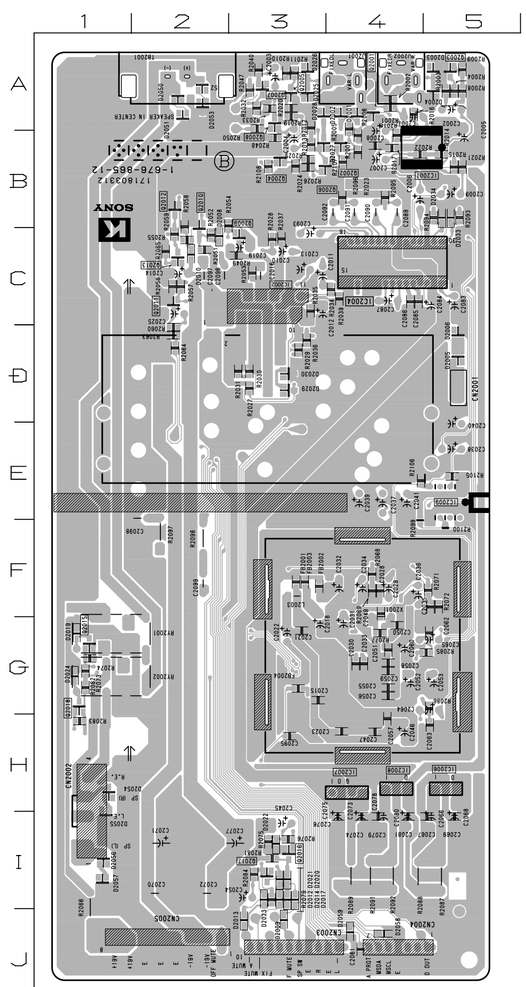
IC

	L	R
IC2001	B-1	B-4
IC2002	C-3	C-3
IC2003	G-3	
IC2004	C-2	C-4
IC2005	G-2	
IC2006	H-1	H-5
IC2007	H-2	H-4
IC2008	H-2	H-4
IC2009	E-1	E-5

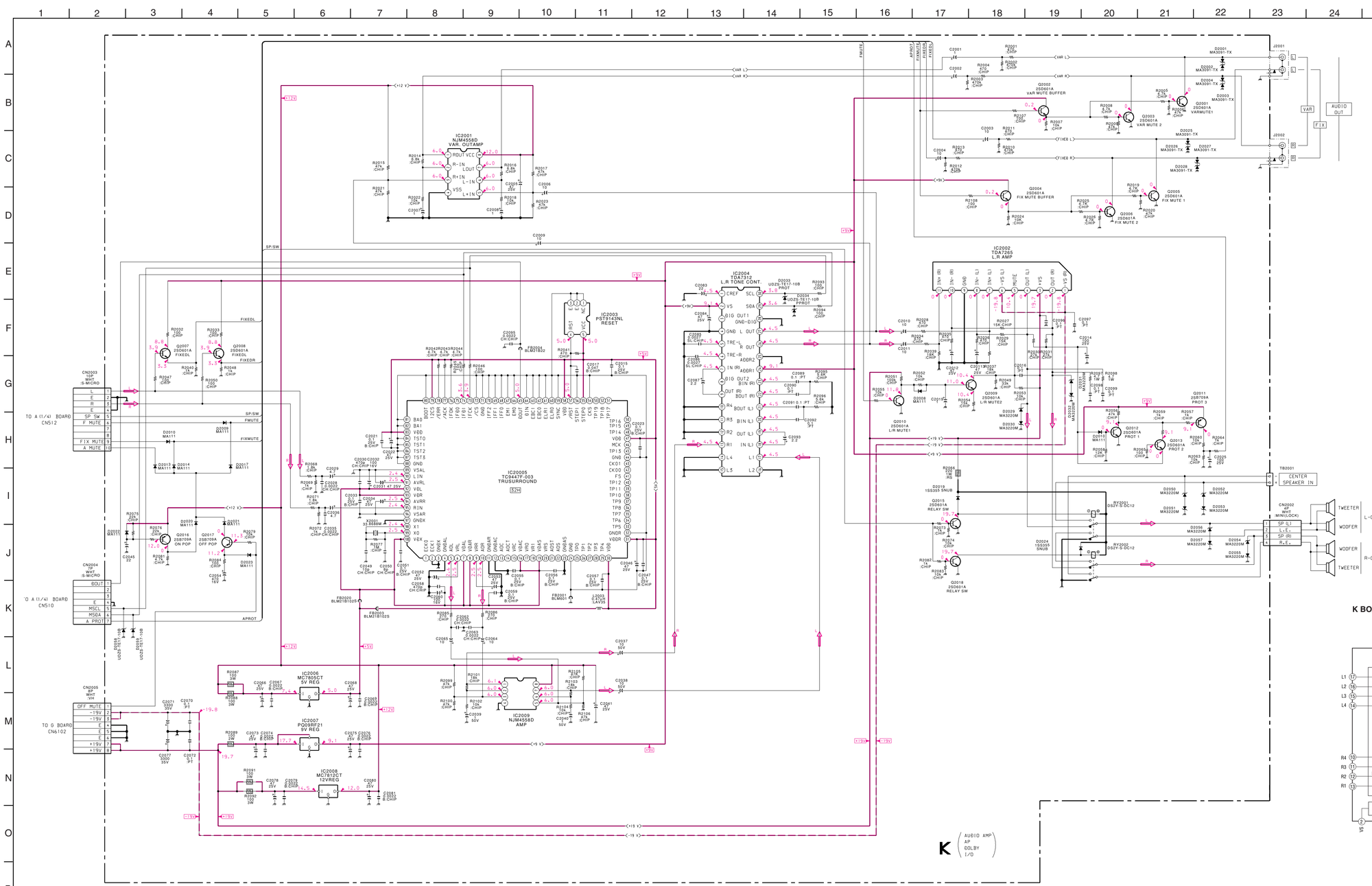
L ; component side
R ; conductor side



< Component Side >

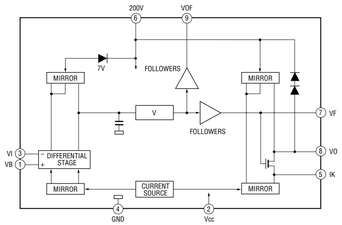


< Conductor Side >

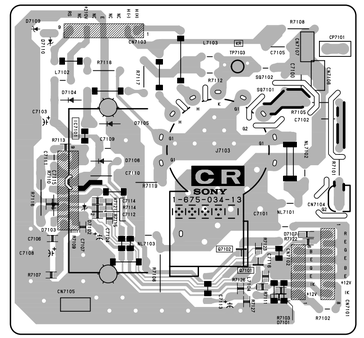

IC2001 NJM4558D VAR_OUTAMP
IC2002 TDA7265 L,R AMP
IC2003 PST9143NL RESET
IC2004 TDA7312 L,R TONE CONT.
IC2005 TC9447F-003 TRUSURROUND
IC2006 MC7805CT 5V REG
IC2007 PQ09RF21 9V REG
IC2008 MC7812CT 12VREG
IC2009 NJM4558D AMP
CN2003 WHT (S-MICRO)
CN2004 WHT (S-MICRO)
CN2005 WHT
CN2002 WHT (MINI/LOCK)
TO A (1/4) BOARD CN512
TO A (1/4) BOARD CN510
TO G BOARD CN6102
TB2001 CENTER SPEAKER IN
TWEETER
WOOFER
L-CH
R-CH
K BOARD : IC2002 TDA7265
K BOARD : IC2001, 2009 NJM4558D
K BOARD : IC2004 TDA7312
AUDIO AMP AP DOLBY I/O
VAR
FIX
AUDIO OUT

CR [CRT I/F RED] CG [CRT I/F GREEN] CB [CRT I/F BLUE]

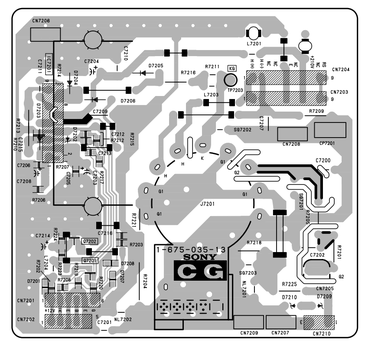
CR BOARD : IC7101 TDA6111Q/N4
CG BOARD : IC7201 TDA6111Q/N4
CB BOARD : IC7301 TDA6111Q/N4



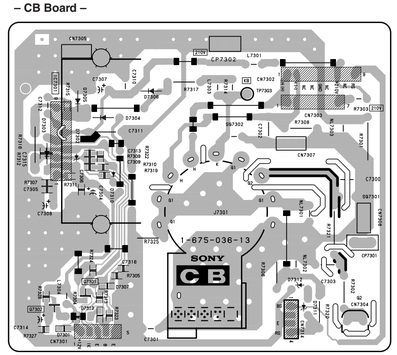
– CR Board –

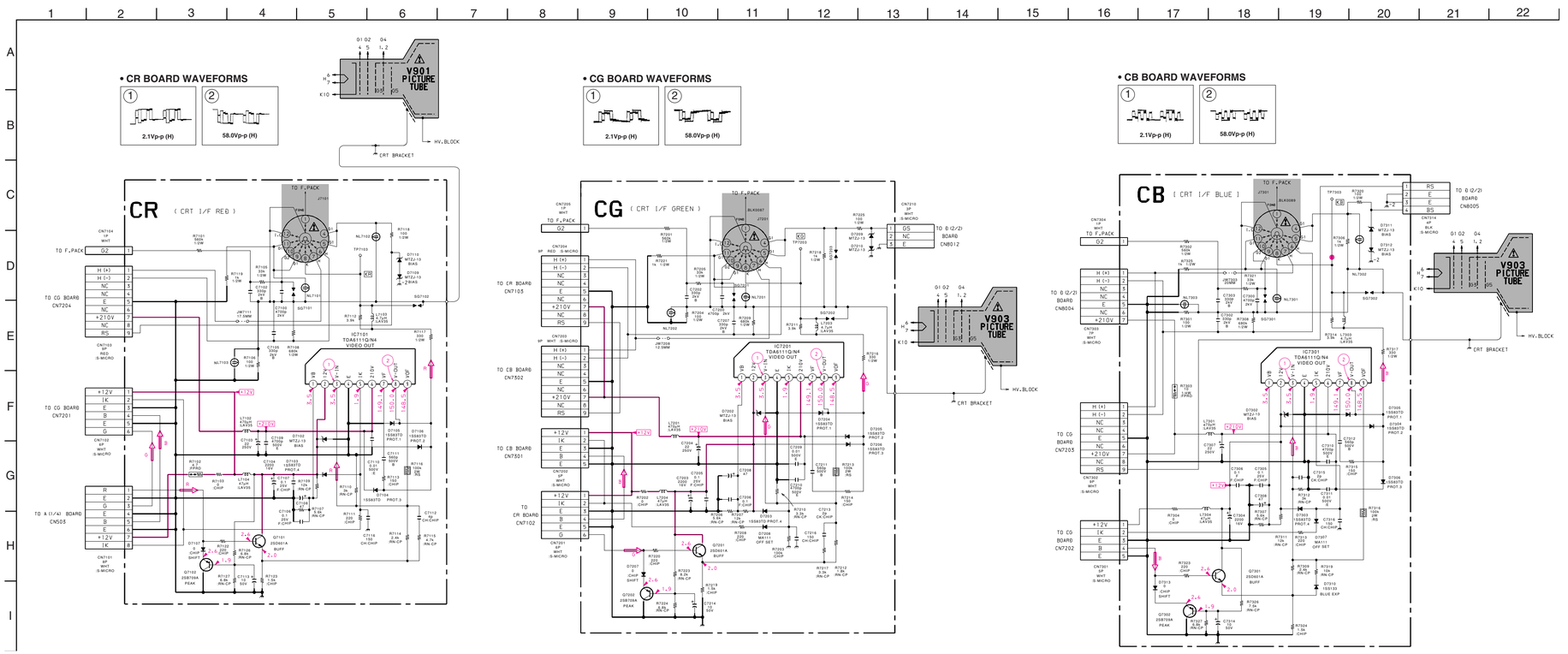


– CG Board –

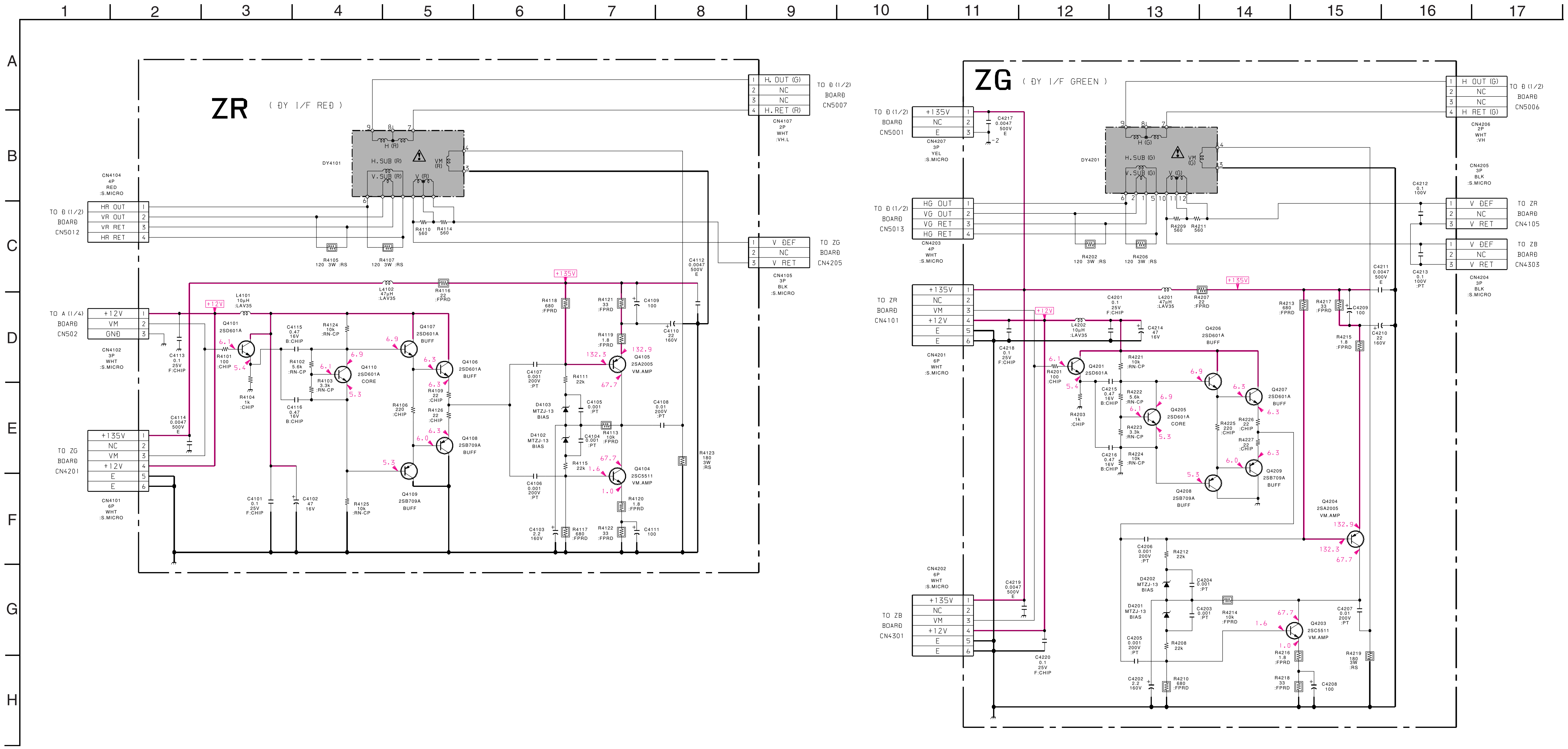


– CB Board –

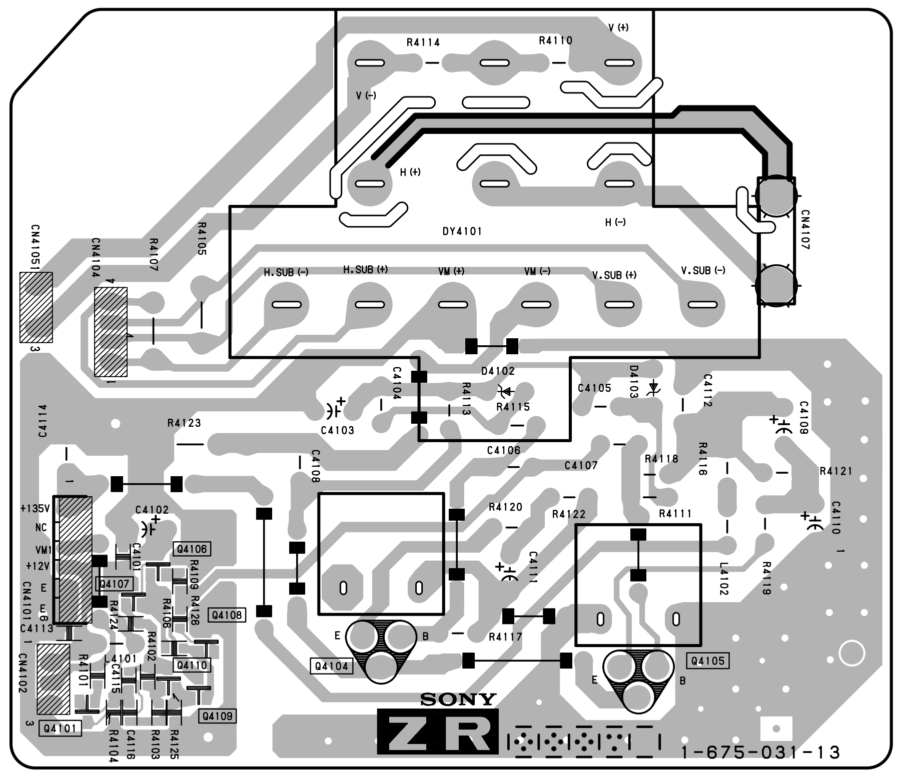




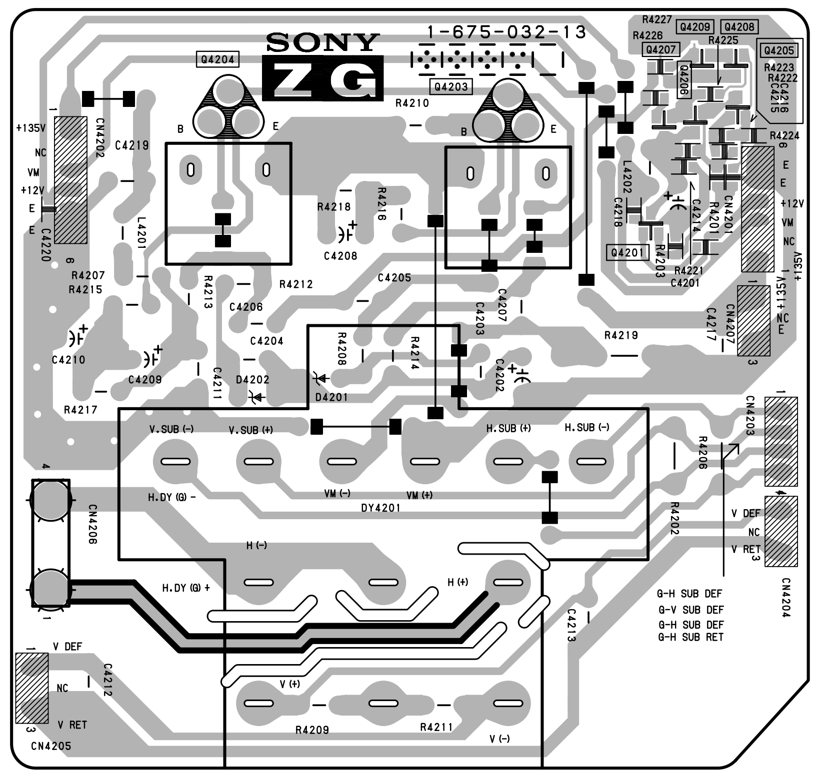
ZR [DY I/F RED] **ZG** [DY I/F GREEN]



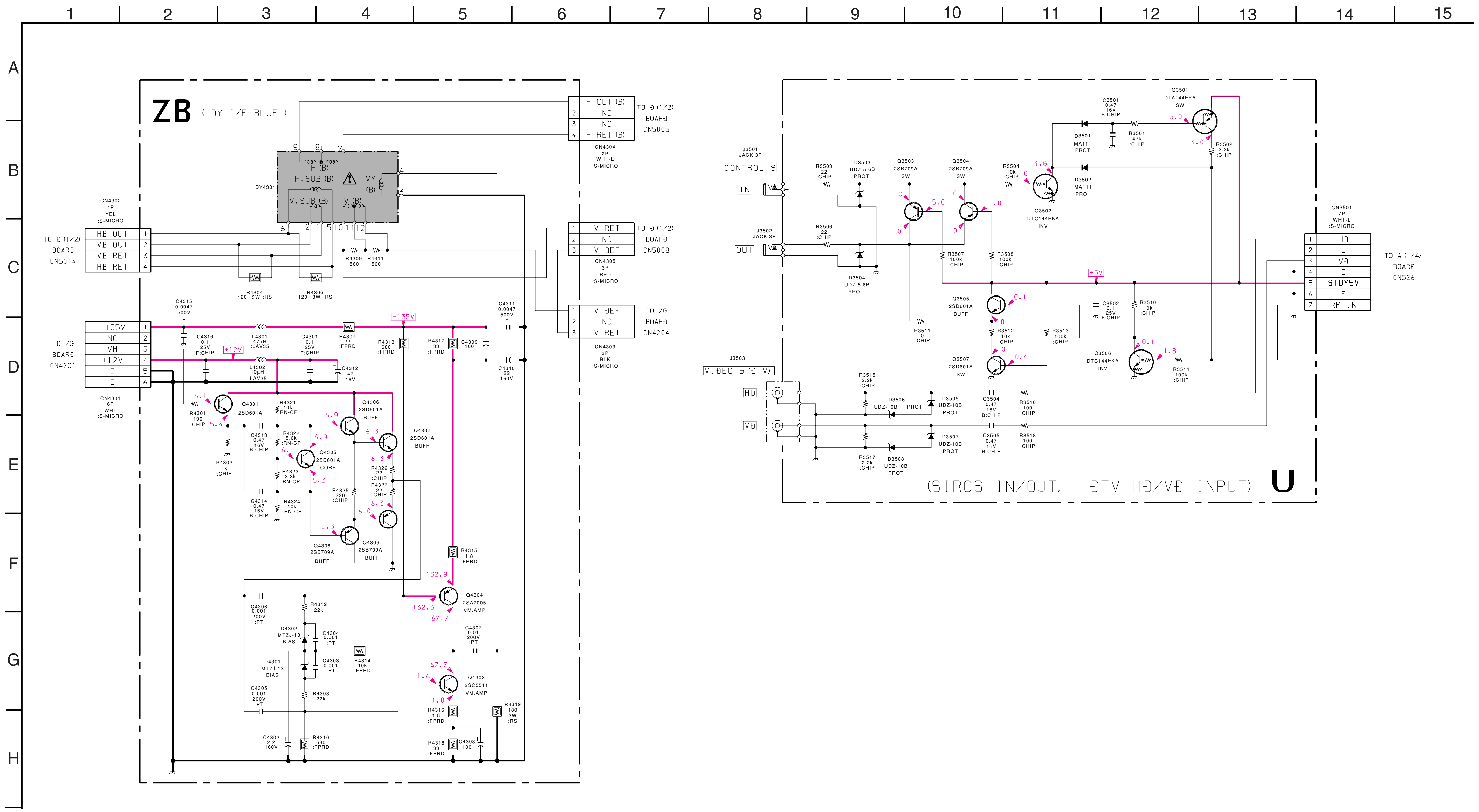
– ZR Board –



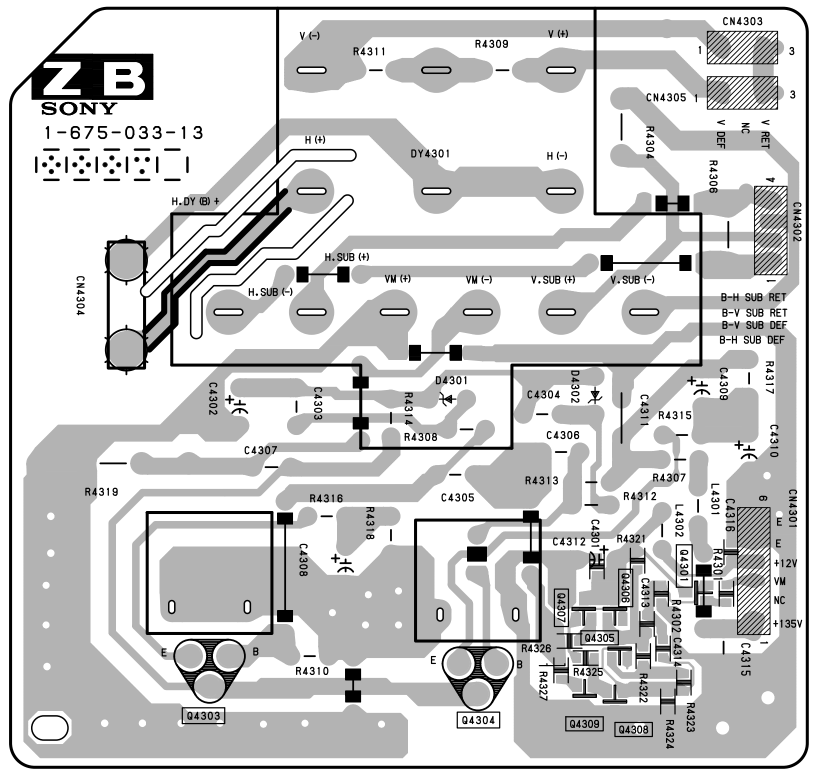
– ZG Board –



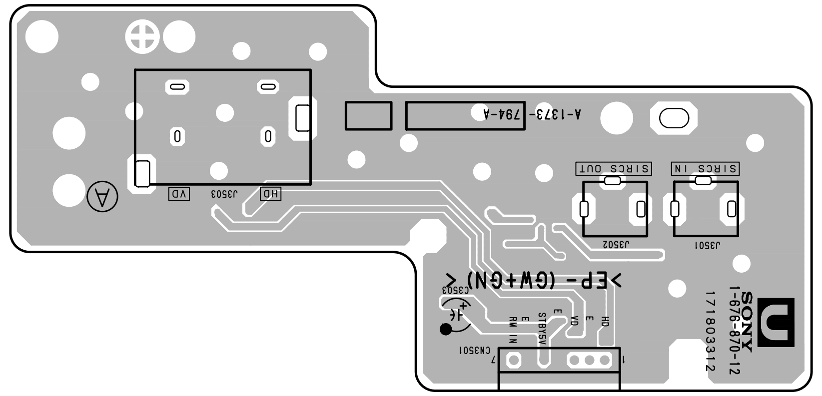
ZB [DY I/F BLUE] **U** [SIRCS IN/OUT, DTV HD/VD INPUT]



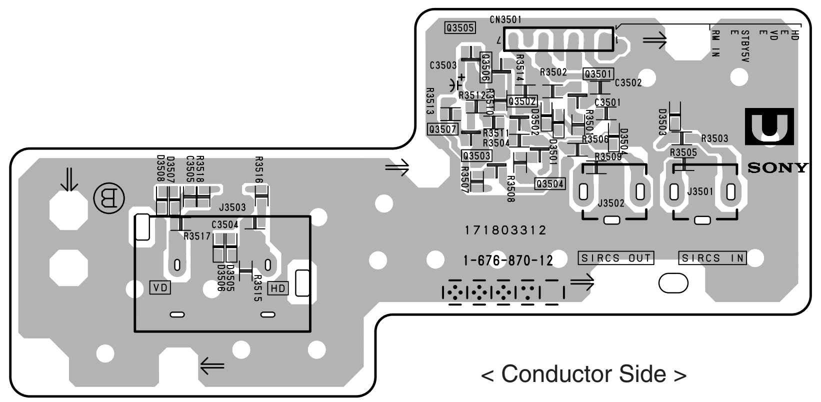
– ZB Board –



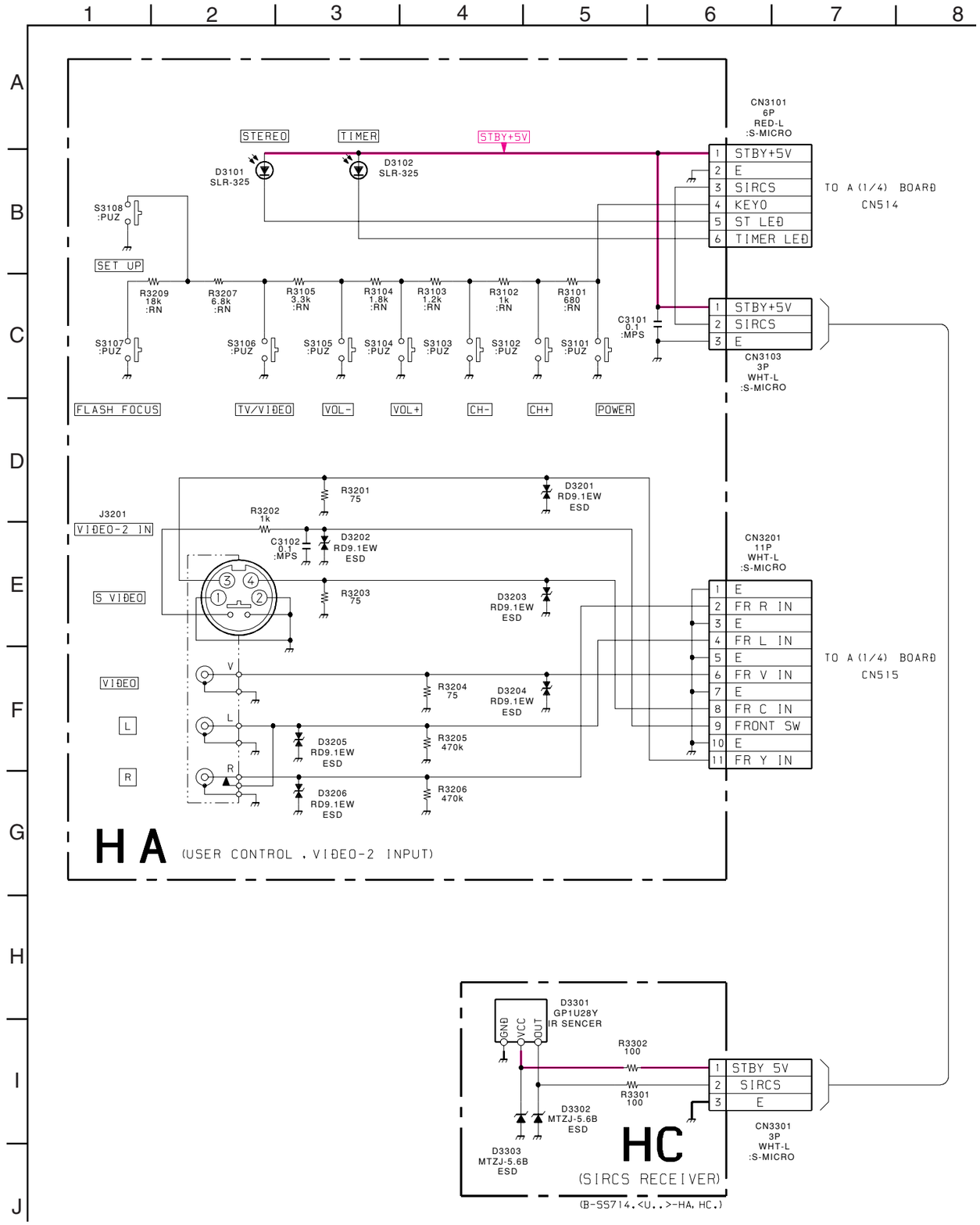
– U Board –



< Component Side >

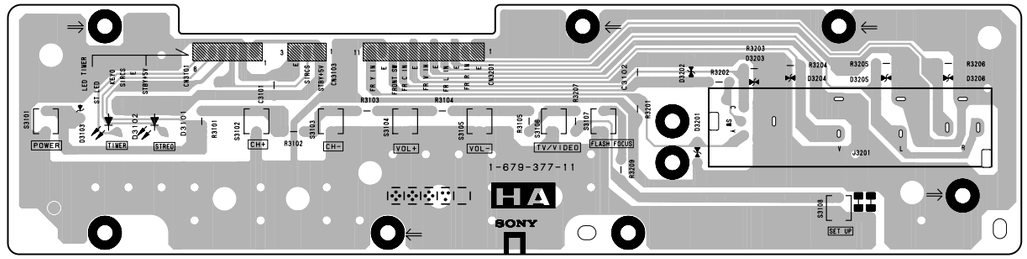


< Conductor Side >

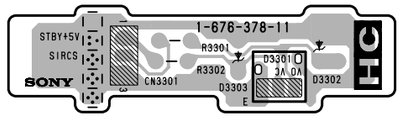


HA [USER CONTROL, VIDEO-2 INPUT] **HC** [SIRCS RECEIVER]

– HA Board –



– HC Board –



G [POWER SUPPLY]

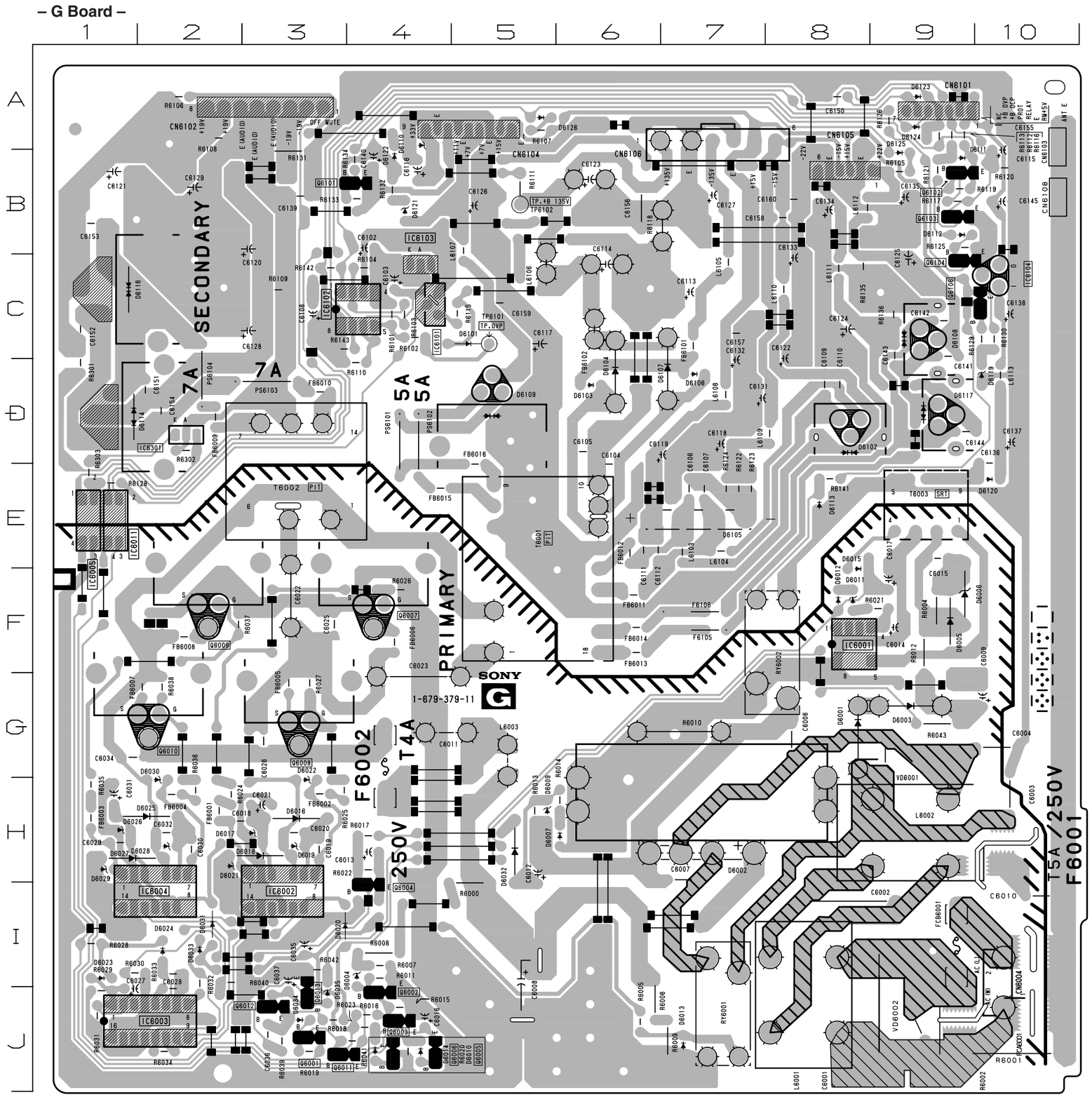
– G Board –

G BOARD

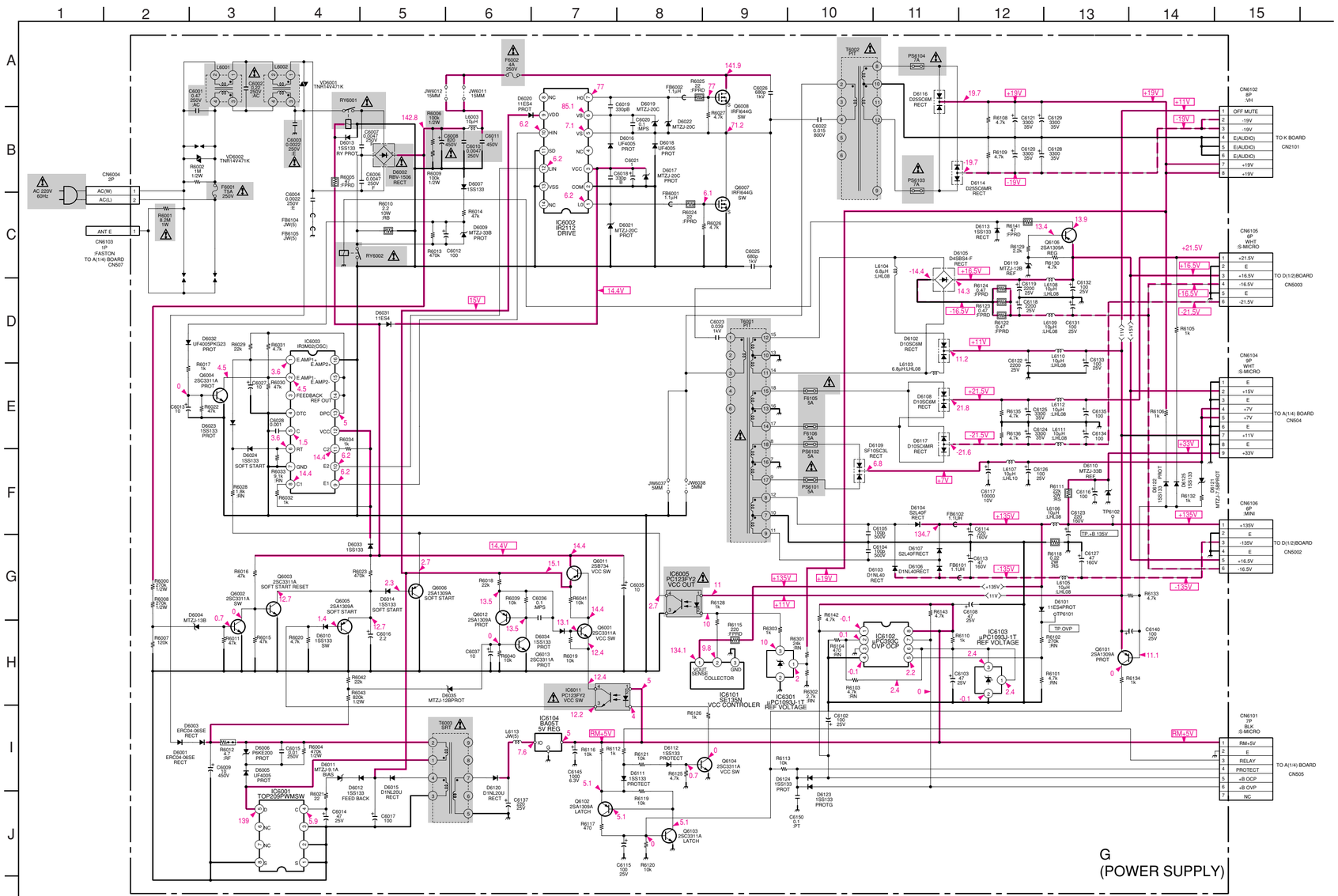
DIODE	
D6001	G-8
D6002	H-7
D6003	G-9
D6004	I-2
D6005	F-9
D6006	F-9
D6007	H-6
D6009	H-5
D6010	J-4
D6011	F-8
D6012	F-8
D6013	J-7
D6014	J-4
D6015	E-8
D6016	H-3
D6017	H-3
D6018	H-3
D6019	H-3
D6020	I-3
D6021	H-2
D6022	G-3
D6023	A-9
D6024	A-9
D6031	I-2
D6032	H-5
D6033	I-2
D6034	J-3
D6035	J-3
D6101	C-5
D6102	D-8
D6103	D-6
D6104	D-6
D6105	E-7
D6106	D-7
D6107	D-7
D6108	C-9
D6109	D-5
D6110	A-4
D6111	B-9
D6112	B-9
D6113	E-8
D6114	D-1
D6116	C-1
D6117	D-9
D6119	D-10
D6120	E-10
D6121	B-4
D6122	B-4
D6123	A-9
D6124	A-9
D6125	B-9

TRANSISTOR	
Q6001	J-3
Q6002	J-4
Q6003	J-2
Q6004	I-4
Q6005	J-4
Q6006	J-4
Q6007	F-4
Q6008	G-3
Q6011	J-3
Q6012	J-3
Q6013	J-3
Q6101	B-4
Q6102	B-9
Q6103	B-9
Q6104	C-9
Q6106	C-10

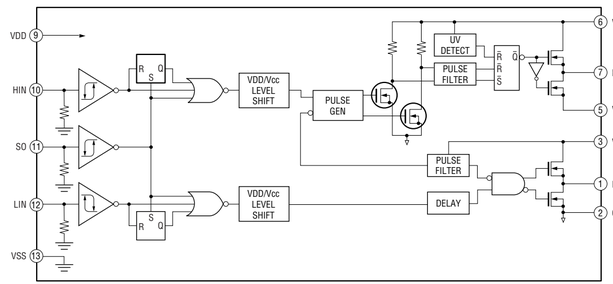
IC	
IC6001	F-8
IC6002	I-3
IC6003	J-2
IC6005	E-1
IC6011	E-1
IC6101	C-4
IC6102	C-4
IC6103	C-4
IC6104	C-10
IC6301	D-2



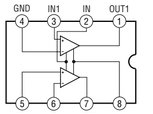
Schematic diagram
← HA HC board



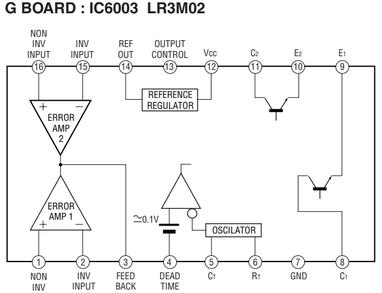
G BOARD : IC6002, 6004 IR2112



G BOARD : IC6102 uPC393C



G BOARD : IC6003 LR3M02



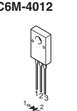
Schematic diagram
← G board

6-5. SEMICONDUCTORS

11ES4-TA1B
1SS83TD
D1NL40-TR2
GP08DPKG23
HZT33-02TE
P6KE200AG23
RGP02-20EL-6394
RGP10GPKG23
RGP15GPKG23
S2L40F
UF4005PKG23

1SS133T-77
ERC04-06S
ERC04-06SE
ERC06-15STP11
ERC91-02
ERC91-02E

D10SC6M-4012

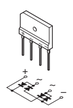


D10SC6MR
D8LC20U-4015

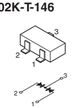
D1NL20U-TR

D25SC6MF04
D25SC6MRF04

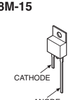
D4SBS4-F
RBV-1506



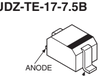
DAN202K-T-146



ERD08M-15

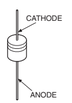


MA111-TX
MA113-(TX)
UDZ-TE-17-10B
UDZ-TE-17-3.9B
UDZ-TE-17-33B
UDZ-TE-17-5.1B
UDZ-TE-17-5.6B
UDZ-TE-17-7.5B

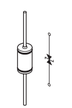


MA3033L-TX
MA3051M-TX
MA3091-TX
MA3130H-TX
MA3150H-TX
MA3220M-TX

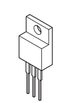
MTZJ-T-77-12B
MTZJ-T-77-13
MTZJ-T-77-15
MTZJ-T-77-20C
MTZJ-T-77-24A
MTZJ-T-77-3.9
MTZJ-T-77-33B
MTZJ-T-77-33C
MTZJ-T-77-5.6
MTZJ-T-77-5.6B
MTZJ-T-77-7.5B
MTZJ-T-77-9.1A
MTZN-T-77-10



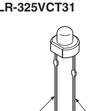
RD9.1EW-T1



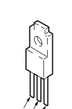
SF10SC3L



SLR-325VCT31



BA05T



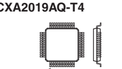
CA0007AM
NJM2058M-TE2
SN74HC00ANSR
SN74HC05ANSR
TC74HC163AF(EL)
TC74HC32AF(EL)
TC74HC74AF(EL)
TLC2932IPW-E20

14pin SOP

CM0006CF

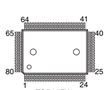
80pin QFP

CXA2019AQ-T4

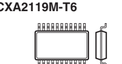


40pin QFP

CXA2101AQ-TL
CXD2303AQ-TL

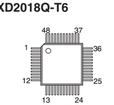


CXA2119M-T6

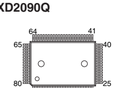


28pin SOP

CXD2018Q-T6



CXD2079Q
CXD2090Q



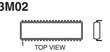
208pin QFP

CXP85840A-025Q
MB90091A-150

IR2112
NJM2058D
NJM2058D

14pin DIP

IR3M02

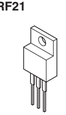


16pin DIP

LA7856

20pin DIP

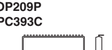
LM2940CT-5.0
MC7805CT
MC7812CT
NJM7812FA
PQ09RF21



LM358DR
LM393PS-E20
LM393PS-E20
NJM4558M-T2

8pin SOP

LM358P
LM393P
NJM4558D
TOP209P
UPC393C



8pin DIP

M24C02-MN6T
M24C08-MN6T
NJM2533M(TE2)
ST24E16FM6TR
TC7W66FU(TE12R)
UPC4570G2-E2

8pin SOP

MB81F161622B-80FN

50pin SOP

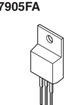
MC14053BFEL
MC74HC4052FEL
PCM56P-L
TC74HC123AF(EL)
TC74HC4052AF(EL)

16pin SOP

MSM5483331TS-K

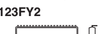
44pin SOP

NJM7905FA



NJM7912FA

PC123FY2

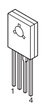


4pin DIP

PQ05RF21
PQ09RF21

PQ20VZ1U

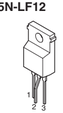
PQ30RV21



PST9143NL
TC7SET08FU(TE85L)

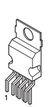
5pin CHIP

SE-135N-LF12



STK392-020

STV9379



TC7W04FU-TE12L
TC7W08FU(TE12R)

8pin CHIP

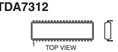
TC9447F-003
UPD64081BGF-3BA

TDA6111Q / N4

TDA7265

11pin ZIP

TDA7312



30pin DIP

TDA9178T/N1.118

24pin SOP

TLC2933IPWR

14pin SOP

TLC5733AIPM

64pin QFP

UPC1093J-1-T

UPC659AGS-E2

24pin SOP

UPD424210LE-60-E2

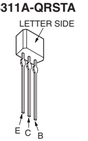
40pin DIP

Z8613012SSC

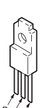
18pin SOP

2SA1221-T-M
2SB734-T-2
2SB734-T-4
2SD774-T-34

2SA1309A-QRSTA
2SC3311A-QRSTA



2SA2005
2SC5511

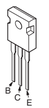


2SA1226-T1E3E4
2SB709A-QRS-TX
2SD601A-QRS-TX
DTA144EKA-T146
DTC114EKA-T146
DTC144EKA-T146

2SC2688-LK

2SC2878AB-TPE2

2SC3997S-SONY-YB



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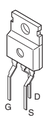
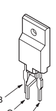
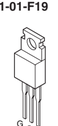


2SC4632LS-CB7



2SK2251-01-F19



2SK3018-T106

IRFI640LF

IRFI644G-LF36

SECTION 7
EXPLODED VIEWS

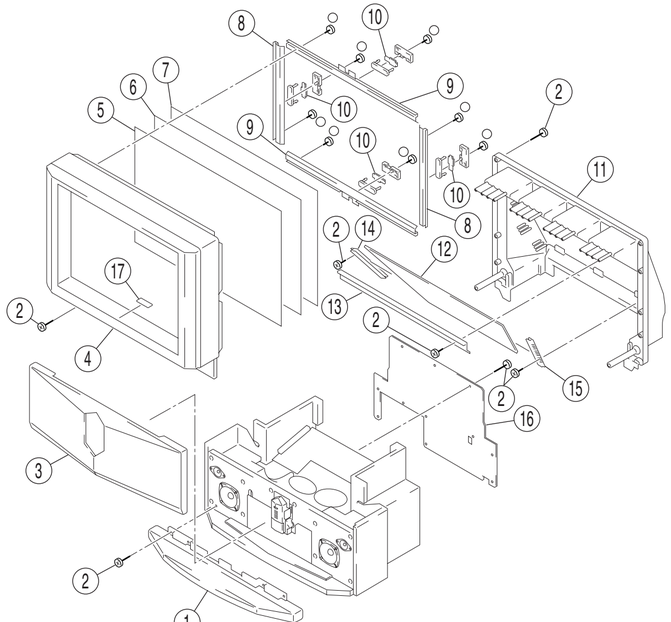
NOTE:

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

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

7-1. COVER (KP-HR53KR1)

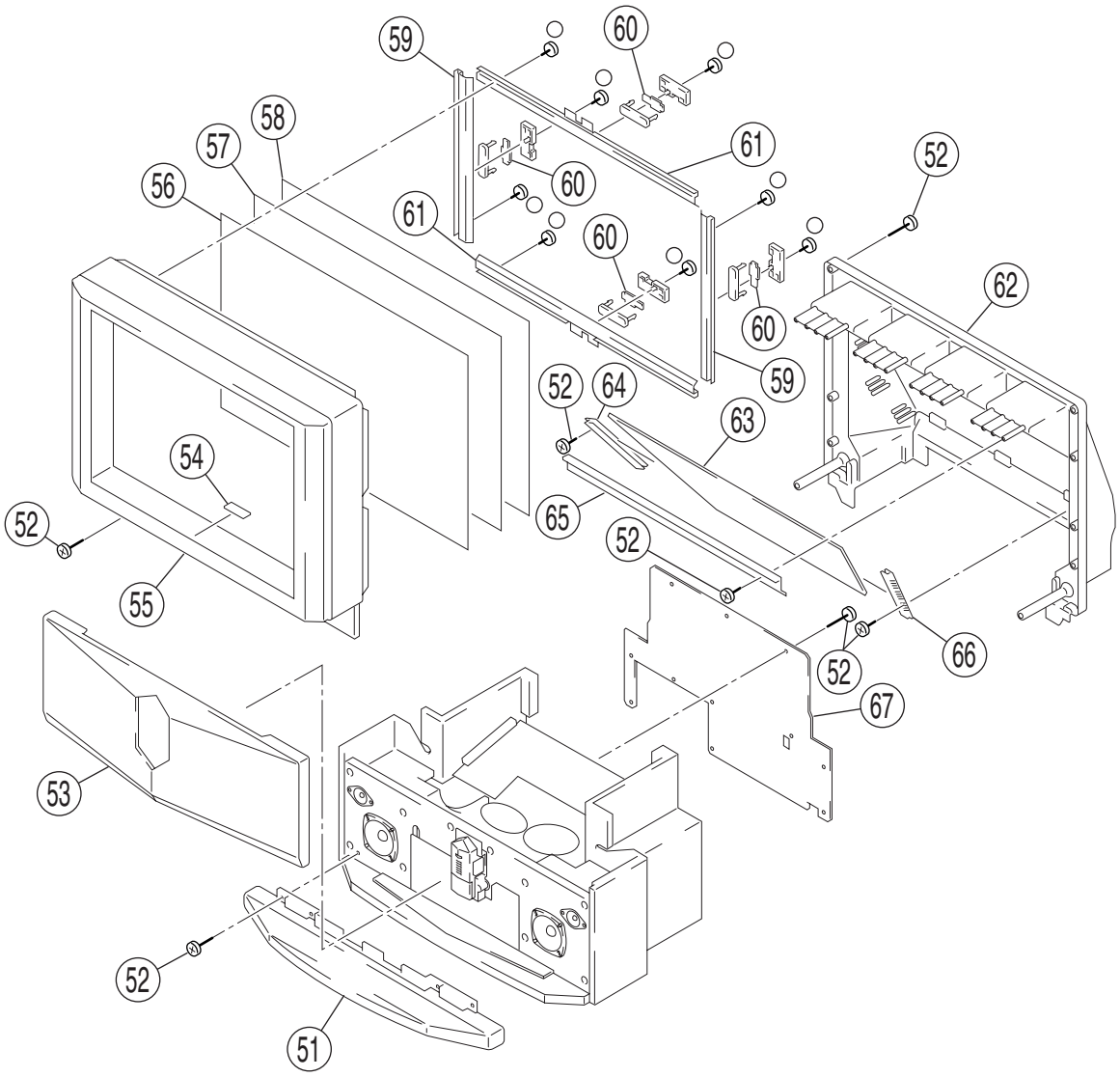
○ : +BVTP 4X12 7-685-661-14



REF. NO.		PART NO.	DESCRIPTION	REMARK
1	*	4-074-354-01	SKIRT (53), FRONT	
2		4-378-522-31	SCREW (4X20), TAPPING	
3		X-4037-650-1	GRILLE ASSY (53), SPEAKER	
4		X-4036-809-1	BEZNET ASSY (53V)	
5		4-071-582-11	SCREEN (53), CONTRAST	
6		4-070-525-11	PLATE (L), DIFFUSION	
7		4-070-602-11	PLATE (F), DIFFUSION	
8	*	4-070-330-01	HOLDER (S), SCREEN YC	
9	*	4-070-328-11	HOLDER (L), SCREEN YC	
10	*	A-1390-933-A	S BORAD, COMPLETE	
11	*	4-069-694-01	COVER, MIRROR	
12		4-070-344-01	MIRROR, REFLECTION	
13	*	4-070-345-11	HOLDER (TOP), MIRROR	
14	*	4-069-687-01	HOLDER (LS), MIRROR	
15	*	4-069-688-01	HOLDER (RS), MIRROR	
16	*	4-075-614-01	BOARD, REAR	
17	*	A-1372-874-A	HC BORAD, COMPLETE	

7-2. COVER (KP-HR61KR1)

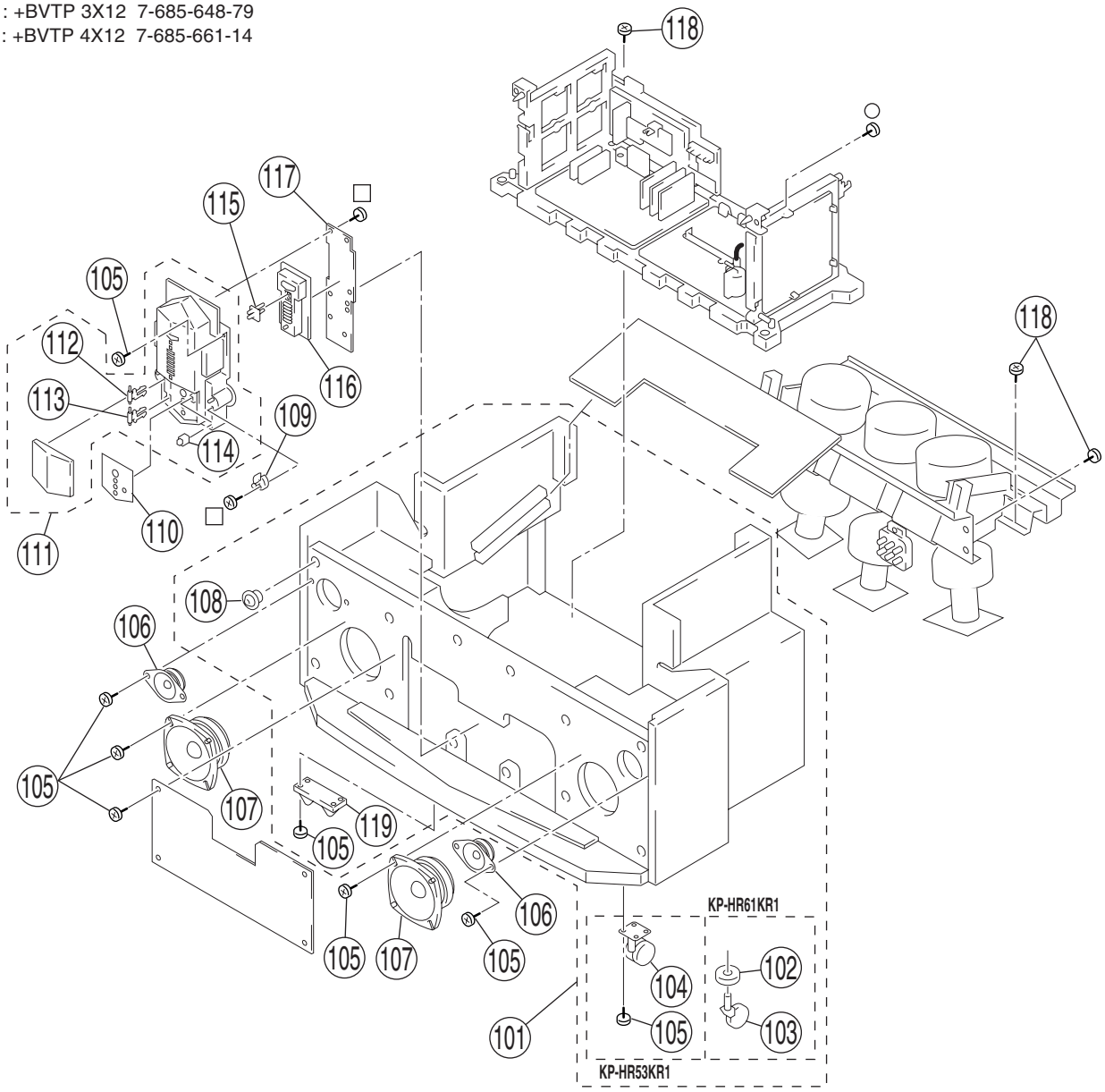
○ : +BVTP 4X12 7-685-661-14



REF. NO.		PART NO.	DESCRIPTION	REMARK
51	*	4-074-355-01	SKIRT (61), FRONT	
52		4-378-522-31	SCREW (4X20), TAPPING	
53		X-4037-653-1	GRILLE ASSY (61), SPEAKER	
54	*	A-1372-874-A	HC BORAD, COMPLETE	
55		X-4036-807-1	BEZNET ASSY (61V)	
56		4-058-538-11	SCREEN (61), CONTRAST	
57		4-070-283-11	PLATE (L), DIFFUSION	
58		4-066-082-11	PLATE (F), DIFFUSION	
59	*	4-070-334-01	HOLDER (S), SCREEN YC	
60	*	A-1390-933-A	S BORAD, COMPLETE	
61	*	4-070-329-01	HOLDER (L), SCREEN YC	
62	*	4-069-695-01	COVER, MIRROR	
63		4-070-922-01	MIRROR, REFLECTION	
64	*	4-069-689-01	HOLDER (L), MIRROR	
65	*	4-070-345-01	HOLDER (TOP), MIRROR	
66	*	4-069-690-01	HOLDER (R), MIRROR	
67	*	4-075-625-01	BOARD, REAR	

7-3. CABINET

□ : +BVTP 3X12 7-685-648-79
○ : +BVTP 4X12 7-685-661-14

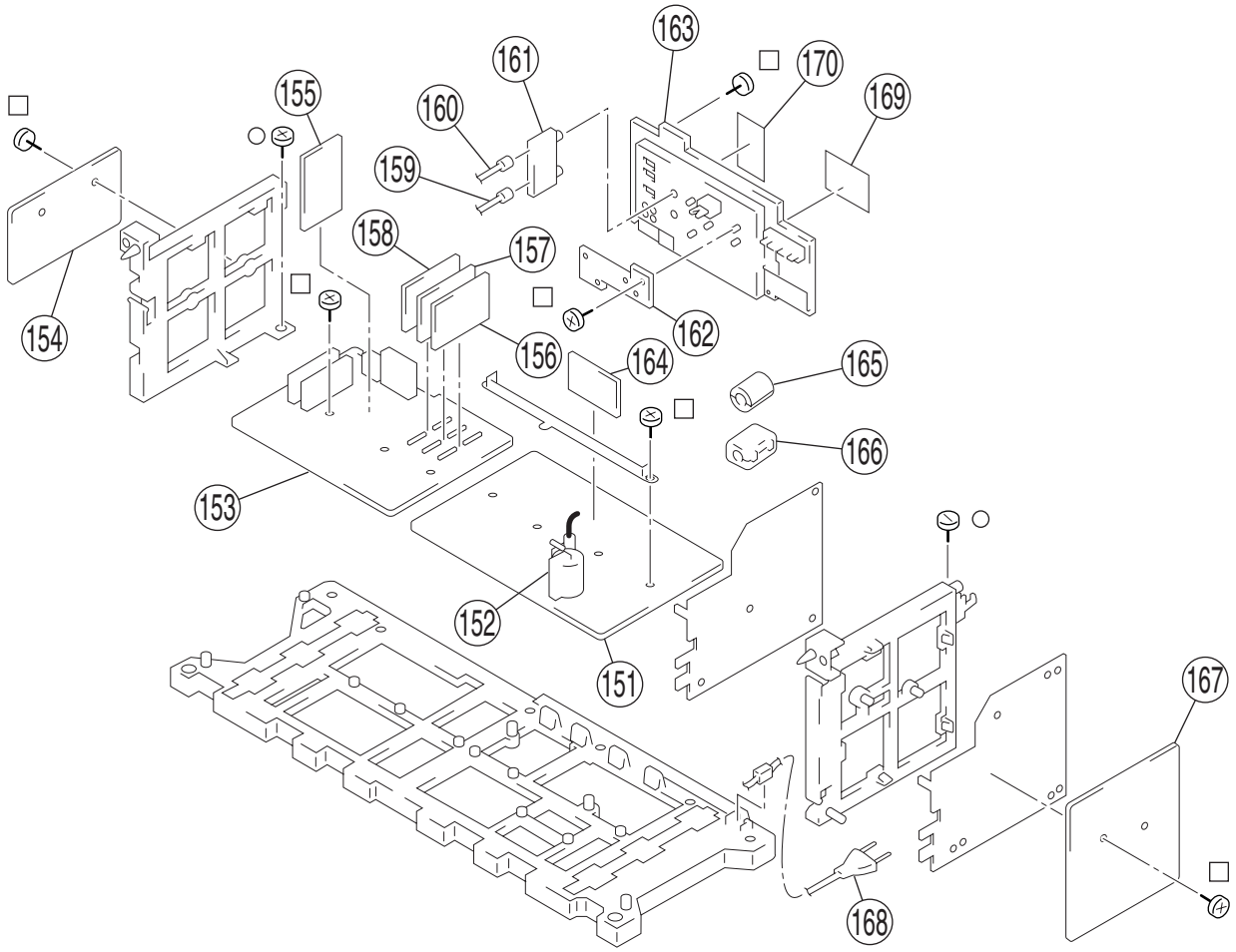


REF. NO.	PART NO.	DESCRIPTION	REMARK
101	X-4037-651-3	CABINET (53) ASSY (HR53KR1)	104, 108, 119
	X-4037-654-3	CABINET (61) ASSY (HR61KR1)	102, 108, 119
102	4-030-850-01	SOCKET, CASTER (HR61KR1)	
103	4-039-546-01	CASTER (HR61KR1)	
104	4-040-755-01	CASTER (DIA. 30) (HR53KR1)	
105	4-378-522-31	SCREW (4X20), TAPPING	
106	1-529-403-21	SPEAKER (6.6cm)	
107	1-529-643-11	SPEAKER (13cm) (HR53KR1)	
	1-529-644-11	SPEAKER (16cm) (HR61KR1)	
108	4-063-421-02	LATCH (K)	
109	4-054-709-01	STRIKE	
110	4-074-360-01	LABEL, CONTROL	
111	X-4037-652-1	PANEL ASSY, CONTROL	112, 113, 114
112	4-045-250-01	DAMPER	
113	3-703-035-11	SHAFT, LID	
114	4-042-192-01	CATCHER, PUSH	
115	4-074-359-01	GUIDE, LED	
116	4-074-357-01	BUTTON, MULTI	
117	* A-1372-873-A	HA BORAD, COMPLETE	
118	4-052-894-01	SCREW (4X20), HEAD TAPPING	
119	4-048-175-01	FOOT, PLASTIC (HR53KR1)	
	4-075-020-01	FOOT, PLASTIC (HR61KR1)	

7-4. CHASSIS

π : +BVTP 3X12 7-685-648-79
○ : +BVTP 4X12 7-685-661-14

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

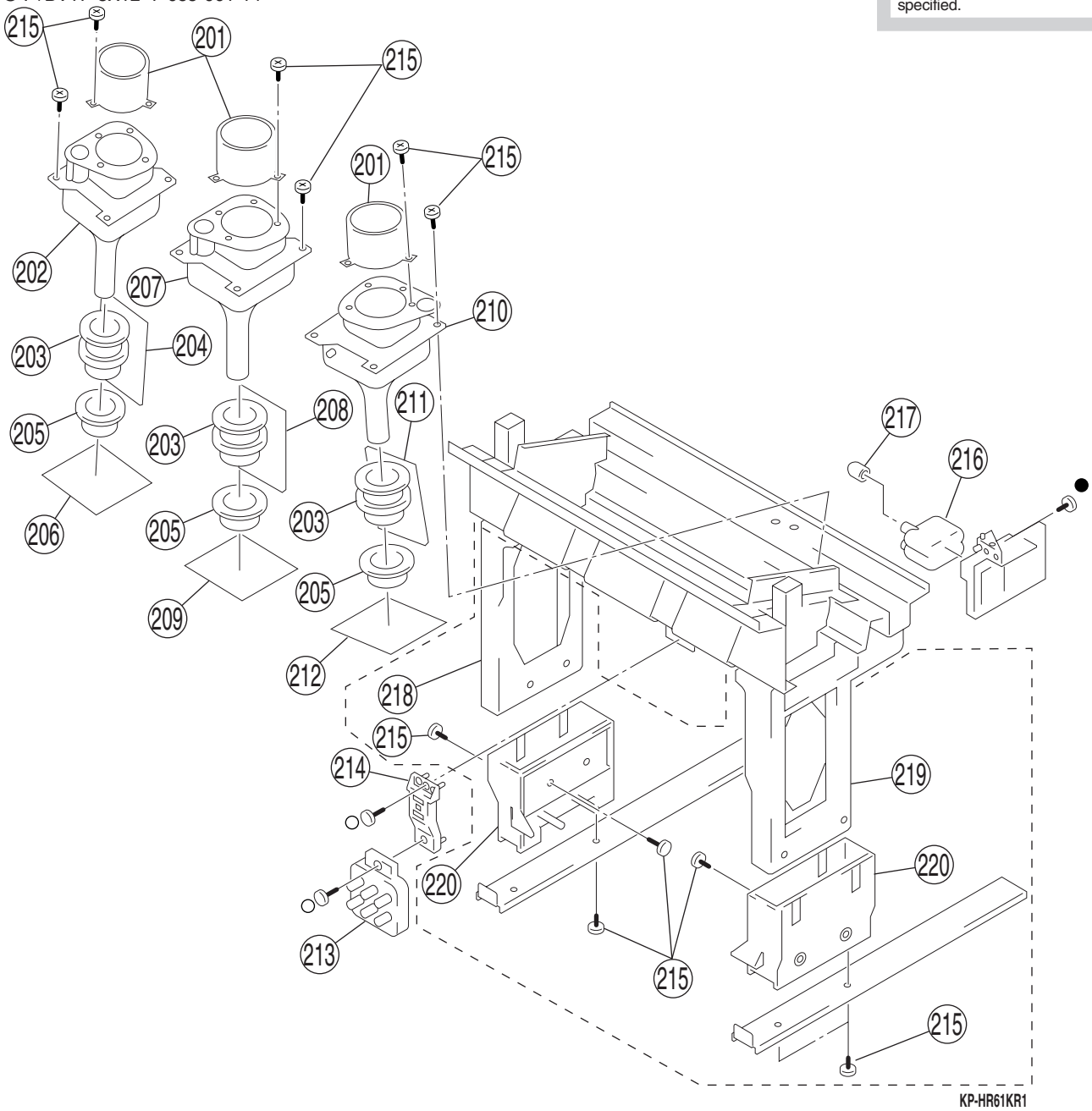


REF. NO.		PART NO.	DESCRIPTION	REMARK
151	*	A-1346-873-A	D BORAD, COMPLETE (HR53KR1)	
	*	A-1346-899-A	D BORAD, COMPLETE (HR61KR1)	
152	⚠	1-453-285-11	FBT ASSY NX-4007//J1P4	
153	*	A-1299-322-A	A BORAD, COMPLETE	
154	*	A-1380-624-A	K BORAD, COMPLETE	
155	*	A-1131-461-A	BA BORAD, COMPLETE	
156	*	A-1131-556-A	BD BORAD, COMPLETE	
157	*	A-1131-462-A	BR BORAD, COMPLETE	
158	*	A-1131-627-A	BM BORAD, COMPLETE	
159	*	1-557-056-31	CABLE, P-P	
160	*	1-556-945-21	CABLE, P-P	
161		1-251-321-12	SELECTOR, ANTENNA	
162	*	A-1373-794-A	U BORAD, COMPLETE	
163		4-065-812-21	TERMINAL BOARD (ASSY)	
164	*	A-1343-712-A	DS BORAD, COMPLETE	
165		1-543-653-11	CORE ASSY, BEAD(DIVISION TYPE)	
166		1-500-021-11	CLAMP, SLEEVE FERRITE	
167	*	A-1316-547-A	G BORAD, COMPLETE	
168	⚠	1-757-131-11	CORD, AC POWER(WITH CONNECTOR)	
169		4-071-136-01	LABEL (A), TERMINAL	
170		4-074-792-01	LABEL, CENTER SPEAKER	

7-5. PICTURE TUBE

● : +BVTP 3X16 7-685-650-79
○ : +BVTP 3X12 7-685-661-14

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



KP-HR61KR1

REF. NO.	PART NO.	DESCRIPTION	REMARK
201	4-040-131-21	LENS (LINNIT POINT 6) (HR61KR1)	
	4-056-258-11	LENS (DELTA 78) (HR53KR1)	
202	⚠ 8-733-572-15	CRT 07MXC3(R)(HEATER) (HR53KR1)	
	⚠ 8-733-573-15	CRT 07MXC4(R)(HEATER) (HR61KR1)	
203	⚠ 1-451-510-11	DEFLECTION YORK	
204	* A-1390-950-A	ZR BORAD, COMPLETE	
205	⚠ 1-452-790-21	NECK ASSY	
206	* A-1331-972-A	CR BORAD, COMPLETE	
207	⚠ 8-733-570-15	CRT 07MXC2(G)(HEATER)	
208	* A-1390-951-A	ZG BORAD, COMPLETE	
209	* A-1331-973-A	CG BORAD, COMPLETE	
210	⚠ 8-733-575-15	CRT 07MAC3(B)(HEATER) (HR53KR1)	
210	⚠ 8-733-576-15	CRT 07MAC4(B)(HEATER) (HR61KR1)	
211	* A-1390-952-A	ZB BORAD, COMPLETE	
212	* A-1331-974-A	CB BORAD, COMPLETE	
213	⚠ 1-223-925-51	RESISTOR ASSY (HIGH-VOLTAGE)	
214	* 4-063-403-01	BRACKET, FOCUS PACK	
215	4-052-894-01	SCREW (4X20), HEAD TAPPING	
216	⚠ 8-598-955-13	BLOCK ASSY, HIGH-VOLTAGE	
217	4-373-137-01	CAP (Z), RUBBER	
218	4-069-677-02	BOARD (L), SIDE (HR61KR1)	
219	4-069-678-02	BOARD (R), SIDE (HR61KR1)	
220	* 4-072-791-01	SPACER, BOTTOM (HR61KR1)	

ZG

SECTION 8
ELECTRICAL PARTS LIST

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

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

- The components identified by in ⊠ this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

- CAPACITORS
PF : μμ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

REF. NO.	PART NO.	DESCRIPTION			REMARK
*	A-1390-951-A	ZG BOARD, COMPLETE			
		**********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C4201	1-163-038-11	CERAMIC CHIP	0.1μF		25V
C4202	1-107-667-11	ELECT	2.2μF	20%	160V
C4203	1-130-471-00	MYLAR	0.001μF	5%	50V
C4204	1-130-471-00	MYLAR	0.001μF	5%	50V
C4205	1-104-987-11	MYLAR	0.001μF	10%	200V
C4206	1-104-987-11	MYLAR	0.001μF	10%	200V
C4207	1-107-364-11	MYLAR	0.01μF	10%	200V
C4208	1-126-968-11	ELECT	100μF	20%	50V
C4209	1-126-968-11	ELECT	100μF	20%	50V
C4210	1-107-645-11	ELECT	22μF	20%	160V
C4211	1-161-830-00	CERAMIC	0.0047μF		500V
C4212	1-106-220-00	MYLAR	0.1μF	10%	100V
C4213	1-106-220-00	MYLAR	0.1μF	10%	100V
C4214	1-104-664-11	ELECT	47μF	20%	16V
C4215	1-107-823-11	CERAMIC CHIP	0.47μF	10%	16V
C4216	1-107-823-11	CERAMIC CHIP	0.47μF	10%	16V
C4217	1-161-830-00	CERAMIC	0.0047μF		500V
C4218	1-163-038-11	CERAMIC CHIP	0.1μF		25V
C4219	1-161-830-00	CERAMIC	0.0047μF		500V
C4220	1-163-038-11	CERAMIC CHIP	0.1μF		25V
		<CONNECTOR>			
CN4201*	1-564-509-11	PLUG, CONNECTOR 6P			
CN4202*	1-564-509-11	PLUG, CONNECTOR 6P			
CN4203*	1-564-507-11	PLUG, CONNECTOR 4P			
CN4204*	1-564-506-11	PLUG, CONNECTOR 3P			
CN4205*	1-564-506-11	PLUG, CONNECTOR 3P			
CN4206*	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P			
CN4207*	1-564-506-11	PLUG, CONNECTOR 3P			
		<DIODE>			
D4201	8-719-921-86	DIODE MTZJ-T-77-13			
D4202	8-719-921-86	DIODE MTZJ-T-77-13			

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<CONNECTOR>			
DY4201⚠	1-451-510-11	DEFLECTION YOKE			
		<COIL>			
L4201	1-414-187-11	INDUCTOR	47μH		
L4202	1-414-183-41	INDUCTOR	10μH		
		<TRANSISTOR>			
Q4201	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q4203	8-729-045-04	TRANSISTOR	2SC5511		
Q4204	8-729-045-05	TRANSISTOR	2SA2005		
Q4205	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q4206	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q4207	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q4208	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX		
Q4209	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX		
		<RESISTOR>			
R4201	1-216-025-11	RES-CHIP	100	5%	1/10W
R4202	1-216-475-11	METAL OXIDE	120	5%	3W
R4203	1-216-049-11	RES-CHIP	1K	5%	1/10W
R4206	1-216-475-11	METAL OXIDE	120	5%	3W
R4207	1-249-397-11	CARBON	22	5%	1/4W
R4208	1-249-433-11	CARBON	22K	5%	1/4W
R4209	1-249-414-11	CARBON	560	5%	1/4W
R4210	1-249-415-11	CARBON	680	5%	1/4W
R4211	1-249-414-11	CARBON	560	5%	1/4W
R4212	1-249-433-11	CARBON	22K	5%	1/4W
R4213	1-249-415-11	CARBON	680	5%	1/4W
R4214	1-249-429-11	CARBON	10K	5%	1/4W
R4215	1-249-384-11	CARBON	1.8	5%	1/4W
R4216	1-249-384-11	CARBON	1.8	5%	1/4W
R4217	1-249-401-11	CARBON	47	5%	1/4W
R4218	1-249-401-11	CARBON	47	5%	1/4W
R4219	1-216-476-11	METAL OXIDE	180	5%	3W
R4221	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R4222	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R4223	1-208-794-11	METAL CHIP	3.3K	0.5%	1/10W

ZG ZR ZB

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

REF. NO.	PART NO.	DESCRIPTION			REMARK
R4224	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R4225	1-216-033-00	RES-CHIP	220	5%	1/10W
R4226	1-216-009-91	RES-CHIP	22	5%	1/10W
R4227	1-216-009-91	RES-CHIP	22	5%	1/10W

****

* A-1390-950-A ZR BOARD, COMPLETE
****

4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

C4101	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C4102	1-104-664-11	ELECT	47µF	20%	16V
C4103	1-107-667-11	ELECT	2.2µF	20%	160V
C4104	1-130-471-00	MYLAR	0.001µF	5%	50V
C4105	1-130-471-00	MYLAR	0.001µF	5%	50V
C4106	1-104-987-11	MYLAR	0.001µF	10%	200V
C4107	1-104-987-11	MYLAR	0.001µF	10%	200V
C4108	1-107-364-11	MYLAR	0.01µF	10%	200V
C4109	1-126-968-11	ELECT	100µF	20%	50V
C4110	1-107-645-11	ELECT	22µF	20%	160V
C4111	1-126-968-11	ELECT	100µF	20%	50V
C4112	1-161-830-00	CERAMIC	0.0047µF		500V
C4113	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C4114	1-161-830-00	CERAMIC	0.0047µF		500V
C4115	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C4116	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V

<CONNECTOR>

CN4101*	1-564-509-11	PLUG, CONNECTOR 6P
CN4102*	1-564-506-11	PLUG, CONNECTOR 3P
CN4104*	1-564-507-11	PLUG, CONNECTOR 4P
CN4105*	1-564-506-11	PLUG, CONNECTOR 3P
CN4107*	1-580-690-11	PIN, CONNECTOR (PC BOARD) 4P

<DIODE>

D4102	8-719-921-86	DIODE MTZJ-T-77-13
D4103	8-719-921-86	DIODE MTZJ-T-77-13

<CONNECTOR>

DY4101⚠1-451-510-11 DEFLECTION YOKE

<COIL>

L4101	1-414-183-41	INDUCTOR	10µH
L4102	1-414-187-11	INDUCTOR	47µH

<TRANSISTOR>

Q4101	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q4104	8-729-045-04	TRANSISTOR 2SC5511
Q4105	8-729-045-05	TRANSISTOR 2SA2005
Q4106	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q4107	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q4108	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX
Q4109	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX
Q4110	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX

<RESISTOR>

R4101	1-216-025-11	RES-CHIP	100	5%	1/10W
R4102	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R4103	1-208-794-11	METAL CHIP	3.3K	0.5%	1/10W
R4104	1-216-049-11	RES-CHIP	1K	5%	1/10W
R4105	1-216-475-11	METAL OXIDE	120	5%	3W
R4106	1-216-033-00	RES-CHIP	220	5%	1/10W
R4107	1-216-475-11	METAL OXIDE	120	5%	3W
R4109	1-216-009-91	RES-CHIP	22	5%	1/10W
R4110	1-249-414-11	CARBON	560	5%	1/4W
R4111	1-249-433-11	CARBON	22K	5%	1/4W
R4113	1-249-429-11	CARBON	10K	5%	1/4W
R4114	1-249-414-11	CARBON	560	5%	1/4W
R4115	1-249-433-11	CARBON	22K	5%	1/4W
R4116	1-249-397-11	CARBON	22	5%	1/4W
R4117	1-249-415-11	CARBON	680	5%	1/4W
R4118	1-249-415-11	CARBON	680	5%	1/4W
R4119	1-249-384-11	CARBON	1.8	5%	1/4W
R4120	1-249-384-11	CARBON	1.8	5%	1/4W
R4121	1-249-401-11	CARBON	47	5%	1/4W
R4122	1-249-401-11	CARBON	47	5%	1/4W
R4123	1-216-476-11	METAL OXIDE	180	5%	3W
R4124	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R4125	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R4126	1-216-009-91	RES-CHIP	22	5%	1/10W

****

* A-1390-952-A ZB BOARD, COMPLETE
****

4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

C4301	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C4302	1-107-667-11	ELECT	2.2µF	20%	160V
C4303	1-130-471-00	MYLAR	0.001µF	5%	50V
C4304	1-130-471-00	MYLAR	0.001µF	5%	50V
C4305	1-104-987-11	MYLAR	0.001µF	10%	200V
C4306	1-104-987-11	MYLAR	0.001µF	10%	200V
C4307	1-107-364-11	MYLAR	0.01µF	10%	200V
C4308	1-126-968-11	ELECT	100µF	20%	50V
C4309	1-126-968-11	ELECT	100µF	20%	50V
C4310	1-107-645-11	ELECT	22µF	20%	160V
C4311	1-161-830-00	CERAMIC	0.0047µF		500V
C4312	1-104-664-11	ELECT	47µF	20%	16V
C4313	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C4314	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V

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

REF. NO.	PART NO.	DESCRIPTION			REMARK
C4315	1-161-830-00	CERAMIC	0.0047µF		500V
C4316	1-163-038-11	CERAMIC CHIP	0.1µF		25V
		<CONNECTOR>			
CN4301*	1-564-509-11	PLUG, CONNECTOR 6P			
CN4302*	1-564-507-11	PLUG, CONNECTOR 4P			
CN4303*	1-564-506-11	PLUG, CONNECTOR 3P			
CN4304*	1-580-690-11	PIN, CONNECTOR (PC BOARD) 4P			
CN4305*	1-564-506-11	PLUG, CONNECTOR 3P			
		<DIODE>			
D4301	8-719-921-86	DIODE MTZJ-T-77-13			
D4302	8-719-921-86	DIODE MTZJ-T-77-13			
		<CONNECTOR>			
DY4301⚠	1-451-510-11	DEFLECTION YOKE			
		<COIL>			
L4301	1-414-187-11	INDUCTOR	47µH		
L4302	1-414-183-41	INDUCTOR	10µH		
		<TRANSISTOR>			
Q4301	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q4303	8-729-045-04	TRANSISTOR 2SC5511			
Q4304	8-729-045-05	TRANSISTOR 2SA2005			
Q4305	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q4306	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q4307	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q4308	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX			
Q4309	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX			
		<RESISTOR>			
R4301	1-216-025-11	RES-CHIP	100	5%	1/10W
R4302	1-216-049-11	RES-CHIP	1K	5%	1/10W
R4304	1-216-475-11	METAL OXIDE	120	5%	3W
R4306	1-216-475-11	METAL OXIDE	120	5%	3W
R4307	1-249-397-11	CARBON	22	5%	1/4W
R4308	1-249-433-11	CARBON	22K	5%	1/4W
R4309	1-249-414-11	CARBON	560	5%	1/4W
R4310	1-249-415-11	CARBON	680	5%	1/4W
R4311	1-249-414-11	CARBON	560	5%	1/4W
R4312	1-249-433-11	CARBON	22K	5%	1/4W
R4313	1-249-415-11	CARBON	680	5%	1/4W
R4314	1-249-429-11	CARBON	10K	5%	1/4W
R4315	1-249-384-11	CARBON	1.8	5%	1/4W
R4316	1-249-384-11	CARBON	1.8	5%	1/4W
R4317	1-249-401-11	CARBON	47	5%	1/4W
R4318	1-249-401-11	CARBON	47	5%	1/4W
R4319	1-216-476-11	METAL OXIDE	180	5%	3W
R4321	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R4322	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R4323	1-208-794-11	METAL CHIP	3.3K	0.5%	1/10W
R4324	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R4325	1-216-033-00	RES-CHIP	220	5%	1/10W
R4326	1-216-009-91	RES-CHIP	22	5%	1/10W
R4327	1-216-009-91	RES-CHIP	22	5%	1/10W

****

* A-1331-972-A CR BOARD, COMPLETE
****

4-382-854-51 SCREW (M3X8), P, SW (+)

<CAPACITOR>

C7100	1-162-114-00	CERAMIC	0.0047µF		2KV
C7102	1-162-115-00	CERAMIC	330pF	10%	2KV
C7103	1-107-662-11	ELECT	22µF	20%	250V
C7104	1-126-768-11	ELECT	2200µF	20%	16V
C7105	1-162-115-00	CERAMIC	330pF	10%	2KV
C7106	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C7107	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C7108	1-126-967-11	ELECT	47µF	20%	50V
C7109	1-161-830-00	CERAMIC	0.0047µF		500V
C7110	1-102-050-00	CERAMIC	0.01µF	99%	500V
C7111	1-102-157-00	CERAMIC	560pF	10%	500V
C7112	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
C7113	1-126-964-11	ELECT	10µF	20%	50V
C7116	1-163-255-11	CERAMIC CHIP	150pF	5%	50V

<CONNECTOR>

CN7101*	1-564-511-11	PLUG, CONNECTOR 8P
CN7102*	1-564-509-11	PLUG, CONNECTOR 6P
CN7103*	1-564-512-11	PLUG, CONNECTOR 9P
CN7104	1-785-879-11	CONNECTOR, ONE TOUCH
CN7107	1-695-915-11	TAB (CONTACT)

<DIODE>

D7102	8-719-921-86	DIODE MTZJ-T-77-13	
D7103	8-719-901-83	DIODE 1SS83TD	
D7104	8-719-901-83	DIODE 1SS83TD	
D7105	8-719-901-83	DIODE 1SS83TD	
D7106	8-719-901-83	DIODE 1SS83TD	
D7107	1-216-295-11	SHORT	0
D7109	8-719-921-86	DIODE MTZJ-T-77-13	
D7110	8-719-921-86	DIODE MTZJ-T-77-13	

<IC>

IC7101	8-759-360-83	IC TDA6111Q/N4

<JACK>

J7101	⚠ 1-251-182-11	SOCKET, CRT	

CR **CG**

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

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<COIL>			
L7102	1-414-223-11	INDUCTOR	470µH		
L7103	1-414-181-11	INDUCTOR	4.7µH		
L7104	1-414-187-11	INDUCTOR	47µH		
		<NEON LAMP>			
NL7101	1-517-778-21	LAMP, NEON			
NL7102	1-517-778-21	LAMP, NEON			
NL7103	1-517-778-21	LAMP, NEON			
		<TRANSISTOR>			
Q7101	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q7102	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX		
		<RESISTOR>			
R7101	1-260-132-11	CARBON	560K	5%	1/2W
R7102	1-249-389-11	CARBON	4.7	5%	1/4W
R7103	1-216-295-11	SHORT	0		
R7105	1-260-117-11	CARBON	33K	5%	1/2W
R7106	1-219-743-11	CARBON	100	5%	1/2W
R7107	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R7108	1-260-133-11	CARBON	680K	5%	1/2W
R7109	1-208-808-11	METAL CHIP	12K	0.5%	1/10W
R7110	1-208-793-11	METAL CHIP	3K	0.5%	1/10W
R7111	1-216-033-00	RES-CHIP	220	5%	1/10W
R7112	1-249-424-11	CARBON	3.9K	5%	1/4W
R7113	1-216-029-00	RES-CHIP	150	5%	1/10W
R7114	1-208-791-11	METAL CHIP	2.4K	0.5%	1/10W
R7115	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R7116	1-215-904-11	METAL OXIDE	100K	5%	2W
R7117	1-260-093-11	CARBON	330	5%	1/2W
R7118	1-260-087-11	CARBON	100	5%	1/2W
R7119	1-260-099-11	CARBON	1K	5%	1/2W
R7122	1-216-033-00	RES-CHIP	220	5%	1/10W
R7123	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R7126	1-208-802-11	METAL CHIP	6.8K	0.5%	1/10W
R7127	1-208-802-11	METAL CHIP	6.8K	0.5%	1/10W
		<SPARK GAP>			
SG7101	1-519-422-11	GAP, SPARK			
SG7102	1-519-422-11	GAP, SPARK			

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* A-1331-973-A CG BOARD, COMPLETE
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4-382-854-51 SCREW (M3X8), P, SW (+)

<CAPACITOR>

C7200	1-162-114-00	CERAMIC	0.0047µF		2KV
C7202	1-162-115-00	CERAMIC	330pF	10%	2KV
C7203	1-126-768-11	ELECT	2200µF	20%	16V
C7204	1-107-662-11	ELECT	22µF	20%	250V
C7205	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C7206	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C7207	1-162-115-00	CERAMIC	330pF	10%	2KV
C7208	1-126-967-11	ELECT	47µF	20%	50V
C7209	1-102-050-00	CERAMIC	0.01µF	99%	500V
C7210	1-161-830-00	CERAMIC	0.0047µF		500V
C7211	1-102-157-00	CERAMIC	560pF	10%	500V
C7213	1-163-085-00	CERAMIC CHIP	2pF	0.25pF	50V
C7214	1-126-964-11	ELECT	10µF	20%	50V
C7216	1-163-255-11	CERAMIC CHIP	150pF	5%	50V

<CONNECTOR>

CN7201 *	1-564-509-11	PLUG, CONNECTOR 6P	
CN7202 *	1-564-508-11	PLUG, CONNECTOR 5P	
CN7203 *	1-564-512-11	PLUG, CONNECTOR 9P	
CN7204 *	1-564-512-11	PLUG, CONNECTOR 9P	
CN7205	1-785-879-11	CONNECTOR, ONE TOUCH	
CN7208	1-695-915-11	TAB (CONTACT)	
CN7210 *	1-564-506-11	PLUG, CONNECTOR 3P	

<DIODE>

D7202	8-719-921-86	DIODE	MTZJ-T-77-13
D7203	8-719-901-83	DIODE	1SS83TD
D7204	8-719-901-83	DIODE	1SS83TD
D7205	8-719-901-83	DIODE	1SS83TD
D7206	8-719-901-83	DIODE	1SS83TD
D7207	1-216-295-11	SHORT	0
D7208	8-719-073-01	DIODE	MA111-TX
D7209	8-719-921-86	DIODE	MTZJ-T-77-13
D7210	8-719-921-86	DIODE	MTZJ-T-77-13

<IC>

IC7201 8-759-360-83 IC TDA6111Q/N4

<JACK>

J7201 ⚠ 1-251-182-11 SOCKET, CRT

<COIL>

L7201	1-414-223-11	INDUCTOR	470µH
L7203	1-414-181-11	INDUCTOR	4.7µH
L7204	1-414-187-11	INDUCTOR	47µH

<NEON LAMP>

NL7201	1-517-778-21	LAMP, NEON	
NL7202	1-517-778-21	LAMP, NEON	

CG BD

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<TRANSISTOR>			
Q7201	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q7202	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX			
		<RESISTOR>			
R7201	1-260-132-11	CARBON	560K	5%	1/2W
R7202	1-216-295-11	SHORT	0		
R7203	1-216-097-91	RES-CHIP	100K	5%	1/10W
R7204	1-219-743-11	CARBON	100	5%	1/2W
R7205	1-260-117-11	CARBON	33K	5%	1/2W
R7206	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R7207	1-208-808-11	METAL CHIP	12K	0.5%	1/10W
R7208	1-216-033-00	RES-CHIP	220	5%	1/10W
R7209	1-260-133-11	CARBON	680K	5%	1/2W
R7210	1-208-794-11	METAL CHIP	3.3K	0.5%	1/10W
R7211	1-249-424-11	CARBON	3.9K	5%	1/4W
R7212	1-208-788-11	METAL CHIP	1.8K	0.5%	1/10W
R7213	1-215-904-11	METAL OXIDE	100K	5%	2W
R7214	1-216-029-00	RES-CHIP	150	5%	1/10W
R7216	1-260-093-11	CARBON	330	5%	1/2W
R7217	1-208-794-11	METAL CHIP	3.3K	0.5%	1/10W
R7219	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R7220	1-216-033-00	RES-CHIP	220	5%	1/10W
R7221	1-260-099-11	CARBON	1K	5%	1/2W
R7223	1-208-804-11	METAL CHIP	8.2K	0.5%	1/10W
R7224	1-208-802-11	METAL CHIP	6.8K	0.5%	1/10W
R7225	1-260-087-11	CARBON	100	5%	1/2W
		<SPARK GAP>			
SG7201	1-519-422-11	GAP, SPARK			
SG7202	1-519-422-11	GAP, SPARK			
SG7203	1-519-422-11	GAP, SPARK			

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* A-1131-556-A BD BOARD, COMPLETE
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4-382-854-51 SCREW (M3X8), P, SW (+)

<CAPACITOR>

C1703	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C1705	1-164-346-11	CERAMIC CHIP	1µF		16V
C1707	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1708	1-104-664-11	ELECT	47µF	20%	25V
C1709	1-126-964-11	ELECT	10µF	20%	50V
C1710	1-164-346-11	CERAMIC CHIP	1µF		16V
C1711	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V
C1712	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1713	1-104-664-11	ELECT	47µF	20%	25V
C1714	1-164-346-11	CERAMIC CHIP	1µF		16V
C1717	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C1718	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V
C1719	1-163-237-11	CERAMIC CHIP	27pF	5%	50V
C1721	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1722	1-104-664-11	ELECT	47µF	20%	25V
C1723	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1724	1-104-664-11	ELECT	47µF	20%	25V
C1725	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
C1727	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V
C1729	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1730	1-104-664-11	ELECT	47µF	20%	25V
C1737	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C1738	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V
C1739	1-104-664-11	ELECT	47µF	20%	25V
C1740	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1741	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1744	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1745	1-104-664-11	ELECT	47µF	20%	25V
C1747	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1748	1-104-664-11	ELECT	47µF	20%	25V
C1749	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1750	1-104-664-11	ELECT	47µF	20%	25V
C1753	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C1757	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1758	1-104-664-11	ELECT	47µF	20%	25V
C1761	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1762	1-104-664-11	ELECT	47µF	20%	25V
C1763	1-104-664-11	ELECT	47µF	20%	25V
C1764	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1768	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C1772	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C1773	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1774	1-104-664-11	ELECT	47µF	20%	25V
C1775	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C1776	1-104-664-11	ELECT	47µF	20%	25V
C1777	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1779	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C1780	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1781	1-104-664-11	ELECT	47µF	20%	25V
C1785	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C1786	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V
C1787	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1788	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1789	1-104-664-11	ELECT	47µF	20%	25V
C1790	1-104-664-11	ELECT	47µF	20%	25V
C1791	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C1792	1-104-664-11	ELECT	47µF	20%	25V
C1793	1-104-664-11	ELECT	47µF	20%	25V
C1794	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1796	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1797	1-104-664-11	ELECT	47µF	20%	25V
C1798	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1799	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1801	1-104-664-11	ELECT	47µF	20%	25V
C1802	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C1803	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1804	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1805	1-104-664-11	ELECT	47µF	20%	25V
C1806	1-163-038-11	CERAMIC CHIP	0.1µF		25V

BD

REF. NO.	PART NO.	DESCRIPTION			REMARK
C1807	1-104-664-11	ELECT	47µF	20%	25V
C1808	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1809	1-104-664-11	ELECT	47µF	20%	25V
C1810	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1811	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C1812	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1814	1-104-664-11	ELECT	47µF	20%	25V
C1815	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1816	1-104-664-11	ELECT	47µF	20%	25V
C1817	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1818	1-104-664-11	ELECT	47µF	20%	25V
C1819	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1820	1-163-235-11	CERAMIC CHIP	22pF	5%	50V
C1821	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1822	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1823	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1824	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1825	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1830	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C1831	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1832	1-104-664-11	ELECT	47µF	20%	25V
C1833	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C1834	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1835	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1836	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1837	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1838	1-104-664-11	ELECT	47µF	20%	25V
C1839	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1840	1-104-664-11	ELECT	47µF	20%	25V
C1841	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1842	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1844	1-104-664-11	ELECT	47µF	20%	25V
C1845	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1846	1-104-664-11	ELECT	47µF	20%	25V
C1847	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1849	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V
C1855	1-104-664-11	ELECT	47µF	20%	25V
C1856	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1857	1-104-664-11	ELECT	47µF	20%	25V
C1858	1-104-664-11	ELECT	47µF	20%	25V
C1859	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C1860	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1861	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1862	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1863	1-163-001-11	CERAMIC CHIP	220pF	10%	50V
C1864	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1877	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1878	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C1879	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1880	1-163-038-11	CERAMIC CHIP	0.1µF		25V

<CONNECTOR>

CN1701	1-573-301-21	CONNECTOR, BOARD TO BOARD 20P	
CN1702	1-573-301-21	CONNECTOR, BOARD TO BOARD 20P	

REF. NO.	PART NO.	DESCRIPTION	REMARK

<DIODE>

D1701	8-719-073-01	DIODE MA111-TX	
D1702	8-719-073-01	DIODE MA111-TX	
D1703	8-719-073-01	DIODE MA111-TX	
D1704	8-719-073-01	DIODE MA111-TX	
D1705	8-719-073-01	DIODE MA111-TX	
D1706	8-719-073-01	DIODE MA111-TX	

<IC>

IC1702	8-759-106-02	IC µPC4570G2-E2	
IC1703	8-752-913-91	IC CXP86324-026Q	
IC1704	8-759-468-90	IC ST24E16FM6TR	
IC1705	8-759-106-02	IC µPC4570G2-E2	
IC1706	8-759-106-02	IC µPC4570G2-E2	
IC1707	8-759-589-66	IC CM0006CF	
IC1708	8-759-106-02	IC µPC4570G2-E2	
IC1709	8-759-106-02	IC µPC4570G2-E2	
IC1710	8-759-106-02	IC µPC4570G2-E2	
IC1712	8-759-032-20	IC TC74HC32AF(EL)	
IC1713	8-759-998-22	IC PCM56P-L	
IC1714	8-759-998-22	IC PCM56P-L	
IC1715	8-759-998-22	IC PCM56P-L	
IC1716	8-759-032-23	IC TC74HC74AF(EL)	
IC1717	8-759-488-29	IC TC7W66FU(TE12R)	
IC1718	8-759-352-91	IC PST9143NL	
IC1719	8-759-998-22	IC PCM56P-L	
IC1720	8-759-998-22	IC PCM56P-L	
IC1721	8-759-998-22	IC PCM56P-L	
IC1722	8-759-669-75	IC TLC2932IPWR	
IC1723	8-759-485-79	IC TC7SET08FU(TE85L)	
IC1725	8-759-485-79	IC TC7SET08FU(TE85L)	

<CHIP CONDUCTOR>

JR1701	1-216-295-11	SHORT	0

<COIL>

L1703	1-469-555-21	INDUCTOR	10µH
L1704	1-469-555-21	INDUCTOR	10µH
L1707	1-469-555-21	INDUCTOR	10µH
L1708	1-469-555-21	INDUCTOR	10µH
L1709	1-414-234-22	INDUCTOR CHIP	0µH
L1710	1-469-555-21	INDUCTOR	10µH
L1713	1-469-555-21	INDUCTOR	10µH
L1714	1-414-234-22	INDUCTOR CHIP	0µH
L1715	1-469-555-21	INDUCTOR	10µH
L1716	1-469-555-21	INDUCTOR	10µH
L1719	1-469-555-21	INDUCTOR	10µH
L1720	1-469-555-21	INDUCTOR	10µH
L1721	1-414-234-22	INDUCTOR CHIP	0µH
L1724	1-469-555-21	INDUCTOR	10µH
L1725	1-414-234-22	INDUCTOR CHIP	0µH
L1726	1-469-555-21	INDUCTOR	10µH
L1729	1-414-234-22	INDUCTOR CHIP	0µH

REF. NO.	PART NO.	DESCRIPTION			REMARK
L1730	1-469-555-21	INDUCTOR	10µH		
L1731	1-469-555-21	INDUCTOR	10µH		
L1732	1-414-234-22	INDUCTOR CHIP	0µH		
L1733	1-414-234-22	INDUCTOR CHIP	0µH		
L1734	1-414-234-22	INDUCTOR CHIP	0µH		
L1735	1-414-234-22	INDUCTOR CHIP	0µH		
L1736	1-414-234-22	INDUCTOR CHIP	0µH		
L1737	1-414-234-22	INDUCTOR CHIP	0µH		
L1738	1-414-234-22	INDUCTOR CHIP	0µH		
L1739	1-414-234-22	INDUCTOR CHIP	0µH		
L1740	1-414-234-22	INDUCTOR CHIP	0µH		
L1741	1-414-234-22	INDUCTOR CHIP	0µH		
L1742	1-414-234-22	INDUCTOR CHIP	0µH		
L1744	1-414-234-22	INDUCTOR CHIP	0µH		
L1745	1-414-234-22	INDUCTOR CHIP	0µH		
L1746	1-414-234-22	INDUCTOR CHIP	0µH		
L1747	1-414-234-22	INDUCTOR CHIP	0µH		
L1748	1-414-234-22	INDUCTOR CHIP	0µH		
L1750	1-414-234-22	INDUCTOR CHIP	0µH		
L1751	1-414-234-22	INDUCTOR CHIP	0µH		
L1753	1-414-234-22	INDUCTOR CHIP	0µH		
L1754	1-414-234-22	INDUCTOR CHIP	0µH		
L1756	1-414-234-22	INDUCTOR CHIP	0µH		
L1757	1-414-234-22	INDUCTOR CHIP	0µH		
L1759	1-414-234-22	INDUCTOR CHIP	0µH		
L1760	1-414-234-22	INDUCTOR CHIP	0µH		
L1762	1-414-234-22	INDUCTOR CHIP	0µH		
L1763	1-414-234-22	INDUCTOR CHIP	0µH		
L1764	1-414-234-22	INDUCTOR CHIP	0µH		
L1765	1-414-234-22	INDUCTOR CHIP	0µH		
L1766	1-414-234-22	INDUCTOR CHIP	0µH		
L1767	1-414-234-22	INDUCTOR CHIP	0µH		
L1768	1-414-234-22	INDUCTOR CHIP	0µH		
L1769	1-414-234-22	INDUCTOR CHIP	0µH		
L1770	1-414-234-22	INDUCTOR CHIP	0µH		
		<TRANSISTOR>			
Q1701	1-801-806-11	TRANSISTOR	DTC144EKA-T146		
Q1702	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q1703	8-729-900-53	TRANSISTOR	DTC114EKA-T146		
Q1709	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q1710	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
		<RESISTOR>			
R1701	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R1702	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R1703	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R1704	1-216-295-11	SHORT	0		
R1705	1-216-025-11	RES-CHIP	100	5%	1/10W
R1706	1-216-025-11	RES-CHIP	100	5%	1/10W
R1707	1-216-025-11	RES-CHIP	100	5%	1/10W
R1708	1-216-025-11	RES-CHIP	100	5%	1/10W
R1710	1-216-025-11	RES-CHIP	100	5%	1/10W
R1711	1-216-025-11	RES-CHIP	100	5%	1/10W
R1712	1-216-295-11	SHORT	0		

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1713	1-216-025-11	RES-CHIP	100	5%	1/10W
R1714	1-216-295-11	SHORT	0		
R1715	1-216-025-11	RES-CHIP	100	5%	1/10W
R1716	1-216-025-11	RES-CHIP	100	5%	1/10W
R1717	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1718	1-216-025-11	RES-CHIP	100	5%	1/10W
R1719	1-216-025-11	RES-CHIP	100	5%	1/10W
R1720	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1721	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1722	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1723	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1724	1-216-025-11	RES-CHIP	100	5%	1/10W
R1725	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R1727	1-216-033-00	RES-CHIP	220	5%	1/10W
R1728	1-216-033-00	RES-CHIP	220	5%	1/10W
R1729	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1730	1-208-850-11	METAL CHIP	680K	0.5%	1/10W
R1731	1-216-025-11	RES-CHIP	100	5%	1/10W
R1732	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R1733	1-216-025-11	RES-CHIP	100	5%	1/10W
R1735	1-216-025-11	RES-CHIP	100	5%	1/10W
R1736	1-216-025-11	RES-CHIP	100	5%	1/10W
R1737	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R1739	1-216-295-11	SHORT	0		
R1740	1-216-025-11	RES-CHIP	100	5%	1/10W
R1741	1-216-033-00	RES-CHIP	220	5%	1/10W
R1742	1-216-025-11	RES-CHIP	100	5%	1/10W
R1743	1-216-033-00	RES-CHIP	220	5%	1/10W
R1744	1-216-025-11	RES-CHIP	100	5%	1/10W
R1745	1-216-033-00	RES-CHIP	220	5%	1/10W
R1746	1-216-033-00	RES-CHIP	220	5%	1/10W
R1747	1-216-025-11	RES-CHIP	100	5%	1/10W
R1748	1-216-025-11	RES-CHIP	100	5%	1/10W
R1749	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R1750	1-216-295-11	SHORT	0		
R1751	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1752	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R1753	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1754	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1755	1-216-025-11	RES-CHIP	100	5%	1/10W
R1756	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R1757	1-216-295-11	SHORT	0		
R1759	1-216-025-11	RES-CHIP	100	5%	1/10W
R1760	1-216-025-11	RES-CHIP	100	5%	1/10W
R1761	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1762	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1763	1-216-025-11	RES-CHIP	100	5%	1/10W
R1764	1-216-025-11	RES-CHIP	100	5%	1/10W
R1765	1-216-033-00	RES-CHIP	220	5%	1/10W
R1766	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1767	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1768	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1769	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1770	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1771	1-216-025-11	RES-CHIP	100	5%	1/10W
R1772	1-216-025-11	RES-CHIP	100	5%	1/10W
R1773	1-216-025-11	RES-CHIP	100	5%	1/10W

BD

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1774	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1775	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R1777	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R1778	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1779	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R1780	1-216-025-11	RES-CHIP	100	5%	1/10W
R1781	1-216-025-11	RES-CHIP	100	5%	1/10W
R1782	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R1783	1-216-033-00	RES-CHIP	220	5%	1/10W
R1784	1-216-025-11	RES-CHIP	100	5%	1/10W
R1785	1-216-025-11	RES-CHIP	100	5%	1/10W
R1786	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R1787	1-216-025-11	RES-CHIP	100	5%	1/10W
R1788	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R1789	1-216-025-11	RES-CHIP	100	5%	1/10W
R1790	1-216-295-11	SHORT	0		
R1791	1-216-025-11	RES-CHIP	100	5%	1/10W
R1792	1-216-025-11	RES-CHIP	100	5%	1/10W
R1793	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1794	1-208-801-11	METAL CHIP	6.2K	0.5%	1/10W
R1795	1-216-037-00	RES-CHIP	330	5%	1/10W
R1796	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R1798	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R1799	1-208-802-11	METAL CHIP	6.8K	0.5%	1/10W
R1800	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1801	1-208-816-11	METAL CHIP	27K	0.5%	1/10W
R1802	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1803	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R1804	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1805	1-216-025-11	RES-CHIP	100	5%	1/10W
R1806	1-216-295-11	SHORT	0		
R1807	1-216-037-00	RES-CHIP	330	5%	1/10W
R1808	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1809	1-216-025-11	RES-CHIP	100	5%	1/10W
R1810	1-216-025-11	RES-CHIP	100	5%	1/10W
R1811	1-216-025-11	RES-CHIP	100	5%	1/10W
R1819	1-216-025-11	RES-CHIP	100	5%	1/10W
R1820	1-216-025-11	RES-CHIP	100	5%	1/10W
R1821	1-216-025-11	RES-CHIP	100	5%	1/10W
R1822	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1823	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R1824	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R1826	1-216-037-00	RES-CHIP	330	5%	1/10W
R1827	1-216-295-11	SHORT	0		
R1828	1-216-025-11	RES-CHIP	100	5%	1/10W
R1830	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1831	1-216-025-11	RES-CHIP	100	5%	1/10W
R1834	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1835	1-216-025-11	RES-CHIP	100	5%	1/10W
R1836	1-216-025-11	RES-CHIP	100	5%	1/10W
R1840	1-216-025-11	RES-CHIP	100	5%	1/10W
R1841	1-216-025-11	RES-CHIP	100	5%	1/10W
R1844	1-216-025-11	RES-CHIP	100	5%	1/10W
R1846	1-216-025-11	RES-CHIP	100	5%	1/10W
R1847	1-216-025-11	RES-CHIP	100	5%	1/10W
R1848	1-216-025-11	RES-CHIP	100	5%	1/10W
R1849	1-216-025-11	RES-CHIP	100	5%	1/10W
R1850	1-216-025-11	RES-CHIP	100	5%	1/10W
R1851	1-216-025-11	RES-CHIP	100	5%	1/10W
R1852	1-216-295-11	SHORT	0		
R1853	1-216-025-11	RES-CHIP	100	5%	1/10W
R1854	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1855	1-216-025-11	RES-CHIP	100	5%	1/10W
R1856	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1857	1-216-025-11	RES-CHIP	100	5%	1/10W
R1858	1-216-033-00	RES-CHIP	220	5%	1/10W
R1859	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1860	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1861	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1862	1-216-025-11	RES-CHIP	100	5%	1/10W
R1864	1-208-850-11	METAL CHIP	680K	0.5%	1/10W
R1865	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R1866	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R1867	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R1868	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R1869	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R1870	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R1877	1-216-295-11	SHORT	0		
R1878	1-216-295-11	SHORT	0		
R1879	1-216-295-11	SHORT	0		
R1880	1-216-295-11	SHORT	0		
R1881	1-216-295-11	SHORT	0		
R1882	1-216-295-11	SHORT	0		
R1883	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1885	1-208-793-11	METAL CHIP	3K	0.5%	1/10W
R1886	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R1887	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R1888	1-216-033-00	RES-CHIP	220	5%	1/10W
R1889	1-216-033-00	RES-CHIP	220	5%	1/10W
R1890	1-216-295-11	SHORT	0		
R1907	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1908	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1909	1-216-041-00	RES-CHIP	470	5%	1/10W
R1910	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1913	1-208-799-11	METAL CHIP	5.1K	0.5%	1/10W
R1914	1-216-025-11	RES-CHIP	100	5%	1/10W
R1915	1-216-033-00	RES-CHIP	220	5%	1/10W
R1916	1-216-025-11	RES-CHIP	100	5%	1/10W
R1917	1-216-033-00	RES-CHIP	220	5%	1/10W
R1919	1-216-033-00	RES-CHIP	220	5%	1/10W
R1920	1-216-033-00	RES-CHIP	220	5%	1/10W
R1921	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1922	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1924	1-216-025-11	RES-CHIP	100	5%	1/10W
R1926	1-216-033-00	RES-CHIP	220	5%	1/10W
		<CRYSTAL>			
X1701	1-767-925-21	VIBRATOR, CRYSTAL			

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CB BA

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

REF. NO.	PART NO.	DESCRIPTION			REMARK
		* A-1331-974-A CB BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C7300	1-162-114-00	CERAMIC	0.0047µF		2KV
C7302	1-162-115-00	CERAMIC	330pF	10%	2KV
C7303	1-162-115-00	CERAMIC	330pF	10%	2KV
C7304	1-126-768-11	ELECT	2200µF	20%	16V
C7305	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C7306	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C7307	1-107-662-11	ELECT	22µF	20%	250V
C7308	1-126-967-11	ELECT	47µF	20%	50V
C7310	1-161-830-00	CERAMIC	0.0047µF		500V
C7311	1-102-050-00	CERAMIC	0.01µF	99%	500V
C7312	1-102-157-00	CERAMIC	560pF	10%	500V
C7314	1-126-964-11	ELECT	10µF	20%	50V
C7315	1-163-085-00	CERAMIC CHIP	2pF	0.25pF	50V
C7316	1-163-255-11	CERAMIC CHIP	150pF	5%	50V
		<CONNECTOR>			
CN7301*	1-564-508-11	PLUG, CONNECTOR 5P			
CN7302*	1-564-512-11	PLUG, CONNECTOR 9P			
CN7303*	1-564-510-11	PLUG, CONNECTOR 7P			
CN7304	1-785-879-11	CONNECTOR, ONE TOUCH			
CN7307	1-695-915-11	TAB (CONTACT)			
CN7314*	1-564-507-11	PLUG, CONNECTOR 4P			
		<DIODE>			
D7302	8-719-921-86	DIODE	MTZJ-T-77-13		
D7303	8-719-901-83	DIODE	1SS83TD		
D7304	8-719-901-83	DIODE	1SS83TD		
D7305	8-719-901-83	DIODE	1SS83TD		
D7306	8-719-901-83	DIODE	1SS83TD		
D7307	8-719-073-01	DIODE	MA111-TX		
D7310	8-719-991-33	DIODE	1SS133T-77		
D7311	8-719-921-86	DIODE	MTZJ-T-77-13		
D7312	8-719-921-86	DIODE	MTZJ-T-77-13		
D7313	1-216-295-11	SHORT	0		
		<IC>			
IC7301	8-759-360-83	IC	TDA6111Q/N4		
		<JACK>			
J7301	⚠ 1-251-182-11	SOCKET, CRT			
		<COIL>			
L7301	1-414-223-11	INDUCTOR	470µH		
L7303	1-414-181-11	INDUCTOR	4.7µH		
L7304	1-414-187-11	INDUCTOR	47µH		

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<NEON LAMP>			
NL7301	1-517-778-21	LAMP, NEON			
NL7302	1-517-778-21	LAMP, NEON			
NL7303	1-517-778-21	LAMP, NEON			
		<TRANSISTOR>			
Q7301	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q7302	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX		
		<RESISTOR>			
R7301	1-219-743-11	CARBON	100	5%	1/2W
R7302	1-260-132-11	CARBON	560K	5%	1/2W
R7303	1-249-393-11	CARBON	10	5%	1/4W
R7304	1-216-295-11	SHORT	0		
R7307	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R7308	1-260-133-11	CARBON	680K	5%	1/2W
R7309	1-208-791-11	METAL CHIP	2.4K	0.5%	1/10W
R7311	1-208-808-11	METAL CHIP	12K	0.5%	1/10W
R7312	1-208-793-11	METAL CHIP	3K	0.5%	1/10W
R7313	1-216-033-00	RES-CHIP	220	5%	1/10W
R7314	1-249-424-11	CARBON	3.9K	5%	1/4W
R7315	1-216-029-00	RES-CHIP	150	5%	1/10W
R7316	1-215-904-11	METAL OXIDE	100K	5%	2W
R7317	1-260-093-11	CARBON	330	5%	1/2W
R7319	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R7320	1-260-087-11	CARBON	100	5%	1/2W
R7321	1-260-117-11	CARBON	33K	5%	1/2W
R7323	1-216-033-00	RES-CHIP	220	5%	1/10W
R7324	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R7325	1-260-099-11	CARBON	1K	5%	1/2W
R7326	1-208-803-11	METAL CHIP	7.5K	0.5%	1/10W
R7327	1-208-802-11	METAL CHIP	6.8K	0.5%	1/10W
		<SPARK GAP>			
SG7301	1-519-422-11	GAP, SPARK			
SG7302	1-519-422-11	GAP, SPARK			

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		* A-1131-461-A BA BOARD, COMPLETE			
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		<CAPACITOR>			
C2401	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C2402	1-104-664-11	ELECT	47µF	20%	25V
C2403	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2404	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2405	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2406	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2407	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C2408	1-163-038-11	CERAMIC CHIP	0.1µF		25V

BA

REF. NO.	PART NO.	DESCRIPTION			REMARK
C2409	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2410	1-104-664-11	ELECT	47µF	20%	25V
C2411	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2412	1-104-664-11	ELECT	47µF	20%	25V
C2414	1-126-964-11	ELECT	10µF	20%	50V
C2415	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C2416	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C2417	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
C2418	1-104-664-11	ELECT	47µF	20%	25V
C2420	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2421	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2422	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2424	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2425	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2426	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2427	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C2429	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2430	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2431	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2432	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2434	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
C2436	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2437	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2439	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2440	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2441	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2442	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2443	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2444	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C2445	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2446	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2447	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
C2448	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2449	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C2450	1-126-964-11	ELECT	10µF	20%	50V
C2451	1-163-227-11	CERAMIC CHIP	10pF	0.50pF	50V
C2452	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2453	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2454	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2455	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C2456	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C2457	1-163-241-11	CERAMIC CHIP	39pF	5%	50V
C2458	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2459	1-126-935-11	ELECT	470µF	20%	6.3V
C2461	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
C2462	1-163-249-11	CERAMIC CHIP	82pF	5%	50V
C2463	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2464	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2466	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C2467	1-163-255-11	CERAMIC CHIP	150pF	5%	50V
C2468	1-104-664-11	ELECT	47µF	20%	25V
C2471	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2472	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2474	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2475	1-126-934-11	ELECT	220µF	20%	10V
C2476	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2477	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2478	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2479	1-126-963-11	ELECT	4.7µF	20%	50V
C2480	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2481	1-126-961-11	ELECT	2.2µF	20%	50V
C2482	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2483	1-163-038-11	CERAMIC CHIP	0.1µF		25V

<CONNECTOR>

CN2401 *	1-691-632-21	CONNECTOR, BOARD TO BOARD 15P	

<FILTER>

FL2401	1-239-847-11	FILTER, LOW PASS	
FL2402	1-239-847-11	FILTER, LOW PASS	
FL2403	1-239-847-11	FILTER, LOW PASS	
FL2404	1-239-847-11	FILTER, LOW PASS	

<IC>

IC2401	8-759-568-27	IC	µPD424210LE-60-E2
IC2402	8-759-536-12	IC	µPD64081BGF-3BA
IC2403	8-759-161-24	IC	µPC659AGS-E2

<COIL>

L2401	1-469-555-21	INDUCTOR	10µH
L2402	1-414-234-22	INDUCTOR CHIP	0µH
L2403	1-414-234-22	INDUCTOR CHIP	0µH
L2404	1-414-234-22	INDUCTOR CHIP	0µH
L2405	1-469-555-21	INDUCTOR	10µH
L2406	1-469-555-21	INDUCTOR	10µH
L2407	1-414-234-22	INDUCTOR CHIP	0µH
L2408	1-414-234-22	INDUCTOR CHIP	0µH
L2409	1-469-555-21	INDUCTOR	10µH
L2410	1-414-234-22	INDUCTOR CHIP	0µH
L2411	1-414-234-22	INDUCTOR CHIP	0µH
L2412	1-414-234-22	INDUCTOR CHIP	0µH
L2413	1-414-234-22	INDUCTOR CHIP	0µH
L2414	1-414-234-22	INDUCTOR CHIP	0µH
L2415	1-414-234-22	INDUCTOR CHIP	0µH
L2416	1-414-234-22	INDUCTOR CHIP	0µH
L2417	1-414-234-22	INDUCTOR CHIP	0µH
L2418	1-414-234-22	INDUCTOR CHIP	0µH
L2420	1-414-234-22	INDUCTOR CHIP	0µH
L2421	1-414-234-22	INDUCTOR CHIP	0µH
L2422	1-414-234-22	INDUCTOR CHIP	0µH
L2423	1-469-555-21	INDUCTOR	10µH
L2424	1-469-555-21	INDUCTOR	10µH
L2425	1-414-234-22	INDUCTOR CHIP	0µH
L2427	1-216-295-11	SHORT	0
L2428	1-216-295-11	SHORT	0
L2429	1-216-295-11	SHORT	0
L2430	1-469-555-21	INDUCTOR	10µH

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<TRANSISTOR>			
Q2401	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX		
Q2402	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q2403	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q2404	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q2405	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q2406	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX		
Q2407	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX		
Q2408	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q2409	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX		
Q2410	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX		
Q2411	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q2412	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q2413	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q2414	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX		
Q2415	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q2416	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q2417	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
Q2418	1-801-806-11	TRANSISTOR	DTC144EKA-T146		
Q2419	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX		
Q2421	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX		
Q2422	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX		
		<RESISTOR>			
R2401	1-216-295-11	SHORT	0		
R2402	1-216-295-11	SHORT	0		
R2403	1-216-295-11	SHORT	0		
R2404	1-216-021-00	RES-CHIP	68	5%	1/10W
R2405	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2406	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R2407	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2408	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R2409	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R2410	1-216-295-11	SHORT	0		
R2411	1-216-033-00	RES-CHIP	220	5%	1/10W
R2413	1-216-025-11	RES-CHIP	100	5%	1/10W
R2414	1-216-025-11	RES-CHIP	100	5%	1/10W
R2415	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2416	1-216-105-91	RES-CHIP	220K	5%	1/10W
R2417	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2418	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R2419	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R2420	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2421	1-216-041-00	RES-CHIP	470	5%	1/10W
R2422	1-216-025-11	RES-CHIP	100	5%	1/10W
R2423	1-216-033-00	RES-CHIP	220	5%	1/10W
R2424	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2425	1-208-774-11	METAL CHIP	470	0.5%	1/10W
R2426	1-208-774-11	METAL CHIP	470	0.5%	1/10W
R2427	1-216-025-11	RES-CHIP	100	5%	1/10W
R2428	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R2429	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R2430	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2431	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2432	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R2433	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R2434	1-216-085-00	RES-CHIP	33K	5%	1/10W
R2435	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R2436	1-216-025-11	RES-CHIP	100	5%	1/10W
R2438	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2439	1-208-784-11	METAL CHIP	1.2K	0.5%	1/10W
R2440	1-216-047-91	RES-CHIP	820	5%	1/10W
R2441	1-216-075-00	RES-CHIP	12K	5%	1/10W
R2442	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2444	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R2445	1-216-025-11	RES-CHIP	100	5%	1/10W
R2446	1-216-025-11	RES-CHIP	100	5%	1/10W
R2447	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2448	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R2449	1-208-784-11	METAL CHIP	1.2K	0.5%	1/10W
R2450	1-216-085-00	RES-CHIP	33K	5%	1/10W
R2451	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R2452	1-216-025-11	RES-CHIP	100	5%	1/10W
R2453	1-216-025-11	RES-CHIP	100	5%	1/10W
R2454	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R2455	1-216-295-11	SHORT	0		
R2456	1-216-017-91	RES-CHIP	47	5%	1/10W
R2457	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2458	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2459	1-208-778-11	METAL CHIP	680	0.5%	1/10W
R2460	1-216-047-91	RES-CHIP	820	5%	1/10W
R2461	1-216-075-00	RES-CHIP	12K	5%	1/10W
R2462	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2464	1-216-025-11	RES-CHIP	100	5%	1/10W
R2465	1-216-025-11	RES-CHIP	100	5%	1/10W
R2466	1-216-025-11	RES-CHIP	100	5%	1/10W
R2467	1-216-025-11	RES-CHIP	100	5%	1/10W
R2468	1-216-025-11	RES-CHIP	100	5%	1/10W
R2469	1-216-025-11	RES-CHIP	100	5%	1/10W
R2470	1-216-025-11	RES-CHIP	100	5%	1/10W
R2471	1-216-025-11	RES-CHIP	100	5%	1/10W
R2472	1-216-025-11	RES-CHIP	100	5%	1/10W
R2476	1-208-774-11	METAL CHIP	470	0.5%	1/10W
R2477	1-216-025-11	RES-CHIP	100	5%	1/10W
R2478	1-208-758-11	METAL CHIP	100	0.5%	1/10W
R2479	1-208-774-11	METAL CHIP	470	0.5%	1/10W
R2480	1-216-295-11	SHORT	0		
R2481	1-216-295-11	SHORT	0		
R2482	1-216-295-11	SHORT	0		
R2483	1-216-295-11	SHORT	0		
R2484	1-216-295-11	SHORT	0		
R2485	1-216-295-11	SHORT	0		
R2486	1-216-295-11	SHORT	0		
R2487	1-216-295-11	SHORT	0		
R2489	1-208-822-11	METAL CHIP	47K	0.5%	1/10W
R2490	1-208-810-11	METAL CHIP	15K	0.5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1131-462-A	BR BOARD, COMPLETE			
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		<CAPACITOR>			
C301	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C302	1-124-779-00	ELECT CHIP	10µF	20%	16V
C303	1-126-204-11	ELECT CHIP	47µF	20%	16V
C304	1-124-779-00	ELECT CHIP	10µF	20%	16V
C305	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C306	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C307	1-124-779-00	ELECT CHIP	10µF	20%	16V
C308	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C309	1-126-204-11	ELECT CHIP	47µF	20%	16V
C310	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C311	1-126-204-11	ELECT CHIP	47µF	20%	16V
C312	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C313	1-126-204-11	ELECT CHIP	47µF	20%	16V
C314	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C315	1-117-681-11	ELECT CHIP	100µF	20%	16V
C316	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C317	1-126-204-11	ELECT CHIP	47µF	20%	16V
C320	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C321	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C322	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C326	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C328	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C329	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C331	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C343	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C347	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C355	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C359	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C360	1-126-204-11	ELECT CHIP	47µF	20%	16V
C364	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C368	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C375	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C376	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C377	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C378	1-126-204-11	ELECT CHIP	47µF	20%	16V
C379	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C380	1-126-204-11	ELECT CHIP	47µF	20%	16V
C384	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C385	1-126-204-11	ELECT CHIP	47µF	20%	16V
C386	1-124-779-00	ELECT CHIP	10µF	20%	16V
C388	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C389	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C393	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C394	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C395	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C396	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C397	1-124-779-00	ELECT CHIP	10µF	20%	16V
C398	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C399	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C400	1-126-204-11	ELECT CHIP	47µF	20%	16V
C401	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C402	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C403	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C405	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C406	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C407	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C409	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C410	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C411	1-126-204-11	ELECT CHIP	47µF	20%	16V
C412	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V
C414	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C419	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C420	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C421	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C422	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C423	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C424	1-126-204-11	ELECT CHIP	47µF	20%	16V
C425	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C426	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C427	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C428	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C429	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C430	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C431	1-126-204-11	ELECT CHIP	47µF	20%	16V
C432	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C433	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C434	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C435	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C436	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C437	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C438	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C439	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C440	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C441	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C442	1-126-204-11	ELECT CHIP	47µF	20%	16V
C2301	1-126-204-11	ELECT CHIP	47µF	20%	16V
C2303	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2304	1-126-204-11	ELECT CHIP	47µF	20%	16V
C2305	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2306	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2307	1-126-204-11	ELECT CHIP	47µF	20%	16V
C2308	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2309	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2310	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2311	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2312	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2313	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C2314	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C2315	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
		<CONNECTOR>			
CN301	1-573-301-21	CONNECTOR, BOARD TO BOARD 20P			
CN302	1-573-979-21	CONNECTOR, BOARD TO BOARD 11P			
		<DIODE>			
D301	8-719-422-12	DIODE UDZ-TE-17-3.9B			

REF. NO.	PART NO.	DESCRIPTION	REMARK
D2301	8-719-041-97	DIODE MA113-(TX)	
		<FILTER>	
FL301	1-233-877-11	FILTER, LOW PASS	
FL302	1-233-504-21	FILTER, LOW PASS	
FL303	1-233-504-21	FILTER, LOW PASS	
FL304	1-234-112-21	FILTER, LOW PASS	
FL305	1-234-112-21	FILTER, LOW PASS	
FL306	1-234-113-21	FILTER, LOW PASS	
FL307	1-233-736-21	FILTER, EMI	
FL308	1-233-736-21	FILTER, EMI	
FL309	1-233-736-21	FILTER, EMI	
		<IC>	
IC301	8-759-430-32	IC TLC2933IPWR	
IC302	8-759-388-31	IC PQ20VZ1U	
IC303	8-759-669-75	IC TLC2932IPWR	
IC304	8-759-567-37	IC MB81F161622B-80FN	
IC305	8-752-398-47	IC CXD2090Q	
IC306	8-759-447-90	IC TLC5733AIPM	
IC466	8-759-239-55	IC TC74HC123AF(EL)	
IC2301	8-759-572-04	IC TDA9178T/N1.118	
		<COIL>	
L302	1-414-234-22	INDUCTOR CHIP 0µH	
L303	1-414-234-22	INDUCTOR CHIP 0µH	
L305	1-414-234-22	INDUCTOR CHIP 0µH	
L306	1-414-234-22	INDUCTOR CHIP 0µH	
L312	1-469-555-21	INDUCTOR 10µH	
L313	1-469-555-21	INDUCTOR 10µH	
L315	1-469-555-21	INDUCTOR 10µH	
L316	1-469-555-21	INDUCTOR 10µH	
L317	1-469-555-21	INDUCTOR 10µH	
L319	1-216-295-11	SHORT 0	
L320	1-469-555-21	INDUCTOR 10µH	
L321	1-469-555-21	INDUCTOR 10µH	
L322	1-469-555-21	INDUCTOR 10µH	
L323	1-469-555-21	INDUCTOR 10µH	
L324	1-469-555-21	INDUCTOR 10µH	
L2301	1-469-555-21	INDUCTOR 10µH	
L2302	1-469-555-21	INDUCTOR 10µH	
L2303	1-469-555-21	INDUCTOR 10µH	
		<TRANSISTOR>	
Q301	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q302	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q303	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q306	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q308	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q312	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q317	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q318	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q319	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q322	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q323	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q325	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q326	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q2301	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2302	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q2303	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2304	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2305	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q2306	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2307	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2308	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2309	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2310	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2311	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2312	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2313	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
		<RESISTOR>	
R302	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R303	1-216-037-00	RES-CHIP 330 5% 1/10W	
R304	1-216-037-00	RES-CHIP 330 5% 1/10W	
R305	1-208-795-11	METAL CHIP 3.6K 0.5% 1/10W	
R306	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R307	1-216-113-00	RES-CHIP 470K 5% 1/10W	
R308	1-216-295-11	SHORT 0	
R309	1-216-295-11	SHORT 0	
R311	1-216-117-00	RES-CHIP 680K 5% 1/10W	
R312	1-216-081-00	RES-CHIP 22K 5% 1/10W	
R313	1-216-033-00	RES-CHIP 220 5% 1/10W	
R314	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R315	1-208-799-11	METAL CHIP 5.1K 0.5% 1/10W	
R317	1-216-061-00	RES-CHIP 3.3K 5% 1/10W	
R318	1-216-295-11	SHORT 0	
R320	1-216-295-11	SHORT 0	
R321	1-216-295-11	SHORT 0	
R322	1-216-055-00	RES-CHIP 1.8K 5% 1/10W	
R323	1-216-295-11	SHORT 0	
R324	1-216-295-11	SHORT 0	
R325	1-216-047-91	RES-CHIP 820 5% 1/10W	
R326	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R327	1-216-117-00	RES-CHIP 680K 5% 1/10W	
R328	1-216-117-00	RES-CHIP 680K 5% 1/10W	
R333	1-208-782-11	METAL CHIP 1K 0.5% 1/10W	
R334	1-216-033-00	RES-CHIP 220 5% 1/10W	
R335	1-208-782-11	METAL CHIP 1K 0.5% 1/10W	
R337	1-216-295-11	SHORT 0	
R338	1-216-025-11	RES-CHIP 100 5% 1/10W	
R340	1-216-037-00	RES-CHIP 330 5% 1/10W	
R341	1-216-295-11	SHORT 0	
R344	1-216-295-11	SHORT 0	
R345	1-216-295-11	SHORT 0	
R346	1-216-295-11	SHORT 0	
R347	1-216-025-11	RES-CHIP 100 5% 1/10W	
R349	1-216-295-11	SHORT 0	
R355	1-216-295-11	SHORT 0	
R358	1-216-055-00	RES-CHIP 1.8K 5% 1/10W	

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R359	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R360	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R361	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R362	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R363	1-216-025-11	RES-CHIP	100	5%	1/10W
R364	1-216-041-00	RES-CHIP	470	5%	1/10W
R365	1-216-295-11	SHORT	0		
R366	1-216-025-11	RES-CHIP	100	5%	1/10W
R367	1-216-041-00	RES-CHIP	470	5%	1/10W
R368	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R370	1-216-025-11	RES-CHIP	100	5%	1/10W
R371	1-216-025-11	RES-CHIP	100	5%	1/10W
R372	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R375	1-208-752-11	METAL CHIP	56	0.5%	1/10W
R376	1-208-752-11	METAL CHIP	56	0.5%	1/10W
R377	1-216-295-11	SHORT	0		
R378	1-216-041-00	RES-CHIP	470	5%	1/10W
R380	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R381	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R382	1-208-754-11	METAL CHIP	68	0.5%	1/10W
R383	1-216-295-11	SHORT	0		
R384	1-208-754-11	METAL CHIP	68	0.5%	1/10W
R386	1-216-295-11	SHORT	0		
R390	1-216-295-11	SHORT	0		
R392	1-216-295-11	SHORT	0		
R393	1-208-752-11	METAL CHIP	56	0.5%	1/10W
R394	1-216-295-11	SHORT	0		
R397	1-216-041-00	RES-CHIP	470	5%	1/10W
R400	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R401	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R402	1-208-752-11	METAL CHIP	56	0.5%	1/10W
R403	1-216-295-11	SHORT	0		
R404	1-216-077-91	RES-CHIP	15K	5%	1/10W
R405	1-208-794-11	METAL CHIP	3.3K	0.5%	1/10W
R406	1-216-049-11	RES-CHIP	1K	5%	1/10W
R407	1-216-295-11	SHORT	0		
R408	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R413	1-216-025-11	RES-CHIP	100	5%	1/10W
R414	1-208-765-11	METAL CHIP	200	0.5%	1/10W
R416	1-216-077-91	RES-CHIP	15K	5%	1/10W
R417	1-216-077-91	RES-CHIP	15K	5%	1/10W
R418	1-208-752-11	METAL CHIP	56	0.5%	1/10W
R421	1-208-777-11	METAL CHIP	620	0.5%	1/10W
R422	1-216-049-11	RES-CHIP	1K	5%	1/10W
R423	1-216-025-11	RES-CHIP	100	5%	1/10W
R424	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R425	1-216-295-11	SHORT	0		
R426	1-216-295-11	SHORT	0		
R428	1-216-295-11	SHORT	0		
R429	1-208-765-11	METAL CHIP	200	0.5%	1/10W
R430	1-208-752-11	METAL CHIP	56	0.5%	1/10W
R431	1-216-295-11	SHORT	0		
R433	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R434	1-216-295-11	SHORT	0		
R437	1-216-295-11	SHORT	0		
R438	1-208-768-11	METAL CHIP	270	0.5%	1/10W
R439	1-216-049-11	RES-CHIP	1K	5%	1/10W
R440	1-208-752-11	METAL CHIP	56	0.5%	1/10W
R441	1-208-752-11	METAL CHIP	56	0.5%	1/10W
R442	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R443	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R444	1-216-295-11	SHORT	0		
R445	1-208-765-11	METAL CHIP	200	0.5%	1/10W
R447	1-216-295-11	SHORT	0		
R448	1-216-295-11	SHORT	0		
R449	1-216-295-11	SHORT	0		
R450	1-216-049-11	RES-CHIP	1K	5%	1/10W
R451	1-414-234-22	INDUCTOR CHIP	0µH		
R452	1-216-049-11	RES-CHIP	1K	5%	1/10W
R453	1-216-295-11	SHORT	0		
R454	1-216-295-11	SHORT	0		
R455	1-216-295-11	SHORT	0		
R456	1-216-295-11	SHORT	0		
R457	1-216-295-11	SHORT	0		
R458	1-216-295-11	SHORT	0		
R459	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R460	1-216-025-11	RES-CHIP	100	5%	1/10W
R461	1-216-049-11	RES-CHIP	1K	5%	1/10W
R462	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R463	1-216-025-11	RES-CHIP	100	5%	1/10W
R464	1-216-049-11	RES-CHIP	1K	5%	1/10W
R465	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R466	1-216-025-11	RES-CHIP	100	5%	1/10W
R467	1-216-045-00	RES-CHIP	680	5%	1/10W
R468	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R469	1-216-025-11	RES-CHIP	100	5%	1/10W
R474	1-216-295-11	SHORT	0		
R475	1-216-295-11	SHORT	0		
R477	1-216-295-11	SHORT	0		
R478	1-216-295-11	SHORT	0		
R480	1-216-073-00	RES-CHIP	10K	5%	1/10W
R481	1-216-073-00	RES-CHIP	10K	5%	1/10W
R482	1-216-073-00	RES-CHIP	10K	5%	1/10W
R483	1-216-073-00	RES-CHIP	10K	5%	1/10W
R484	1-216-073-00	RES-CHIP	10K	5%	1/10W
R485	1-216-073-00	RES-CHIP	10K	5%	1/10W
R486	1-216-073-00	RES-CHIP	10K	5%	1/10W
R487	1-216-073-00	RES-CHIP	10K	5%	1/10W
R488	1-216-073-00	RES-CHIP	10K	5%	1/10W
R489	1-216-073-00	RES-CHIP	10K	5%	1/10W
R490	1-216-073-00	RES-CHIP	10K	5%	1/10W
R491	1-216-073-00	RES-CHIP	10K	5%	1/10W
R492	1-216-073-00	RES-CHIP	10K	5%	1/10W
R493	1-216-073-00	RES-CHIP	10K	5%	1/10W
R494	1-216-073-00	RES-CHIP	10K	5%	1/10W
R495	1-216-073-00	RES-CHIP	10K	5%	1/10W
R496	1-216-073-00	RES-CHIP	10K	5%	1/10W
R497	1-216-073-00	RES-CHIP	10K	5%	1/10W
R498	1-216-073-00	RES-CHIP	10K	5%	1/10W
R499	1-216-295-11	SHORT	0		
R2301	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R2302	1-216-025-11	RES-CHIP	100	5%	1/10W
R2303	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R2304	1-216-057-00	RES-CHIP	2.2K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R2305	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R2306	1-216-025-11	RES-CHIP	100	5%	1/10W
R2307	1-208-778-11	METAL CHIP	680	0.5%	1/10W
R2308	1-208-772-11	METAL CHIP	390	0.5%	1/10W
R2309	1-216-025-11	RES-CHIP	100	5%	1/10W
R2310	1-208-780-11	METAL CHIP	820	0.5%	1/10W
R2311	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2312	1-208-780-11	METAL CHIP	820	0.5%	1/10W
R2314	1-208-788-11	METAL CHIP	1.8K	0.5%	1/10W
R2315	1-216-025-11	RES-CHIP	100	5%	1/10W
R2316	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2317	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2318	1-216-025-11	RES-CHIP	100	5%	1/10W
R2319	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2320	1-216-025-11	RES-CHIP	100	5%	1/10W
R2321	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2322	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2323	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R2325	1-216-025-11	RES-CHIP	100	5%	1/10W
R2326	1-216-025-11	RES-CHIP	100	5%	1/10W
R2327	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2328	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2329	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2330	1-216-025-11	RES-CHIP	100	5%	1/10W
R2331	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R2332	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R2333	1-208-810-11	METAL CHIP	15K	0.5%	1/10W
R2334	1-208-804-11	METAL CHIP	8.2K	0.5%	1/10W
R2335	1-208-804-11	METAL CHIP	8.2K	0.5%	1/10W
R2336	1-216-089-91	RES-CHIP	47K	5%	1/10W
R2337	1-216-089-91	RES-CHIP	47K	5%	1/10W
R2338	1-208-808-11	METAL CHIP	12K	0.5%	1/10W
R2339	1-216-089-91	RES-CHIP	47K	5%	1/10W
R2340	1-216-089-91	RES-CHIP	47K	5%	1/10W

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* A-1131-627-A BM BOARD, COMPLETE
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<CAPACITOR>

C001	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C002	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C003	1-104-760-11	CERAMIC CHIP	0.047µF	10%	50V
C004	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C005	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C006	1-126-204-11	ELECT CHIP	47µF	20%	16V
C009	1-126-204-11	ELECT CHIP	47µF	20%	16V
C010	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C011	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C012	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C013	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C014	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C015	1-126-204-11	ELECT CHIP	47µF	20%	16V
C016	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C017	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C018	1-126-204-11	ELECT CHIP	47µF	20%	16V
C019	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C021	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C022	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C023	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C024	1-126-204-11	ELECT CHIP	47µF	20%	16V
C025	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C026	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C028	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C030	1-124-779-00	ELECT CHIP	10µF	20%	16V
C031	1-164-346-11	CERAMIC CHIP	1µF		16V
C032	1-164-346-11	CERAMIC CHIP	1µF		16V
C034	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C035	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C036	1-126-204-11	ELECT CHIP	47µF	20%	16V
C037	1-126-204-11	ELECT CHIP	47µF	20%	16V
C038	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C039	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C040	1-126-204-11	ELECT CHIP	47µF	20%	16V
C042	1-104-760-11	CERAMIC CHIP	0.047µF	10%	50V
C043	1-163-235-11	CERAMIC CHIP	22pF	5%	50V
C044	1-163-235-11	CERAMIC CHIP	22pF	5%	50V
C045	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C046	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C047	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C050	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C052	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C053	1-126-204-11	ELECT CHIP	47µF	20%	16V
C054	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C055	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C056	1-126-204-11	ELECT CHIP	47µF	20%	16V
C058	1-164-005-11	CERAMIC CHIP	0.47µF		16V
C059	1-126-204-11	ELECT CHIP	47µF	20%	16V
C060	1-163-233-11	CERAMIC CHIP	18pF	5%	50V
C062	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
C063	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C064	1-126-204-11	ELECT CHIP	47µF	20%	16V
C066	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C067	1-164-005-11	CERAMIC CHIP	0.47µF		16V
C068	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C069	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C070	1-126-204-11	ELECT CHIP	47µF	20%	16V
C071	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C072	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C073	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C074	1-126-204-11	ELECT CHIP	47µF	20%	16V
C075	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C076	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C077	1-126-204-11	ELECT CHIP	47µF	20%	16V
C078	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C081	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C082	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C083	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C084	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C085	1-163-038-11	CERAMIC CHIP	0.1µF		25V

BM

REF. NO.	PART NO.	DESCRIPTION			REMARK
C086	1-126-204-11	ELECT CHIP	47µF	20%	16V
C087	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C089	1-163-237-11	CERAMIC CHIP	27pF	5%	50V
C090	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
C091	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C092	1-126-204-11	ELECT CHIP	47µF	20%	16V
C093	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C094	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C095	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C096	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C097	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C098	1-126-204-11	ELECT CHIP	47µF	20%	16V
C100	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C101	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C102	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C103	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C104	1-126-204-11	ELECT CHIP	47µF	20%	16V
C105	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C106	1-126-204-11	ELECT CHIP	47µF	20%	16V
C107	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C108	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C109	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C110	1-124-779-00	ELECT CHIP	10µF	20%	16V
C111	1-124-779-00	ELECT CHIP	10µF	20%	16V
C112	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C113	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C114	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C115	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C116	1-126-204-11	ELECT CHIP	47µF	20%	16V
C117	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C118	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C119	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C120	1-104-760-11	CERAMIC CHIP	0.047µF	10%	50V
C121	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C122	1-124-779-00	ELECT CHIP	10µF	20%	16V
C123	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C124	1-126-204-11	ELECT CHIP	47µF	20%	16V
C125	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C126	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C127	1-126-204-11	ELECT CHIP	47µF	20%	16V
C128	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C129	1-126-204-11	ELECT CHIP	47µF	20%	16V
C130	1-124-779-00	ELECT CHIP	10µF	20%	16V
C131	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C132	1-126-204-11	ELECT CHIP	47µF	20%	16V
C133	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C134	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C135	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C136	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C137	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C138	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C141	1-124-779-00	ELECT CHIP	10µF	20%	16V
C142	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C143	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C144	1-126-204-11	ELECT CHIP	47µF	20%	16V
C145	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C146	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C147	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C148	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C149	1-126-204-11	ELECT CHIP	47µF	20%	16V
C150	1-126-204-11	ELECT CHIP	47µF	20%	16V
C151	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C152	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C153	1-124-779-00	ELECT CHIP	10µF	20%	16V
C154	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C155	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C156	1-124-779-00	ELECT CHIP	10µF	20%	16V
C157	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C158	1-126-204-11	ELECT CHIP	47µF	20%	16V
C159	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C160	1-126-204-11	ELECT CHIP	47µF	20%	16V
C161	1-163-038-11	CERAMIC CHIP	0.1µF		25V

<CONNECTOR>

CN001	1-573-301-21	CONNECTOR, BOARD TO BOARD 20P
CN002	1-573-301-21	CONNECTOR, BOARD TO BOARD 20P

<DIODE>

D001	8-719-073-01	DIODE MA111-TX
D002	8-719-073-01	DIODE MA111-TX
D003	8-719-073-01	DIODE MA111-TX

<FILTER>

FL001	1-233-505-21	FILTER, LOW PASS
FL002	1-233-504-21	FILTER, LOW PASS
FL003	1-233-504-21	FILTER, LOW PASS
FL007	1-233-505-21	FILTER, LOW PASS
FL008	1-233-945-21	FILTER, LOW PASS
FL009	1-233-944-21	FILTER, LOW PASS
FL010	1-233-504-21	FILTER, LOW PASS
FL011	1-233-944-21	FILTER, LOW PASS
FL012	1-233-504-21	FILTER, LOW PASS

<IC>

IC001	8-759-467-22	IC MSM548331TS-K
IC002	8-759-669-75	IC TLC2932IPWR
IC003	8-752-388-98	IC CXD2303AQ-TL
IC004	8-759-485-79	IC TC7SET08FU(TE85L)
IC005	8-759-972-80	IC M24C02-MN6T
IC006	8-759-352-91	IC PST9143NL
IC007	8-759-485-79	IC TC7SET08FU(TE85L)
IC008	8-759-669-75	IC TLC2932IPWR
IC009	8-752-917-13	IC CXP85840A-040Q
IC010	8-752-392-55	IC CXD2079Q
IC011	8-759-669-75	IC TLC2932IPWR
IC012	8-759-485-79	IC TC7SET08FU(TE85L)
IC013	8-759-467-22	IC MSM548331TS-K
IC014	8-752-388-98	IC CXD2303AQ-TL

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<COIL>	
L001	1-414-234-22	INDUCTOR CHIP 0µH	
L002	1-414-234-22	INDUCTOR CHIP 0µH	
L003	1-414-234-22	INDUCTOR CHIP 0µH	
L004	1-414-234-22	INDUCTOR CHIP 0µH	
L005	1-414-234-22	INDUCTOR CHIP 0µH	
L006	1-414-234-22	INDUCTOR CHIP 0µH	
L007	1-414-754-11	INDUCTOR 10µH	
L008	1-414-754-11	INDUCTOR 10µH	
L009	1-414-754-11	INDUCTOR 10µH	
L010	1-414-234-22	INDUCTOR CHIP 0µH	
L011	1-414-754-11	INDUCTOR 10µH	
L012	1-414-754-11	INDUCTOR 10µH	
L013	1-414-234-22	INDUCTOR CHIP 0µH	
L014	1-414-754-11	INDUCTOR 10µH	
L015	1-414-234-22	INDUCTOR CHIP 0µH	
L016	1-414-234-22	INDUCTOR CHIP 0µH	
L017	1-414-234-22	INDUCTOR CHIP 0µH	
L018	1-414-234-22	INDUCTOR CHIP 0µH	
L019	1-414-234-22	INDUCTOR CHIP 0µH	
L020	1-414-234-22	INDUCTOR CHIP 0µH	
L021	1-414-234-22	INDUCTOR CHIP 0µH	
L022	1-414-234-22	INDUCTOR CHIP 0µH	
L023	1-414-234-22	INDUCTOR CHIP 0µH	
L024	1-414-234-22	INDUCTOR CHIP 0µH	
L025	1-414-234-22	INDUCTOR CHIP 0µH	
L026	1-414-234-22	INDUCTOR CHIP 0µH	
L027	1-414-234-22	INDUCTOR CHIP 0µH	
L028	1-414-234-22	INDUCTOR CHIP 0µH	
		<TRANSISTOR>	
Q001	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q002	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q006	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q007	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q009	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q010	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q018	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q019	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q020	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q021	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q022	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q023	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q025	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q026	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q027	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q028	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q029	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q030	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q031	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q032	1-801-806-11	TRANSISTOR DTC144EKA-T146	
		<RESISTOR>	
R001	1-216-117-00	RES-CHIP 680K 5% 1/10W	
R002	1-216-051-00	RES-CHIP 1.2K 5% 1/10W	
R003	1-216-295-11	SHORT 0	
R007	1-216-041-00	RES-CHIP 470 5% 1/10W	
R008	1-208-800-11	METAL CHIP 5.6K 0.5% 1/10W	
R009	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R010	1-216-295-11	SHORT 0	
R012	1-208-794-11	METAL CHIP 3.3K 0.5% 1/10W	
R013	1-216-041-00	RES-CHIP 470 5% 1/10W	
R014	1-208-776-11	METAL CHIP 560 0.5% 1/10W	
R016	1-216-013-00	RES-CHIP 33 5% 1/10W	
R018	1-216-295-11	SHORT 0	
R019	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R020	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R021	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R022	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R023	1-208-754-11	METAL CHIP 68 0.5% 1/10W	
R024	1-208-776-11	METAL CHIP 560 0.5% 1/10W	
R025	1-208-754-11	METAL CHIP 68 0.5% 1/10W	
R026	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R027	1-208-754-11	METAL CHIP 68 0.5% 1/10W	
R028	1-208-770-11	METAL CHIP 330 0.5% 1/10W	
R029	1-208-800-11	METAL CHIP 5.6K 0.5% 1/10W	
R030	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R032	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R033	1-208-776-11	METAL CHIP 560 0.5% 1/10W	
R035	1-216-013-00	RES-CHIP 33 5% 1/10W	
R036	1-216-013-00	RES-CHIP 33 5% 1/10W	
R037	1-216-033-00	RES-CHIP 220 5% 1/10W	
R038	1-208-754-11	METAL CHIP 68 0.5% 1/10W	
R039	1-208-800-11	METAL CHIP 5.6K 0.5% 1/10W	
R040	1-208-754-11	METAL CHIP 68 0.5% 1/10W	
R042	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R046	1-216-037-00	RES-CHIP 330 5% 1/10W	
R048	1-216-025-11	RES-CHIP 100 5% 1/10W	
R050	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R052	1-208-754-11	METAL CHIP 68 0.5% 1/10W	
R059	1-216-295-11	SHORT 0	
R060	1-208-754-11	METAL CHIP 68 0.5% 1/10W	
R061	1-216-025-11	RES-CHIP 100 5% 1/10W	
R064	1-216-041-00	RES-CHIP 470 5% 1/10W	
R065	1-216-025-11	RES-CHIP 100 5% 1/10W	
R066	1-216-033-00	RES-CHIP 220 5% 1/10W	
R067	1-216-033-00	RES-CHIP 220 5% 1/10W	
R070	1-216-033-00	RES-CHIP 220 5% 1/10W	
R072	1-216-295-11	SHORT 0	
R073	1-216-295-11	SHORT 0	
R074	1-216-295-11	SHORT 0	
R075	1-216-295-11	SHORT 0	
R076	1-216-295-11	SHORT 0	
R077	1-216-295-11	SHORT 0	
R078	1-208-797-11	METAL CHIP 4.3K 0.5% 1/10W	
R079	1-216-025-11	RES-CHIP 100 5% 1/10W	
R080	1-216-025-11	RES-CHIP 100 5% 1/10W	
R081	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R082	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R086	1-216-051-00	RES-CHIP 1.2K 5% 1/10W	
R087	1-216-117-00	RES-CHIP 680K 5% 1/10W	
R090	1-216-025-11	RES-CHIP 100 5% 1/10W	

BM

REF. NO.	PART NO.	DESCRIPTION			REMARK
R091	1-216-295-11	SHORT	0		
R093	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R094	1-216-051-00	RES-CHIP	1.2K	5%	1/10W
R098	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R099	1-216-117-00	RES-CHIP	680K	5%	1/10W
R100	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R101	1-216-295-11	SHORT	0		
R102	1-216-041-00	RES-CHIP	470	5%	1/10W
R106	1-216-085-00	RES-CHIP	33K	5%	1/10W
R107	1-216-295-11	SHORT	0		
R108	1-216-017-91	RES-CHIP	47	5%	1/10W
R109	1-216-295-11	SHORT	0		
R110	1-216-017-91	RES-CHIP	47	5%	1/10W
R111	1-216-295-11	SHORT	0		
R112	1-216-049-11	RES-CHIP	1K	5%	1/10W
R113	1-216-033-00	RES-CHIP	220	5%	1/10W
R118	1-216-025-11	RES-CHIP	100	5%	1/10W
R119	1-216-085-00	RES-CHIP	33K	5%	1/10W
R120	1-216-295-11	SHORT	0		
R121	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R122	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R123	1-216-025-11	RES-CHIP	100	5%	1/10W
R124	1-216-049-11	RES-CHIP	1K	5%	1/10W
R125	1-208-762-11	METAL CHIP	150	0.5%	1/10W
R127	1-216-049-11	RES-CHIP	1K	5%	1/10W
R128	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R129	1-216-025-11	RES-CHIP	100	5%	1/10W
R130	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R131	1-216-033-00	RES-CHIP	220	5%	1/10W
R132	1-216-025-11	RES-CHIP	100	5%	1/10W
R133	1-216-025-11	RES-CHIP	100	5%	1/10W
R134	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R135	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R136	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R137	1-208-769-11	METAL CHIP	300	0.5%	1/10W
R138	1-208-770-11	METAL CHIP	330	0.5%	1/10W
R139	1-216-025-11	RES-CHIP	100	5%	1/10W
R140	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R141	1-216-117-00	RES-CHIP	680K	5%	1/10W
R142	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R143	1-216-049-11	RES-CHIP	1K	5%	1/10W
R144	1-216-041-00	RES-CHIP	470	5%	1/10W
R145	1-216-085-00	RES-CHIP	33K	5%	1/10W
R146	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R147	1-216-049-11	RES-CHIP	1K	5%	1/10W
R148	1-208-769-11	METAL CHIP	300	0.5%	1/10W
R149	1-216-025-11	RES-CHIP	100	5%	1/10W
R150	1-208-762-11	METAL CHIP	150	0.5%	1/10W
R151	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R153	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R154	1-216-025-11	RES-CHIP	100	5%	1/10W
R155	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R156	1-208-774-11	METAL CHIP	470	0.5%	1/10W
R157	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R159	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R160	1-208-776-11	METAL CHIP	560	0.5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R161	1-216-295-11	SHORT	0		
R163	1-208-762-11	METAL CHIP	150	0.5%	1/10W
R164	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R165	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R166	1-216-049-11	RES-CHIP	1K	5%	1/10W
R167	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R170	1-216-019-00	RES-CHIP	56	5%	1/10W
R171	1-216-121-91	RES-CHIP	1M	5%	1/10W
R172	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R173	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R175	1-216-049-11	RES-CHIP	1K	5%	1/10W
R176	1-216-049-11	RES-CHIP	1K	5%	1/10W
R177	1-216-049-11	RES-CHIP	1K	5%	1/10W
R178	1-216-025-11	RES-CHIP	100	5%	1/10W
R181	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R182	1-208-800-11	METAL CHIP	5.6K	0.5%	1/10W
R183	1-216-049-11	RES-CHIP	1K	5%	1/10W
R185	1-216-049-11	RES-CHIP	1K	5%	1/10W
R194	1-216-295-11	SHORT	0		
R195	1-216-049-11	RES-CHIP	1K	5%	1/10W
R198	1-216-025-11	RES-CHIP	100	5%	1/10W
R200	1-208-754-11	METAL CHIP	68	0.5%	1/10W
R201	1-216-033-00	RES-CHIP	220	5%	1/10W
R202	1-216-037-00	RES-CHIP	330	5%	1/10W
R203	1-216-049-11	RES-CHIP	1K	5%	1/10W
R204	1-216-049-11	RES-CHIP	1K	5%	1/10W
R205	1-216-049-11	RES-CHIP	1K	5%	1/10W
R206	1-208-754-11	METAL CHIP	68	0.5%	1/10W
R207	1-208-754-11	METAL CHIP	68	0.5%	1/10W
R208	1-208-770-11	METAL CHIP	330	0.5%	1/10W
R210	1-216-013-00	RES-CHIP	33	5%	1/10W
R212	1-216-013-00	RES-CHIP	33	5%	1/10W
R214	1-216-041-00	RES-CHIP	470	5%	1/10W
R215	1-216-295-11	SHORT	0		
R216	1-208-794-11	METAL CHIP	3.3K	0.5%	1/10W
R217	1-216-051-00	RES-CHIP	1.2K	5%	1/10W
R218	1-216-117-00	RES-CHIP	680K	5%	1/10W
R219	1-216-013-00	RES-CHIP	33	5%	1/10W
R220	1-208-754-11	METAL CHIP	68	0.5%	1/10W
R221	1-208-754-11	METAL CHIP	68	0.5%	1/10W
R222	1-208-754-11	METAL CHIP	68	0.5%	1/10W
R223	1-208-754-11	METAL CHIP	68	0.5%	1/10W
R226	1-216-295-11	SHORT	0		
R227	1-216-295-11	SHORT	0		
R228	1-216-295-11	SHORT	0		
R229	1-216-295-11	SHORT	0		
R230	1-216-295-11	SHORT	0		
R231	1-216-295-11	SHORT	0		
R232	1-216-295-11	SHORT	0		
R233	1-216-295-11	SHORT	0		
R234	1-216-295-11	SHORT	0		
R235	1-216-295-11	SHORT	0		
R236	1-216-295-11	SHORT	0		
R237	1-216-295-11	SHORT	0		
R238	1-216-295-11	SHORT	0		
R239	1-216-295-11	SHORT	0		
R240	1-216-295-11	SHORT	0		

REF. NO.	PART NO.	DESCRIPTION			REMARK
R241	1-216-295-11	SHORT	0		
R242	1-216-295-11	SHORT	0		
R243	1-216-295-11	SHORT	0		
R244	1-216-295-11	SHORT	0		
R245	1-216-295-11	SHORT	0		
R246	1-216-295-11	SHORT	0		
R247	1-216-295-11	SHORT	0		
R248	1-216-295-11	SHORT	0		
R249	1-216-295-11	SHORT	0		
R250	1-216-295-11	SHORT	0		
R251	1-216-295-11	SHORT	0		
R252	1-216-295-11	SHORT	0		
R253	1-216-295-11	SHORT	0		
R254	1-216-049-11	RES-CHIP	1K	5%	1/10W
R257	1-216-295-11	SHORT	0		
R258	1-216-049-11	RES-CHIP	1K	5%	1/10W
R259	1-216-295-11	SHORT	0		
R260	1-216-295-11	SHORT	0		
R261	1-216-295-11	SHORT	0		
R262	1-216-295-11	SHORT	0		
R263	1-216-295-11	SHORT	0		
R273	1-216-033-00	RES-CHIP	220	5%	1/10W
R274	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
		<CRYSTAL>			
X001	1-767-924-21	VIBRATOR, CRYSTAL 27MHz			
X002	1-767-654-21	VIBRATOR, CRYSTAL 12MHz			

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*	A-1299-322-A	A BOARD, COMPLETE			
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	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C501	1-126-933-11	ELECT	100µF	20%	16V
C502	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C503	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C504	1-104-665-11	ELECT	100µF	20%	25V
C505	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C506	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C507	1-126-933-11	ELECT	100µF	20%	16V
C508	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C509	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C510	1-126-916-11	ELECT	1000µF	20%	6.3V
C511	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C512	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C513	1-126-933-11	ELECT	100µF	20%	16V
C514	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C515	1-104-664-11	ELECT	47µF	20%	25V
C516	1-104-664-11	ELECT	47µF	20%	25V
C517	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C518	1-126-933-11	ELECT	100µF	20%	16V
C519	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C520	1-126-964-11	ELECT	10µF	20%	50V
C521	1-163-145-00	CERAMIC CHIP	0.0015µF	5%	50V
C522	1-163-143-00	CERAMIC CHIP	0.0012µF	5%	50V
C523	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C524	1-104-664-11	ELECT	47µF	20%	25V
C525	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C526	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C527	1-126-933-11	ELECT	100µF	20%	16V
C528	1-126-916-11	ELECT	1000µF	20%	6.3V
C529	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C530	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C531	1-126-933-11	ELECT	100µF	20%	16V
C532	1-126-933-11	ELECT	100µF	20%	16V
C533	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C534	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C535	1-104-665-11	ELECT	100µF	20%	25V
C536	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C537	1-104-664-11	ELECT	47µF	20%	25V
C538	1-126-964-11	ELECT	10µF	20%	50V
C539	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C540	1-126-918-11	ELECT	4700µF	20%	6.3V
C541	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C542	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C543	1-126-960-11	ELECT	1µF	20%	50V
C544	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C545	1-126-964-11	ELECT	10µF	20%	50V
C546	1-163-145-00	CERAMIC CHIP	0.0015µF	5%	50V
C548	1-163-012-00	CERAMIC CHIP	0.0018µF	5%	50V
C550	1-163-127-00	CERAMIC CHIP	270pF	5%	50V
C551	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C552	1-126-934-11	ELECT	220µF	20%	16V
C553	1-126-960-11	ELECT	1µF	20%	50V
C554	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C555	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C557	1-126-960-11	ELECT	1µF	20%	50V
C558	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C559	1-126-963-11	ELECT	4.7µF	20%	50V
C560	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C561	1-104-664-11	ELECT	47µF	20%	25V
C562	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C563	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C564	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C567	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C569	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C570	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C571	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C572	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C574	1-126-960-11	ELECT	1µF	20%	50V
C575	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C576	1-164-182-11	CERAMIC CHIP	0.0033µF	10%	50V
C577	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C580	1-164-182-11	CERAMIC CHIP	0.0033µF	10%	50V
C581	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C582	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C583	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C584	1-163-038-11	CERAMIC CHIP	0.1µF		25V

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C585	1-126-933-11	ELECT	100µF	20%	16V
C586	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C587	1-104-664-11	ELECT	47µF	20%	25V
C588	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C589	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C590	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C591	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C592	1-104-664-11	ELECT	47µF	20%	25V
C593	1-126-963-11	ELECT	4.7µF	20%	50V
C595	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C596	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C598	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C599	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C600	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C601	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C602	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C603	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C604	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C605	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C606	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C607	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C608	1-126-964-11	ELECT	10µF	20%	50V
C610	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C611	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C612	1-104-664-11	ELECT	47µF	20%	25V
C613	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C614	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C615	1-126-933-11	ELECT	100µF	20%	16V
C616	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C617	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C618	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C619	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C621	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C622	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C623	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C624	1-104-664-11	ELECT	47µF	20%	25V
C625	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C626	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C627	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C628	1-104-664-11	ELECT	47µF	20%	25V
C629	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C630	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C631	1-164-346-11	CERAMIC CHIP	1µF		16V
C632	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C636	1-163-263-11	CERAMIC CHIP	330pF	5%	50V
C637	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C638	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C639	1-126-933-11	ELECT	100µF	20%	16V
C640	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C641	1-104-664-11	ELECT	47µF	20%	25V
C642	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C643	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C644	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C645	1-126-965-11	ELECT	22µF	20%	50V
C646	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C647	1-104-664-11	ELECT	47µF	20%	25V
C648	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C649	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C650	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C651	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C652	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C653	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C654	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C655	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C656	1-126-964-11	ELECT	10µF	20%	50V
C657	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C658	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C659	1-104-664-11	ELECT	47µF	20%	25V
C660	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C661	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C662	1-126-965-11	ELECT	22µF	20%	50V
C663	1-126-965-11	ELECT	22µF	20%	50V
C664	1-104-664-11	ELECT	47µF	20%	25V
C665	1-104-664-11	ELECT	47µF	20%	25V
C666	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C667	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C668	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C669	1-126-935-11	ELECT	470µF	20%	16V
C670	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C671	1-104-664-11	ELECT	47µF	20%	25V
C672	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C673	1-126-965-11	ELECT	22µF	20%	50V
C674	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C675	1-110-501-11	CERAMIC CHIP	0.33µF	10%	16V
C676	1-104-664-11	ELECT	47µF	20%	25V
C677	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C678	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C679	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C680	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C681	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C683	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C685	1-126-960-11	ELECT	1µF	20%	50V
C686	1-126-965-11	ELECT	22µF	20%	50V
C687	1-126-960-11	ELECT	1µF	20%	50V
C688	1-126-960-11	ELECT	1µF	20%	50V
C689	1-126-965-11	ELECT	22µF	20%	50V
C690	1-126-960-11	ELECT	1µF	20%	50V
C691	1-126-964-11	ELECT	10µF	20%	50V
C692	1-126-964-11	ELECT	10µF	20%	50V
C693	1-126-965-11	ELECT	22µF	20%	50V
C694	1-126-965-11	ELECT	22µF	20%	50V
C696	1-126-965-11	ELECT	22µF	20%	50V
C697	1-126-965-11	ELECT	22µF	20%	50V
C698	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C699	1-126-965-11	ELECT	22µF	20%	50V
C700	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C701	1-126-965-11	ELECT	22µF	20%	50V
C702	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C703	1-164-182-11	CERAMIC CHIP	0.0033µF	10%	50V
C704	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C705	1-164-182-11	CERAMIC CHIP	0.0033µF	10%	50V
C706	1-126-965-11	ELECT	22µF	20%	50V
C707	1-126-960-11	ELECT	1µF	20%	50V
C708	1-126-960-11	ELECT	1µF	20%	50V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C709	1-126-965-11	ELECT	22µF	20%	50V
C710	1-126-960-11	ELECT	1µF	20%	50V
C711	1-126-960-11	ELECT	1µF	20%	50V
C712	1-126-965-11	ELECT	22µF	20%	50V
C713	1-126-960-11	ELECT	1µF	20%	50V
C714	1-126-960-11	ELECT	1µF	20%	50V
C716	1-126-960-11	ELECT	1µF	20%	50V
C717	1-126-960-11	ELECT	1µF	20%	50V
C718	1-126-935-11	ELECT	470µF	20%	16V
C771	1-126-965-11	ELECT	22µF	20%	50V
C772	1-126-965-11	ELECT	22µF	20%	50V
C773	1-126-960-11	ELECT	1µF	20%	50V
C774	1-126-960-11	ELECT	1µF	20%	50V
C775	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C776	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C777	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1001	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1002	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1003	1-104-664-11	ELECT	47µF	20%	25V
C1005	1-104-664-11	ELECT	47µF	20%	25V
C1006	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1007	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1012	1-163-235-11	CERAMIC CHIP	22pF	5%	50V
C1013	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1014	1-163-235-11	CERAMIC CHIP	22pF	5%	50V
C1015	1-163-235-11	CERAMIC CHIP	22pF	5%	50V
C1016	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1017	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1019	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C1020	1-164-346-11	CERAMIC CHIP	1µF		16V
C1021	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1022	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1023	1-126-935-11	ELECT	470µF	20%	6.3V
C1025	1-126-965-11	ELECT	22µF	20%	50V
C1026	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C1027	1-110-501-11	CERAMIC CHIP	0.33µF	10%	16V
C1029	1-164-346-11	CERAMIC CHIP	1µF		16V
C1030	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C1031	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1032	1-104-664-11	ELECT	47µF	20%	25V
C1033	1-126-964-11	ELECT	10µF	20%	50V
C1034	1-164-346-11	CERAMIC CHIP	1µF		16V
C1035	1-163-237-11	CERAMIC CHIP	27pF	5%	50V
C1036	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C1037	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1038	1-104-664-11	ELECT	47µF	20%	25V
C1039	1-164-346-11	CERAMIC CHIP	1µF		16V
C1040	1-163-237-11	CERAMIC CHIP	27pF	5%	50V
C1041	1-163-233-11	CERAMIC CHIP	18pF	5%	50V
C1042	1-163-233-11	CERAMIC CHIP	18pF	5%	50V
C1043	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C1044	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C1045	1-163-143-00	CERAMIC CHIP	0.0012µF	5%	50V
C1046	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1048	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1049	1-104-664-11	ELECT	47µF	20%	25V
C1050	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1051	1-104-664-11	ELECT	47µF	20%	25V
C1052	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C1058	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1301	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1302	1-104-664-11	ELECT	47µF	20%	25V
C1303	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1305	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1306	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1307	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C1308	1-117-720-11	CERAMIC CHIP	4.7µF		10V
C1309	1-163-227-11	CERAMIC CHIP	10pF	0.50pF	50V
C1310	1-163-227-11	CERAMIC CHIP	10pF	0.50pF	50V
C1311	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C1312	1-163-227-11	CERAMIC CHIP	10pF	0.50pF	50V
C1313	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1315	1-163-137-00	CERAMIC CHIP	680pF	5%	50V
C1316	1-117-720-11	CERAMIC CHIP	4.7µF		10V
C1317	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1321	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C1323	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C1325	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C1326	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1327	1-126-963-11	ELECT	4.7µF	20%	50V
C1328	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1329	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1330	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1331	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C1332	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C1334	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1335	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1336	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1337	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1338	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1339	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1340	1-126-960-11	ELECT	1µF	20%	50V
C1341	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C1342	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1343	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C1344	1-104-664-11	ELECT	47µF	20%	25V
C1345	1-104-664-11	ELECT	47µF	20%	25V
C1346	1-104-664-11	ELECT	47µF	20%	25V
C1347	1-104-664-11	ELECT	47µF	20%	25V
C1348	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1349	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
C1351	1-126-934-11	ELECT	220µF	20%	16V
C1352	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1353	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1354	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1355	1-104-664-11	ELECT	47µF	20%	25V
C1357	1-126-934-11	ELECT	220µF	20%	16V
C1358	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1359	1-104-664-11	ELECT	47µF	20%	25V
C1363	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1364	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1376	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1380	1-109-982-11	CERAMIC CHIP	1µF	10%	10V

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C1381	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C1383	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1385	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C1389	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C1392	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1400	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C1401	1-126-963-11	ELECT	4.7µF	20%	50V
C1406	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1410	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C1411	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1412	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C1413	1-126-960-11	ELECT	1µF	20%	50V
C1414	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C1415	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1417	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1418	1-104-664-11	ELECT	47µF	20%	25V
C1419	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1420	1-104-664-11	ELECT	47µF	20%	25V
C1421	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1422	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
C1423	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1426	1-117-720-11	CERAMIC CHIP	4.7µF		10V
C1427	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1428	1-126-934-11	ELECT	220µF	20%	16V
C1431	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1432	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1455	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1456	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1457	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1462	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25
C1463	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1464	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1465	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1466	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1467	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1470	1-104-664-11	ELECT	47µF	20%	25V
C1471	1-104-664-11	ELECT	47µF	20%	25V
C1472	1-104-664-11	ELECT	47µF	20%	25V
C1481	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C1482	1-104-664-11	ELECT	47µF	20%	25V
C1483	1-104-664-11	ELECT	47µF	20%	25V
C1484	1-126-934-11	ELECT	220µF	20%	16V
C1485	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1601	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1602	1-163-016-00	CERAMIC CHIP	0.0039µF	10%	50V
C1603	1-163-016-00	CERAMIC CHIP	0.0039µF	10%	50V
C1604	1-163-016-00	CERAMIC CHIP	0.0039µF	10%	50V
C1605	1-163-016-00	CERAMIC CHIP	0.0039µF	10%	50V
C1614	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1626	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1628	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C1629	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C1631	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1633	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C1634	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C1640	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1641	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1642	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1643	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1644	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C1646	1-104-664-11	ELECT	47µF	20%	25V
C1647	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C1648	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C1649	1-115-185-11	CERAMIC CHIP	0.033µF	10%	50V
C1650	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C1651	1-109-982-11	CERAMIC CHIP	1µF	10%	10V

<FILTER BLOCK>

CM501	1-467-554-21	FILTER BLOCK, COMB

<CONNECTOR>

CN502 *	1-564-506-11	PLUG, CONNECTOR 3P
CN503 *	1-564-511-11	PLUG, CONNECTOR 8P
CN504 *	1-564-512-11	PLUG, CONNECTOR 9P
CN505 *	1-564-510-11	PLUG, CONNECTOR 7P
CN506 *	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P
CN507	1-695-915-11	TAB (CONTACT)
CN508 *	1-564-507-11	PLUG, CONNECTOR 4P
CN509 *	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P
CN510 *	1-564-510-11	PLUG, CONNECTOR 7P
CN511	1-573-298-21	CONNECTOR, BOARD TO BOARD 20P
CN512 *	1-564-513-11	PLUG, CONNECTOR 10P
CN513	1-573-298-21	CONNECTOR, BOARD TO BOARD 20P
CN514 *	1-564-509-11	PLUG, CONNECTOR 6P
CN515	1-764-334-11	PLUG, CONNECTOR 11P
CN516	1-573-978-21	CONNECTOR, BOARD TO BOARD 11P
CN517 *	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P
CN518	1-573-298-21	CONNECTOR, BOARD TO BOARD 20P
CN519 *	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P
CN520 *	1-691-616-21	CONNECTOR, BOARD TO BOARD 15P
CN521	1-573-979-21	CONNECTOR, BOARD TO BOARD 11P
CN522	1-573-298-21	CONNECTOR, BOARD TO BOARD 20P
CN523	1-573-298-21	CONNECTOR, BOARD TO BOARD 20P
CN525 *	1-564-511-11	PLUG, CONNECTOR 8P
CN526 *	1-564-510-11	PLUG, CONNECTOR 7P

<DIODE>

D501	8-719-073-01	DIODE MA111-TX
D502	8-719-158-15	DIODE UDZ-TE-17-5.6B
D503	8-719-073-01	DIODE MA111-TX
D504	8-719-073-01	DIODE MA111-TX
D505	8-719-073-01	DIODE MA111-TX
D506	8-719-056-84	DIODE UDZ-TE-17-7.5B
D508	8-719-073-01	DIODE MA111-TX
D509	8-719-056-84	DIODE UDZ-TE-17-7.5B
D511	8-719-073-01	DIODE MA111-TX
D512	8-719-073-01	DIODE MA111-TX
D513	8-719-073-01	DIODE MA111-TX
D514	8-719-073-01	DIODE MA111-TX
D515	8-719-158-15	DIODE UDZ-TE-17-5.6B
D516	8-719-158-15	DIODE UDZ-TE-17-5.6B

REF. NO.	PART NO.	DESCRIPTION	REMARK
D517	8-719-158-15	DIODE UDZ-TE-17-5.6B	
D518	8-719-073-01	DIODE MA111-TX	
D519	8-719-977-28	DIODE UDZ-TE-17-10B	
D520	8-719-977-28	DIODE UDZ-TE-17-10B	
D521	8-719-073-01	DIODE MA111-TX	
D522	8-719-977-28	DIODE UDZ-TE-17-10B	
D523	8-719-073-01	DIODE MA111-TX	
D524	8-719-977-28	DIODE UDZ-TE-17-10B	
D525	8-719-977-28	DIODE UDZ-TE-17-10B	
D526	8-719-977-28	DIODE UDZ-TE-17-10B	
D527	8-719-977-28	DIODE UDZ-TE-17-10B	
D528	8-719-977-28	DIODE UDZ-TE-17-10B	
D529	8-719-977-28	DIODE UDZ-TE-17-10B	
D530	8-719-073-01	DIODE MA111-TX	
D531	8-719-073-01	DIODE MA111-TX	
D532	8-719-977-28	DIODE UDZ-TE-17-10B	
D533	8-719-977-28	DIODE UDZ-TE-17-10B	
D534	8-719-977-28	DIODE UDZ-TE-17-10B	
D535	8-719-977-28	DIODE UDZ-TE-17-10B	
D536	8-719-073-01	DIODE MA111-TX	
D537	8-719-977-28	DIODE UDZ-TE-17-10B	
D538	8-719-977-28	DIODE UDZ-TE-17-10B	
D539	8-719-977-28	DIODE UDZ-TE-17-10B	
D540	8-719-977-28	DIODE UDZ-TE-17-10B	
D541	8-719-977-28	DIODE UDZ-TE-17-10B	
D542	8-719-977-28	DIODE UDZ-TE-17-10B	
D543	8-719-977-28	DIODE UDZ-TE-17-10B	
D544	8-719-977-28	DIODE UDZ-TE-17-10B	
D545	8-719-977-28	DIODE UDZ-TE-17-10B	
D546	8-719-977-28	DIODE UDZ-TE-17-10B	
D547	8-719-977-28	DIODE UDZ-TE-17-10B	
D548	8-719-073-01	DIODE MA111-TX	
D549	8-719-158-15	DIODE UDZ-TE-17-5.6B	
D550	8-719-977-28	DIODE UDZ-TE-17-10B	
D551	8-719-977-28	DIODE UDZ-TE-17-10B	
D552	8-719-977-28	DIODE UDZ-TE-17-10B	
D555	8-719-977-28	DIODE UDZ-TE-17-10B	
D556	8-719-977-28	DIODE UDZ-TE-17-10B	
D557	8-719-977-28	DIODE UDZ-TE-17-10B	
D558	8-719-977-81	DIODE UDZ-TE-17-33B	
D559	8-719-977-28	DIODE UDZ-TE-17-10B	
D560	8-719-977-28	DIODE UDZ-TE-17-10B	
D1001	8-719-073-01	DIODE MA111-TX	
D1002	8-719-073-01	DIODE MA111-TX	
D1003	8-719-073-01	DIODE MA111-TX	
D1005	8-719-073-01	DIODE MA111-TX	
D1006	8-719-073-01	DIODE MA111-TX	
D1007	8-719-073-01	DIODE MA111-TX	
D1008	8-719-073-01	DIODE MA111-TX	
D1009	8-719-073-01	DIODE MA111-TX	
D1011	8-719-158-15	DIODE UDZ-TE-17-5.6B	
D1601	8-719-976-99	DIODE UDZ-TE-17-5.1B	
D1602	8-719-976-99	DIODE UDZ-TE-17-5.1B	
D1615	8-719-976-99	DIODE UDZ-TE-17-5.1B	
D1616	8-719-976-99	DIODE UDZ-TE-17-5.1B	
D1626	8-719-073-01	DIODE MA111-TX	
D1628	8-719-073-01	DIODE MA111-TX	
D1630	8-719-073-01	DIODE MA111-TX	
D1632	8-719-073-01	DIODE MA111-TX	
D1634	8-719-073-01	DIODE MA111-TX	

<IC>

IC501	8-759-701-79	IC NJM7812FA	
IC503	8-759-390-57	IC LM2940CT-5.0	
IC504	8-759-513-71	IC PQ05RF21	
IC505	8-759-198-03	IC PQ09RF21	
IC506	8-759-520-49	IC PQ30RV21	
IC507	8-759-083-85	IC LA7856	
IC508	8-759-032-23	IC TC74HC74AF(EL)	
IC509	8-759-011-64	IC TC74HC4052AF(EL)	
IC510	8-759-988-13	IC LM393PS-E20	
IC511	8-752-086-33	IC CXA2101AQ-TL	
IC512	8-752-378-35	IC CXD2018Q-T6	
IC513	8-759-485-79	IC TC7SET08FU(TE85L)	
IC514	8-759-998-98	IC LM358DR	
IC515	8-752-082-87	IC CXA1845Q-TL	
IC516	8-759-082-58	IC TC7W08FU(TE12R)	
IC517	8-759-239-34	IC TC74HC4538AF(EL)	
IC518	8-759-998-98	IC LM358DR	
IC519	8-759-239-34	IC TC74HC4538AF(EL)	
IC1001	8-759-575-89	IC LH5317VP	
IC1002	8-759-927-46	IC SN74HC00ANSR	
IC1003	8-759-925-75	IC SN74HC05ANSR	
IC1004	8-759-575-90	IC MB90091A-150	
IC1005	8-759-352-91	IC PST9143NL	
IC1007	8-759-675-64	IC M24C08-MN6T	
IC1008	8-752-917-29	IC CXP85856A-042Q	
IC1009	8-752-917-15	IC CXP85460-232Q	
IC1010	8-759-352-91	IC PST9143NL	
IC1301	8-752-086-80	IC CXA2019AQ-T4	
IC1302	8-752-082-49	IC CXA2119M-T6	
IC1303	8-759-353-02	IC NJM2533M(TE2)	
IC1305	8-752-086-80	IC CXA2019AQ-T4	
IC1307	8-752-082-49	IC CXA2119M-T6	
IC1402	8-759-485-79	IC TC7SET08FU(TE85L)	
IC1403	8-759-009-07	IC MC14053BFEL	
IC1404	8-759-485-79	IC TC7SET08FU(TE85R)	
IC1604	8-759-394-80	IC NJM2058M-TE2	
IC1606	8-759-394-80	IC NJM2058M-TE2	
IC1608	8-759-232-74	IC TC74HC163AF(EL)	
IC1609	8-759-232-74	IC TC74HC163AF(EL)	
IC1623	8-759-082-57	IC TC7W04FU-TE12L	
IC1624	8-759-082-58	IC TC7W08FU(TE12R)	

<JACK>

J502	1-774-749-11	JACK BLOCK, PIN (SELECT OUT)	
J505	1-774-751-11	TERMINAL BLOCK, S (VIDEO 1 IN)	
J506	1-774-751-11	TERMINAL BLOCK, S (VIDEO 3 IN)	
J507	1-774-751-11	TERMINAL BLOCK, S (VIDEO 4 IN)	
J508	1-774-750-11	JACK BLOCK, PIN (VIDEO 5(DTV) IN L/R)	

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REF. NO.	PART NO.	DESCRIPTION		REMARK
		<COIL>		
L501	1-414-856-11	INDUCTOR	10µH	
L502	1-414-856-11	INDUCTOR	10µH	
L503	1-414-856-11	INDUCTOR	10µH	
L504	1-414-856-11	INDUCTOR	10µH	
L505	1-414-856-11	INDUCTOR	10µH	
L506	1-414-856-11	INDUCTOR	10µH	
L507	1-414-856-11	INDUCTOR	10µH	
L508	1-414-856-11	INDUCTOR	10µH	
L509	1-414-856-11	INDUCTOR	10µH	
L510	1-414-856-11	INDUCTOR	10µH	
L511	1-414-856-11	INDUCTOR	10µH	
L512	1-414-856-11	INDUCTOR	10µH	
L513	1-414-234-22	INDUCTOR CHIP	0µH	
L514	1-414-856-11	INDUCTOR	10µH	
L515	1-414-856-11	INDUCTOR	10µH	
L517	1-414-234-22	INDUCTOR CHIP	0µH	
L518	1-414-234-22	INDUCTOR CHIP	0µH	
L519	1-414-234-22	INDUCTOR CHIP	0µH	
L520	1-414-234-22	INDUCTOR CHIP	0µH	
L523	1-414-856-11	INDUCTOR	10µH	
L1001	1-414-234-22	INDUCTOR CHIP	0µH	
L1002	1-414-234-22	INDUCTOR CHIP	0µH	
L1004	1-469-555-21	INDUCTOR	10µH	
L1005	1-469-555-21	INDUCTOR	10µH	
L1006	1-469-555-21	INDUCTOR	10µH	
L1008	1-469-555-21	INDUCTOR	10µH	
L1009	1-414-234-22	INDUCTOR CHIP	0µH	
L1301	1-414-234-22	INDUCTOR CHIP	0µH	
L1302	1-414-234-22	INDUCTOR CHIP	0µH	
L1304	1-414-234-22	INDUCTOR CHIP	0µH	
L1306	1-469-555-21	INDUCTOR	10µH	
L1307	1-469-555-21	INDUCTOR	10µH	
L1308	1-469-555-21	INDUCTOR	10µH	
L1314	1-414-234-22	INDUCTOR CHIP	0µH	
L1319	1-469-555-21	INDUCTOR	10µH	
L1320	1-469-555-21	INDUCTOR	10µH	
L1329	1-469-555-21	INDUCTOR	10µH	
L1401	1-414-234-22	INDUCTOR CHIP	0µH	
L1402	1-414-234-22	INDUCTOR CHIP	0µH	
L1403	1-414-234-22	INDUCTOR CHIP	0µH	
L1404	1-469-555-21	INDUCTOR	10µH	
L1405	1-414-234-22	INDUCTOR CHIP	0µH	
		<TRANSISTOR>		
Q501	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q502	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q503	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q504	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q505	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q506	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q507	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q508	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q509	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q510	8-729-122-63	TRANSISTOR	2SA1226-T1E3E4	
Q511	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q512	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q513	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q514	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q515	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q516	8-729-122-63	TRANSISTOR	2SA1226-T1E3E4	
Q517	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q518	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q519	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q520	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q521	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q522	8-729-027-38	TRANSISTOR	DTA144EKA-T146	
Q523	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q524	8-729-122-63	TRANSISTOR	2SA1226-T1E3E4	
Q525	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q526	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q527	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q528	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q530	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q531	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q532	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q533	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q535	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q536	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q537	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q538	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q539	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q540	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q541	8-729-027-38	TRANSISTOR	DTA144EKA-T146	
Q542	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q543	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q544	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q545	1-801-806-11	TRANSISTOR	DTC144EKA-T146	
Q546	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q547	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q548	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q549	8-729-027-38	TRANSISTOR	DTA144EKA-T146	
Q550	1-801-806-11	TRANSISTOR	DTC144EKA-T146	
Q551	1-801-806-11	TRANSISTOR	DTC144EKA-T146	
Q552	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q554	8-729-027-38	TRANSISTOR	DTA144EKA-T146	
Q560	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q561	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q562	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q563	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q564	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX	
Q801	8-729-027-38	TRANSISTOR	DTA144EKA-T146	
Q802	1-801-806-11	TRANSISTOR	DTC144EKA-T146	
Q1001	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q1002	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q1003	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q1004	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q1005	1-801-806-11	TRANSISTOR	DTC144EKA-T146	
Q1006	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q1008	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q1010	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	
Q1011	8-729-422-27	TRANSISTOR	2SD601A-QRS-TX	

REF. NO.	PART NO.	DESCRIPTION	REMARK
Q1012	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1015	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1018	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1020	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1022	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1301	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1302	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1303	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1304	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1305	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1306	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1307	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1308	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1309	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1311	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1312	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1313	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1315	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1317	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1318	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1319	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1320	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1321	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1322	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1323	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1324	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1325	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1326	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1327	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1328	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1329	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1330	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1331	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1332	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1333	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1335	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1336	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1338	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1343	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1366	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1367	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1402	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1403	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1405	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1407	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1408	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1413	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1414	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1415	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1416	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1417	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1418	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1419	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1420	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1421	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1422	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1605	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1606	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1607	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1608	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1613	8-729-048-50	TRANSISTOR 2SK3018-T106	
Q1614	8-729-048-50	TRANSISTOR 2SK3018-T106	
Q1615	8-729-048-50	TRANSISTOR 2SK3018-T106	
Q1616	8-729-048-50	TRANSISTOR 2SK3018-T106	
Q1617	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1621	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q1628	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1629	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1630	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1631	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	

<RESISTOR>

R501	1-216-073-00	RES-CHIP	10K	5%	1/10W
R502	1-216-073-00	RES-CHIP	10K	5%	1/10W
R503	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R504	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R505	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R506	1-216-025-11	RES-CHIP	100	5%	1/10W
R507	1-216-295-11	SHORT	0		
R508	1-249-393-11	CARBON	10	5%	1/4W
R509	1-249-381-11	CARBON	1	5%	1/4W
R510	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R511	1-216-295-11	SHORT	0		
R512	1-216-295-11	SHORT	0		
R513	1-216-295-11	SHORT	0		
R514	1-216-031-00	RES-CHIP	180	5%	1/10W
R515	1-249-381-11	CARBON	1	5%	1/4W
R516	1-216-025-11	RES-CHIP	100	5%	1/10W
R517	1-216-101-00	RES-CHIP	150K	5%	1/10W
R518	1-216-295-11	SHORT	0		
R519	1-216-025-11	RES-CHIP	100	5%	1/10W
R520	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R521	1-216-049-11	RES-CHIP	1K	5%	1/10W
R522	1-216-295-11	SHORT	0		
R523	1-216-031-00	RES-CHIP	180	5%	1/10W
R524	1-216-081-00	RES-CHIP	22K	5%	1/10W
R525	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R526	1-216-031-00	RES-CHIP	180	5%	1/10W
R527	1-216-085-00	RES-CHIP	33K	5%	1/10W
R528	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R529	1-216-105-91	RES-CHIP	220K	5%	1/10W
R530	1-208-780-11	METAL CHIP	820	0.5%	1/10W
R531	1-208-774-11	METAL CHIP	470	0.5%	1/10W
R532	1-216-049-11	RES-CHIP	1K	5%	1/10W
R533	1-216-368-11	METAL OXIDE	0.82	5%	2W
R534	1-208-810-11	METAL CHIP	15K	0.5%	1/10W
R535	1-216-373-11	METAL OXIDE	2.2	5%	2W
R536	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R537	1-208-818-11	METAL CHIP	33K	0.5%	1/10W
R538	1-216-083-00	RES-CHIP	27K	5%	1/10W
R539	1-216-689-11	RES-CHIP	39K	5%	1/10W
R540	1-208-808-11	METAL CHIP	12K	0.5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R541	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R542	1-216-043-91	RES-CHIP	560	5%	1/10W
R543	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R544	1-216-045-00	RES-CHIP	680	5%	1/10W
R545	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R546	1-208-826-11	METAL CHIP	68K	0.5%	1/10W
R547	1-216-073-00	RES-CHIP	10K	5%	1/10W
R548	1-208-788-11	METAL CHIP	1.8K	0.5%	1/10W
R549	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R550	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R551	1-216-097-91	RES-CHIP	100K	5%	1/10W
R552	1-216-081-00	RES-CHIP	22K	5%	1/10W
R553	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R554	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R555	1-216-043-91	RES-CHIP	560	5%	1/10W
R556	1-216-121-91	RES-CHIP	1M	5%	1/10W
R557	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R558	1-216-073-00	RES-CHIP	10K	5%	1/10W
R559	1-216-073-00	RES-CHIP	10K	5%	1/10W
R560	1-208-778-11	METAL CHIP	680	0.5%	1/10W
R561	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R562	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R563	1-216-097-91	RES-CHIP	100K	5%	1/10W
R564	1-216-097-91	RES-CHIP	100K	5%	1/10W
R565	1-216-097-91	RES-CHIP	100K	5%	1/10W
R566	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R567	1-216-049-11	RES-CHIP	1K	5%	1/10W
R569	1-216-073-00	RES-CHIP	10K	5%	1/10W
R570	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R571	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R572	1-216-097-91	RES-CHIP	100K	5%	1/10W
R573	1-216-049-11	RES-CHIP	1K	5%	1/10W
R574	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R575	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R576	1-216-097-91	RES-CHIP	100K	5%	1/10W
R577	1-216-075-00	RES-CHIP	12K	5%	1/10W
R578	1-216-073-00	RES-CHIP	10K	5%	1/10W
R580	1-208-814-91	METAL CHIP	22K	0.5%	1/10W
R581	1-216-073-00	RES-CHIP	10K	5%	1/10W
R582	1-216-049-11	RES-CHIP	1K	5%	1/10W
R583	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R584	1-216-097-91	RES-CHIP	100K	5%	1/10W
R585	1-216-097-91	RES-CHIP	100K	5%	1/10W
R586	1-216-049-11	RES-CHIP	1K	5%	1/10W
R587	1-216-295-11	SHORT	0		
R588	1-216-017-91	RES-CHIP	47	5%	1/10W
R589	1-216-049-11	RES-CHIP	1K	5%	1/10W
R590	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R591	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R592	1-216-025-11	RES-CHIP	100	5%	1/10W
R593	1-216-049-11	RES-CHIP	1K	5%	1/10W
R594	1-216-121-91	RES-CHIP	1M	5%	1/10W
R595	1-216-033-00	RES-CHIP	220	5%	1/10W
R596	1-216-049-11	RES-CHIP	1K	5%	1/10W
R597	1-216-025-11	RES-CHIP	100	5%	1/10W
R598	1-216-033-00	RES-CHIP	220	5%	1/10W
R599	1-216-105-91	RES-CHIP	220K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R600	1-216-295-11	SHORT	0		
R601	1-216-081-00	RES-CHIP	22K	5%	1/10W
R602	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R603	1-216-073-00	RES-CHIP	10K	5%	1/10W
R604	1-216-073-00	RES-CHIP	10K	5%	1/10W
R605	1-216-049-11	RES-CHIP	1K	5%	1/10W
R606	1-216-373-11	METAL OXIDE	2.2	5%	2W
R607	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R608	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R609	1-216-033-00	RES-CHIP	220	5%	1/10W
R610	1-216-025-11	RES-CHIP	100	5%	1/10W
R611	1-216-107-00	RES-CHIP	270K	5%	1/10W
R612	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R613	1-216-073-00	RES-CHIP	10K	5%	1/10W
R614	1-216-073-00	RES-CHIP	10K	5%	1/10W
R615	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R616	1-216-295-11	SHORT	0		
R617	1-216-017-91	RES-CHIP	47	5%	1/10W
R618	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R619	1-216-033-00	RES-CHIP	220	5%	1/10W
R620	1-216-049-11	RES-CHIP	1K	5%	1/10W
R621	1-216-025-11	RES-CHIP	100	5%	1/10W
R622	1-216-049-11	RES-CHIP	1K	5%	1/10W
R623	1-216-025-11	RES-CHIP	100	5%	1/10W
R624	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R625	1-216-025-11	RES-CHIP	100	5%	1/10W
R626	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R628	1-208-788-11	METAL CHIP	1.8K	0.5%	1/10W
R629	1-208-814-91	METAL CHIP	22K	0.5%	1/10W
R630	1-216-097-91	RES-CHIP	100K	5%	1/10W
R631	1-216-025-11	RES-CHIP	100	5%	1/10W
R632	1-216-025-11	RES-CHIP	100	5%	1/10W
R633	1-216-025-11	RES-CHIP	100	5%	1/10W
R634	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R635	1-216-295-11	SHORT	0		
R636	1-216-133-00	RES-CHIP	3.3M	5%	1/10W
R637	1-216-025-11	RES-CHIP	100	5%	1/10W
R638	1-216-025-11	RES-CHIP	100	5%	1/10W
R639	1-216-025-11	RES-CHIP	100	5%	1/10W
R640	1-216-025-11	RES-CHIP	100	5%	1/10W
R642	1-216-025-11	RES-CHIP	100	5%	1/10W
R643	1-216-025-11	RES-CHIP	100	5%	1/10W
R644	1-216-025-11	RES-CHIP	100	5%	1/10W
R645	1-216-025-11	RES-CHIP	100	5%	1/10W
R646	1-216-025-11	RES-CHIP	100	5%	1/10W
R647	1-216-025-11	RES-CHIP	100	5%	1/10W
R648	1-216-017-91	RES-CHIP	47	5%	1/10W
R649	1-216-025-11	RES-CHIP	100	5%	1/10W
R650	1-216-025-11	RES-CHIP	100	5%	1/10W
R651	1-216-073-00	RES-CHIP	10K	5%	1/10W
R652	1-216-025-11	RES-CHIP	100	5%	1/10W
R653	1-216-025-11	RES-CHIP	100	5%	1/10W
R654	1-216-025-11	RES-CHIP	100	5%	1/10W
R655	1-216-025-11	RES-CHIP	100	5%	1/10W
R656	1-216-025-11	RES-CHIP	100	5%	1/10W
R657	1-216-083-00	RES-CHIP	27K	5%	1/10W
R658	1-216-689-11	RES-CHIP	39K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R659	1-216-025-11	RES-CHIP	100	5%	1/10W
R660	1-216-025-11	RES-CHIP	100	5%	1/10W
R661	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R662	1-216-025-11	RES-CHIP	100	5%	1/10W
R663	1-216-025-11	RES-CHIP	100	5%	1/10W
R664	1-208-776-11	METAL CHIP	560	0.5%	1/10W
R665	1-216-025-11	RES-CHIP	100	5%	1/10W
R666	1-216-049-11	RES-CHIP	1K	5%	1/10W
R667	1-216-109-00	RES-CHIP	330K	5%	1/10W
R668	1-216-025-11	RES-CHIP	100	5%	1/10W
R669	1-208-814-91	METAL CHIP	22K	0.5%	1/10W
R670	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R671	1-216-025-11	RES-CHIP	100	5%	1/10W
R672	1-216-049-11	RES-CHIP	1K	5%	1/10W
R673	1-216-025-11	RES-CHIP	100	5%	1/10W
R674	1-216-025-11	RES-CHIP	100	5%	1/10W
R675	1-216-083-00	RES-CHIP	27K	5%	1/10W
R676	1-216-025-11	RES-CHIP	100	5%	1/10W
R677	1-216-025-11	RES-CHIP	100	5%	1/10W
R678	1-216-025-11	RES-CHIP	100	5%	1/10W
R679	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R680	1-216-025-11	RES-CHIP	100	5%	1/10W
R681	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R682	1-208-778-11	METAL CHIP	680	0.5%	1/10W
R683	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R685	1-216-025-11	RES-CHIP	100	5%	1/10W
R686	1-216-077-91	RES-CHIP	15K	5%	1/10W
R687	1-216-295-11	SHORT	0		
R688	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R689	1-216-025-11	RES-CHIP	100	5%	1/10W
R690	1-216-025-11	RES-CHIP	100	5%	1/10W
R691	1-216-295-11	SHORT	0		
R692	1-208-808-11	METAL CHIP	12K	0.5%	1/10W
R693	1-216-025-11	RES-CHIP	100	5%	1/10W
R694	1-216-033-00	RES-CHIP	220	5%	1/10W
R695	1-216-025-11	RES-CHIP	100	5%	1/10W
R696	1-208-822-11	METAL CHIP	47K	0.5%	1/10W
R697	1-216-025-11	RES-CHIP	100	5%	1/10W
R698	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R699	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R700	1-216-043-91	RES-CHIP	560	5%	1/10W
R701	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R702	1-216-295-11	SHORT	0		
R703	1-216-049-11	RES-CHIP	1K	5%	1/10W
R705	1-216-025-11	RES-CHIP	100	5%	1/10W
R707	1-208-814-91	METAL CHIP	22K	0.5%	1/10W
R708	1-216-025-11	RES-CHIP	100	5%	1/10W
R709	1-216-091-00	RES-CHIP	56K	5%	1/10W
R710	1-216-025-11	RES-CHIP	100	5%	1/10W
R713	1-216-025-11	RES-CHIP	100	5%	1/10W
R714	1-216-295-11	SHORT	0		
R717	1-216-051-00	RES-CHIP	1.2K	5%	1/10W
R719	1-216-295-11	SHORT	0		
R720	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R721	1-216-025-11	RES-CHIP	100	5%	1/10W
R722	1-216-025-11	RES-CHIP	100	5%	1/10W
R723	1-216-295-11	SHORT	0		
R725	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R726	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R727	1-216-051-00	RES-CHIP	1.2K	5%	1/10W
R728	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R729	1-216-295-11	SHORT	0		
R730	1-216-049-11	RES-CHIP	1K	5%	1/10W
R734	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R735	1-216-025-11	RES-CHIP	100	5%	1/10W
R736	1-216-025-11	RES-CHIP	100	5%	1/10W
R739	1-216-073-00	RES-CHIP	10K	5%	1/10W
R740	1-216-017-91	RES-CHIP	47	5%	1/10W
R741	1-216-093-91	RES-CHIP	68K	5%	1/10W
R743	1-216-025-11	RES-CHIP	100	5%	1/10W
R744	1-216-025-11	RES-CHIP	100	5%	1/10W
R745	1-216-025-11	RES-CHIP	100	5%	1/10W
R746	1-216-025-11	RES-CHIP	100	5%	1/10W
R747	1-216-085-00	RES-CHIP	33K	5%	1/10W
R748	1-216-025-11	RES-CHIP	100	5%	1/10W
R749	1-216-025-11	RES-CHIP	100	5%	1/10W
R751	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R753	1-216-025-11	RES-CHIP	100	5%	1/10W
R754	1-216-025-11	RES-CHIP	100	5%	1/10W
R755	1-216-295-11	SHORT	0		
R756	1-216-045-00	RES-CHIP	680	5%	1/10W
R757	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R759	1-216-295-11	SHORT	0		
R760	1-216-295-11	SHORT	0		
R763	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R765	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R766	1-216-019-00	RES-CHIP	56	5%	1/10W
R768	1-216-081-00	RES-CHIP	22K	5%	1/10W
R772	1-216-025-11	RES-CHIP	100	5%	1/10W
R773	1-216-025-11	RES-CHIP	100	5%	1/10W
R774	1-216-025-11	RES-CHIP	100	5%	1/10W
R777	1-216-025-11	RES-CHIP	100	5%	1/10W
R779	1-208-818-11	METAL CHIP	33K	0.5%	1/10W
R780	1-216-025-11	RES-CHIP	100	5%	1/10W
R781	1-208-794-11	METAL CHIP	3.3K	0.5%	1/10W
R783	1-216-025-11	RES-CHIP	100	5%	1/10W
R784	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R787	1-216-025-11	RES-CHIP	100	5%	1/10W
R788	1-216-073-00	RES-CHIP	10K	5%	1/10W
R789	1-216-073-00	RES-CHIP	10K	5%	1/10W
R790	1-216-025-11	RES-CHIP	100	5%	1/10W
R791	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R794	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R795	1-216-025-11	RES-CHIP	100	5%	1/10W
R799	1-216-025-11	RES-CHIP	100	5%	1/10W
R800	1-216-025-11	RES-CHIP	100	5%	1/10W
R801	1-216-081-00	RES-CHIP	22K	5%	1/10W
R802	1-216-041-00	RES-CHIP	470	5%	1/10W
R803	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R804	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R806	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R807	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R808	1-216-067-00	RES-CHIP	5.6K	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R809	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R810	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R812	1-216-025-11	RES-CHIP	100	5%	1/10W
R814	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R815	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R816	1-216-295-11	SHORT	0		
R817	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R818	1-216-049-11	RES-CHIP	1K	5%	1/10W
R819	1-216-025-11	RES-CHIP	100	5%	1/10W
R820	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R821	1-216-025-11	RES-CHIP	100	5%	1/10W
R822	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R823	1-216-025-11	RES-CHIP	100	5%	1/10W
R824	1-216-025-11	RES-CHIP	100	5%	1/10W
R825	1-216-025-11	RES-CHIP	100	5%	1/10W
R826	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R827	1-216-025-11	RES-CHIP	100	5%	1/10W
R828	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R829	1-216-025-11	RES-CHIP	100	5%	1/10W
R830	1-216-025-11	RES-CHIP	100	5%	1/10W
R831	1-216-025-11	RES-CHIP	100	5%	1/10W
R832	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R833	1-216-025-11	RES-CHIP	100	5%	1/10W
R834	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R835	1-216-025-11	RES-CHIP	100	5%	1/10W
R836	1-216-025-11	RES-CHIP	100	5%	1/10W
R840	1-216-081-00	RES-CHIP	22K	5%	1/10W
R841	1-216-081-00	RES-CHIP	22K	5%	1/10W
R843	1-216-081-00	RES-CHIP	22K	5%	1/10W
R852	1-216-113-00	RES-CHIP	470K	5%	1/10W
R853	1-216-041-00	RES-CHIP	470	5%	1/10W
R854	1-216-041-00	RES-CHIP	470	5%	1/10W
R855	1-216-113-00	RES-CHIP	470K	5%	1/10W
R856	1-216-049-11	RES-CHIP	1K	5%	1/10W
R857	1-216-089-91	RES-CHIP	47K	5%	1/10W
R858	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R859	1-216-033-00	RES-CHIP	220	5%	1/10W
R860	1-216-033-00	RES-CHIP	220	5%	1/10W
R861	1-216-033-00	RES-CHIP	220	5%	1/10W
R862	1-216-049-11	RES-CHIP	1K	5%	1/10W
R864	1-216-049-11	RES-CHIP	1K	5%	1/10W
R865	1-216-049-11	RES-CHIP	1K	5%	1/10W
R867	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R868	1-216-033-00	RES-CHIP	220	5%	1/10W
R869	1-216-033-00	RES-CHIP	220	5%	1/10W
R870	1-216-113-00	RES-CHIP	470K	5%	1/10W
R871	1-216-113-00	RES-CHIP	470K	5%	1/10W
R872	1-216-113-00	RES-CHIP	470K	5%	1/10W
R873	1-216-113-00	RES-CHIP	470K	5%	1/10W
R875	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R876	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R877	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R878	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R879	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R880	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R883	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R884	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R885	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R886	1-216-113-00	RES-CHIP	470K	5%	1/10W
R887	1-216-033-00	RES-CHIP	220	5%	1/10W
R891	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R892	1-216-113-00	RES-CHIP	470K	5%	1/10W
R893	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R894	1-216-113-00	RES-CHIP	470K	5%	1/10W
R895	1-208-755-11	METAL CHIP	75	0.5%	1/10W
R896	1-216-113-00	RES-CHIP	470K	5%	1/10W
R898	1-216-113-00	RES-CHIP	470K	5%	1/10W
R899	1-216-033-00	RES-CHIP	220	5%	1/10W
R901	1-216-033-00	RES-CHIP	220	5%	1/10W
R903	1-216-009-91	RES-CHIP	22	5%	1/10W
R904	1-216-009-91	RES-CHIP	22	5%	1/10W
R905	1-216-073-00	RES-CHIP	10K	5%	1/10W
R906	1-216-073-00	RES-CHIP	10K	5%	1/10W
R907	1-216-073-00	RES-CHIP	10K	5%	1/10W
R908	1-216-073-00	RES-CHIP	10K	5%	1/10W
R909	1-216-073-00	RES-CHIP	10K	5%	1/10W
R910	1-216-041-00	RES-CHIP	470	5%	1/10W
R911	1-216-025-11	RES-CHIP	100	5%	1/10W
R912	1-216-025-11	RES-CHIP	100	5%	1/10W
R913	1-216-025-11	RES-CHIP	100	5%	1/10W
R914	1-216-025-11	RES-CHIP	100	5%	1/10W
R1001	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R1002	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R1003	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R1004	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R1005	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R1006	1-216-033-00	RES-CHIP	220	5%	1/10W
R1007	1-208-784-11	METAL CHIP	1.2K	0.5%	1/10W
R1008	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R1009	1-216-033-00	RES-CHIP	220	5%	1/10W
R1010	1-208-784-11	METAL CHIP	1.2K	0.5%	1/10W
R1011	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R1012	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R1013	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R1014	1-216-025-11	RES-CHIP	100	5%	1/10W
R1015	1-216-025-11	RES-CHIP	100	5%	1/10W
R1016	1-216-025-11	RES-CHIP	100	5%	1/10W
R1017	1-216-025-11	RES-CHIP	100	5%	1/10W
R1018	1-216-025-11	RES-CHIP	100	5%	1/10W
R1019	1-216-025-11	RES-CHIP	100	5%	1/10W
R1020	1-216-025-11	RES-CHIP	100	5%	1/10W
R1021	1-216-033-00	RES-CHIP	220	5%	1/10W
R1022	1-208-784-11	METAL CHIP	1.2K	0.5%	1/10W
R1023	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R1024	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1025	1-216-025-11	RES-CHIP	100	5%	1/10W
R1026	1-208-814-91	METAL CHIP	22K	0.5%	1/10W
R1027	1-216-025-11	RES-CHIP	100	5%	1/10W
R1028	1-208-814-91	METAL CHIP	22K	0.5%	1/10W
R1029	1-216-025-11	RES-CHIP	100	5%	1/10W
R1030	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R1031	1-216-025-11	RES-CHIP	100	5%	1/10W
R1032	1-216-097-91	RES-CHIP	100K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1033	1-216-025-11	RES-CHIP	100	5%	1/10W
R1034	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1035	1-216-025-11	RES-CHIP	100	5%	1/10W
R1036	1-216-009-91	RES-CHIP	22	5%	1/10W
R1037	1-208-770-11	METAL CHIP	330	0.5%	1/10W
R1038	1-216-025-11	RES-CHIP	100	5%	1/10W
R1039	1-216-025-11	RES-CHIP	100	5%	1/10W
R1040	1-216-025-11	RES-CHIP	100	5%	1/10W
R1041	1-216-295-11	SHORT	0		
R1042	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1043	1-216-025-11	RES-CHIP	100	5%	1/10W
R1044	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R1045	1-216-033-00	RES-CHIP	220	5%	1/10W
R1046	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1047	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1048	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1049	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1050	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R1051	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1052	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1053	1-216-083-00	RES-CHIP	27K	5%	1/10W
R1062	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1063	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1064	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1065	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1066	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1069	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1071	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1073	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1074	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1077	1-216-033-00	RES-CHIP	220	5%	1/10W
R1078	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1079	1-216-033-00	RES-CHIP	220	5%	1/10W
R1081	1-216-037-00	RES-CHIP	330	5%	1/10W
R1082	1-216-037-00	RES-CHIP	330	5%	1/10W
R1083	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1084	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1086	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1087	1-216-025-11	RES-CHIP	100	5%	1/10W
R1088	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R1089	1-216-025-11	RES-CHIP	100	5%	1/10W
R1090	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R1091	1-216-025-11	RES-CHIP	100	5%	1/10W
R1092	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1094	1-216-033-00	RES-CHIP	220	5%	1/10W
R1095	1-216-033-00	RES-CHIP	220	5%	1/10W
R1096	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R1097	1-216-033-00	RES-CHIP	220	5%	1/10W
R1098	1-216-033-00	RES-CHIP	220	5%	1/10W
R1099	1-216-033-00	RES-CHIP	220	5%	1/10W
R1100	1-216-033-00	RES-CHIP	220	5%	1/10W
R1101	1-216-025-11	RES-CHIP	100	5%	1/10W
R1102	1-216-033-00	RES-CHIP	220	5%	1/10W
R1103	1-216-033-00	RES-CHIP	220	5%	1/10W
R1104	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1105	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1106	1-216-033-00	RES-CHIP	220	5%	1/10W
R1107	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1108	1-216-025-11	RES-CHIP	100	5%	1/10W
R1109	1-216-295-11	SHORT	0		
R1110	1-216-033-00	RES-CHIP	220	5%	1/10W
R1111	1-216-033-00	RES-CHIP	220	5%	1/10W
R1112	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1113	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1114	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1115	1-216-033-00	RES-CHIP	220	5%	1/10W
R1116	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1117	1-216-041-00	RES-CHIP	470	5%	1/10W
R1118	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1119	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1120	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1121	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1122	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1123	1-216-033-00	RES-CHIP	220	5%	1/10W
R1124	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1125	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1126	1-216-025-11	RES-CHIP	100	5%	1/10W
R1130	1-216-033-00	RES-CHIP	220	5%	1/10W
R1131	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1133	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1134	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1135	1-216-033-00	RES-CHIP	220	5%	1/10W
R1136	1-216-033-00	RES-CHIP	220	5%	1/10W
R1137	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1138	1-216-033-00	RES-CHIP	220	5%	1/10W
R1139	1-216-033-00	RES-CHIP	220	5%	1/10W
R1140	1-216-033-00	RES-CHIP	220	5%	1/10W
R1141	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1142	1-216-033-00	RES-CHIP	220	5%	1/10W
R1143	1-216-033-00	RES-CHIP	220	5%	1/10W
R1144	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1145	1-216-033-00	RES-CHIP	220	5%	1/10W
R1146	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1147	1-216-025-11	RES-CHIP	100	5%	1/10W
R1148	1-216-033-00	RES-CHIP	220	5%	1/10W
R1149	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1150	1-216-025-11	RES-CHIP	100	5%	1/10W
R1151	1-216-033-00	RES-CHIP	220	5%	1/10W
R1152	1-216-025-11	RES-CHIP	100	5%	1/10W
R1153	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1154	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1155	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1156	1-216-033-00	RES-CHIP	220	5%	1/10W
R1157	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1158	1-216-033-00	RES-CHIP	220	5%	1/10W
R1159	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1161	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1162	1-216-025-11	RES-CHIP	100	5%	1/10W
R1163	1-216-025-11	RES-CHIP	100	5%	1/10W
R1164	1-216-033-00	RES-CHIP	220	5%	1/10W
R1165	1-216-033-00	RES-CHIP	220	5%	1/10W
R1166	1-216-033-00	RES-CHIP	220	5%	1/10W
R1167	1-216-121-91	RES-CHIP	1M	5%	1/10W
R1171	1-216-049-11	RES-CHIP	1K	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R1172	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1175	1-208-788-11	METAL CHIP	1.8K	0.5%	1/10W
R1178	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R1180	1-208-788-11	METAL CHIP	1.8K	0.5%	1/10W
R1183	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R1185	1-208-788-11	METAL CHIP	1.8K	0.5%	1/10W
R1188	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R1189	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1190	1-216-295-11	SHORT	0		
R1191	1-216-295-11	SHORT	0		
R1192	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1301	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1302	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1303	1-208-788-11	METAL CHIP	1.8K	0.5%	1/10W
R1305	1-208-788-11	METAL CHIP	1.8K	0.5%	1/10W
R1306	1-208-788-11	METAL CHIP	1.8K	0.5%	1/10W
R1307	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R1308	1-216-025-11	RES-CHIP	100	5%	1/10W
R1309	1-216-025-11	RES-CHIP	100	5%	1/10W
R1310	1-216-295-11	SHORT	0		
R1311	1-216-041-00	RES-CHIP	470	5%	1/10W
R1312	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1313	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R1314	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R1315	1-216-025-11	RES-CHIP	100	5%	1/10W
R1316	1-216-025-11	RES-CHIP	100	5%	1/10W
R1317	1-216-025-11	RES-CHIP	100	5%	1/10W
R1318	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R1319	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1320	1-216-025-11	RES-CHIP	100	5%	1/10W
R1321	1-216-025-11	RES-CHIP	100	5%	1/10W
R1322	1-216-025-11	RES-CHIP	100	5%	1/10W
R1323	1-216-037-00	RES-CHIP	330	5%	1/10W
R1324	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1325	1-216-111-00	RES-CHIP	390K	5%	1/10W
R1326	1-216-025-11	RES-CHIP	100	5%	1/10W
R1327	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R1328	1-216-025-11	RES-CHIP	100	5%	1/10W
R1329	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1330	1-216-025-11	RES-CHIP	100	5%	1/10W
R1331	1-216-025-11	RES-CHIP	100	5%	1/10W
R1332	1-216-025-11	RES-CHIP	100	5%	1/10W
R1333	1-216-043-91	RES-CHIP	560	5%	1/10W
R1334	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1335	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1337	1-216-025-11	RES-CHIP	100	5%	1/10W
R1338	1-216-025-11	RES-CHIP	100	5%	1/10W
R1339	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1341	1-216-025-11	RES-CHIP	100	5%	1/10W
R1342	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R1345	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1348	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1349	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R1350	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1352	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1354	1-216-025-11	RES-CHIP	100	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1355	1-216-025-11	RES-CHIP	100	5%	1/10W
R1356	1-216-025-11	RES-CHIP	100	5%	1/10W
R1357	1-216-025-11	RES-CHIP	100	5%	1/10W
R1358	1-208-822-11	METAL CHIP	47K	0.5%	1/10W
R1363	1-216-025-11	RES-CHIP	100	5%	1/10W
R1364	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1365	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1366	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1368	1-208-788-11	METAL CHIP	1.8K	0.5%	1/10W
R1369	1-216-025-11	RES-CHIP	100	5%	1/10W
R1371	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R1372	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1374	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1375	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1377	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R1379	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R1380	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R1381	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R1383	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1389	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1392	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1393	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1394	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1395	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1396	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1397	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1398	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1400	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1401	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1402	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R1404	1-208-822-11	METAL CHIP	47K	0.5%	1/10W
R1405	1-216-037-00	RES-CHIP	330	5%	1/10W
R1407	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R1408	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1419	1-216-025-11	RES-CHIP	100	5%	1/10W
R1420	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1421	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1422	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1423	1-208-770-11	METAL CHIP	330	0.5%	1/10W
R1424	1-208-814-91	METAL CHIP	22K	0.5%	1/10W
R1425	1-216-025-11	RES-CHIP	100	5%	1/10W
R1426	1-216-025-11	RES-CHIP	100	5%	1/10W
R1427	1-216-295-11	SHORT	0		
R1428	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R1429	1-216-025-11	RES-CHIP	100	5%	1/10W
R1430	1-216-025-11	RES-CHIP	100	5%	1/10W
R1431	1-216-025-11	RES-CHIP	100	5%	1/10W
R1432	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R1433	1-216-111-00	RES-CHIP	390K	5%	1/10W
R1434	1-216-295-11	SHORT	0		
R1435	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1436	1-216-295-11	SHORT	0		
R1437	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1438	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1439	1-208-768-11	METAL CHIP	270	0.5%	1/10W
R1440	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R1441	1-216-081-00	RES-CHIP	22K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1442	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1443	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1444	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1445	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1446	1-216-043-91	RES-CHIP	560	5%	1/10W
R1447	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1448	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1449	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R1450	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1451	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1452	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R1453	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1454	1-216-025-11	RES-CHIP	100	5%	1/10W
R1455	1-216-025-11	RES-CHIP	100	5%	1/10W
R1456	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1457	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1458	1-216-025-11	RES-CHIP	100	5%	1/10W
R1461	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1462	1-216-295-11	SHORT	0		
R1463	1-216-025-11	RES-CHIP	100	5%	1/10W
R1464	1-216-025-11	RES-CHIP	100	5%	1/10W
R1465	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1466	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1467	1-216-295-11	SHORT	0		
R1468	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1469	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1470	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R1471	1-216-295-11	SHORT	0		
R1472	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R1473	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R1474	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R1475	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1476	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1477	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1478	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R1479	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1480	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1482	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1483	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1484	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1485	1-216-025-11	RES-CHIP	100	5%	1/10W
R1501	1-216-025-11	RES-CHIP	100	5%	1/10W
R1503	1-216-025-11	RES-CHIP	100	5%	1/10W
R1511	1-216-295-11	SHORT	0		
R1517	1-216-295-11	SHORT	0		
R1518	1-216-295-11	SHORT	0		
R1521	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1527	1-216-025-11	RES-CHIP	100	5%	1/10W
R1528	1-216-025-11	RES-CHIP	100	5%	1/10W
R1529	1-216-025-11	RES-CHIP	100	5%	1/10W
R1530	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1536	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1537	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1538	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1540	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R1543	1-216-295-11	SHORT	0		
R1546	1-216-065-91	RES-CHIP	4.7K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1601	1-216-117-00	RES-CHIP	680K	5%	1/10W
R1602	1-216-113-00	RES-CHIP	470K	5%	1/10W
R1603	1-216-295-11	SHORT	0		
R1605	1-216-117-00	RES-CHIP	680K	5%	1/10W
R1606	1-216-295-11	SHORT	0		
R1607	1-216-117-00	RES-CHIP	680K	5%	1/10W
R1608	1-216-295-11	SHORT	0		
R1613	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1619	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1620	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1623	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1631	1-208-814-91	METAL CHIP	22K	0.5%	1/10W
R1632	1-208-814-91	METAL CHIP	22K	0.5%	1/10W
R1633	1-208-814-91	METAL CHIP	22K	0.5%	1/10W
R1634	1-208-814-91	METAL CHIP	22K	0.5%	1/10W
R1640	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1641	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R1645	1-216-025-11	RES-CHIP	100	5%	1/10W
R1646	1-216-025-11	RES-CHIP	100	5%	1/10W
R1654	1-216-041-00	RES-CHIP	470	5%	1/10W
R1655	1-216-025-11	RES-CHIP	100	5%	1/10W
R1656	1-216-025-11	RES-CHIP	100	5%	1/10W
R1657	1-216-025-11	RES-CHIP	100	5%	1/10W
R1658	1-216-041-00	RES-CHIP	470	5%	1/10W
R1659	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1660	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1661	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1662	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1663	1-216-041-00	RES-CHIP	470	5%	1/10W
R1664	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1665	1-216-113-00	RES-CHIP	470K	5%	1/10W
R1666	1-216-041-00	RES-CHIP	470	5%	1/10W
R1667	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1672	1-216-025-11	RES-CHIP	100	5%	1/10W
R1673	1-216-025-11	RES-CHIP	100	5%	1/10W
R1674	1-216-025-11	RES-CHIP	100	5%	1/10W
R1675	1-216-025-11	RES-CHIP	100	5%	1/10W
R1676	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1677	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1678	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1679	1-216-057-00	RES-CHIP	2.2K	5%	1/10W

<TUNER>

TU501	8-598-475-10	TUNER, FSS BTF-WL411
TU502	8-598-475-10	TUNER, FSS BTF-WL411

<CRYSTAL>

X1001	1-767-924-21	VIBRATOR, CRYSTAL
X1002	1-767-654-21	VIBRATOR, CRYSTAL
X1301	1-577-611-11	OSCILALTOR, CERAMIC
X1302	1-567-505-11	OSCILLATOR, CRYSTAL
X1303	1-577-611-11	OSCILALTOR, CERAMIC
X1305	1-567-505-11	OSCILLATOR, CRYSTAL

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DS D

REF. NO.	PART NO.	DESCRIPTION			REMARK
*	A-1343-712-A	DS BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C8501	1-126-964-11	ELECT	10µF	20%	50V
C8502	1-126-964-11	ELECT	10µF	20%	50V
C8504	1-137-371-11	MYLAR	0.015µF	5%	50V
C8505	1-104-664-11	ELECT	47µF	20%	25V
C8506	1-104-664-11	ELECT	47µF	20%	25V
C8507	1-104-664-11	ELECT	47µF	20%	25V
C8508	1-104-664-11	ELECT	47µF	20%	25V
C8509	1-104-664-11	ELECT	47µF	20%	25V
C8510	1-104-664-11	ELECT	47µF	20%	25V
C8511	1-104-664-11	ELECT	47µF	20%	25V
C8512	1-104-664-11	ELECT	47µF	20%	25V
C8513	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C8514	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C8515	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C8516	1-163-038-11	CERAMIC CHIP	0.1µF		25V
C8517	1-137-374-11	MYLAR	0.047µF	5%	50V
C8518	1-126-964-11	ELECT	10µF	20%	50V
C8519	1-163-237-11	CERAMIC CHIP	27pF	5%	50V
C8520	1-163-237-11	CERAMIC CHIP	27pF	5%	50V
C8521	1-163-224-11	CERAMIC CHIP	7pF	0.25pF	50V
C8522	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C8523	1-126-964-11	ELECT	10µF	20%	50V
C8524	1-104-664-11	ELECT	47µF	20%	25V
C8525	1-104-664-11	ELECT	47µF	20%	25V
C8526	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C8527	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
		<CONNECTOR>			
CN8501*	1-691-632-21	CONNECTOR, BOARD TO BOARD 15P			
		<DIODE>			
D8501	8-719-914-44	DIODE DAP202K-T-146			
D8502	8-719-914-44	DIODE DAP202K-T-146			
D8503	8-719-914-43	DIODE DAN202K-T-146			
D8504	8-719-158-15	DIODE UDZ-TE-17-5.6B			
D8505	8-719-158-15	DIODE UDZ-TE-17-5.6B			
		<IC>			
IC8501	8-759-251-31	IC CA0007AM			
IC8502	8-759-011-64	IC MC74HC4052FEL			
IC8503	8-759-251-31	IC CA0007AM			
IC8504	8-759-711-28	IC NJM2058D			
IC8505	8-759-251-31	IC CA0007AM			
IC8506	8-759-100-96	IC NJM4558M-TE2			
		<RESISTOR>			
R8501	1-216-689-11	RES-CHIP	39K	5%	1/10W
R8502	1-216-113-00	RES-CHIP	470K	5%	1/10W
R8503	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8504	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R8505	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8506	1-216-065-00	RES-CHIP	4.7K	5%	1/10W
R8512	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8513	1-216-093-91	RES-CHIP	68K	5%	1/10W
R8525	1-216-085-00	RES-CHIP	33K	5%	1/10W
R8526	1-216-039-00	RES-CHIP	390	5%	1/10W
R8527	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R8528	1-216-037-00	RES-CHIP	330	5%	1/10W
R8529	1-216-081-00	RES-CHIP	22K	5%	1/10W
R8530	1-216-107-00	RES-CHIP	270K	5%	1/10W
R8531	1-216-081-00	RES-CHIP	22K	5%	1/10W
R8532	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8533	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8534	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8535	1-216-081-00	RES-CHIP	22K	5%	1/10W
R8536	1-216-079-00	RES-CHIP	18K	5%	1/10W
R8537	1-216-081-00	RES-CHIP	22K	5%	1/10W
R8538	1-216-099-00	RES-CHIP	120K	5%	1/10W
R8539	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8540	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8541	1-216-075-00	RES-CHIP	12K	5%	1/10W
R8542	1-216-103-00	RES-CHIP	180K	5%	1/10W
R8543	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8544	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8545	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8546	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8547	1-216-081-00	RES-CHIP	22K	5%	1/10W
R8548	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R8549	1-216-065-00	RES-CHIP	4.7K	5%	1/10W

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*	A-1346-873-A	D BOARD, COMPLETE (HR53KR1)			
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*	A-1346-899-A	D BOARD, COMPLETE (HR61KR1)			
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	4-363-414-00	SPACER, MICA			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
	7-682-952-09	SCREW +PSW 3X16			
		<CAPACITOR>			
C5001	1-104-664-11	ELECT	47µF	20%	25V
C5002	1-126-965-11	ELECT	22µF	20%	50V
C5003	1-104-664-11	ELECT	47µF	20%	25V
C5004	1-101-002-00	CERAMIC	0.0022µF		50V
C5005	1-130-495-00	MYLAR	0.1µF	5%	50V
C5006	1-101-002-00	CERAMIC	0.0022µF		50V
C5007	1-102-973-00	CERAMIC	100pF	5%	50V
C5008	1-126-967-11	ELECT	47µF	20%	50V
C5010	1-102-973-00	CERAMIC	100pF	5%	50V
C5011	1-126-967-11	ELECT	47µF	20%	50V
C5012	1-107-645-11	ELECT	22µF	20%	160V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C5013	1-126-967-11	ELECT	47µF	20%	50V
C5014	1-101-002-00	CERAMIC	0.0022µF		50V
C5015	1-101-880-00	CERAMIC	47pF	5%	50V
C5016	1-106-383-00	MYLAR	0.047µF	10%	200V
C5017	1-126-967-11	ELECT	47µF	20%	50V
C5019	1-102-228-00	CERAMIC	470pF	10%	500V
C5020	1-130-495-00	MYLAR	0.1µF	5%	50V
C5023	1-126-960-11	ELECT	1µF	20%	50V
C5024	1-126-942-61	ELECT	1000µF	20%	25V
C5025	1-126-942-61	ELECT	1000µF	20%	25V
C5026	1-137-150-11	MYLAR	0.01µF	5%	50V
C5028	1-102-228-00	CERAMIC	470pF	10%	500V
C5029	1-164-096-11	CERAMIC	0.01µF		50V
C5032	1-126-972-11	ELECT	1000µF	20%	50V
C5033	1-101-002-00	CERAMIC	0.0022µF		50V
C5034	1-136-177-00	MYLAR	1µF	5%	50V
C5035	1-126-967-11	ELECT	47µF	20%	50V
C5036	1-164-096-11	CERAMIC	0.01µF		50V
C5037	1-126-969-11	ELECT	220µF	20%	50V
C5038	1-115-524-11	FILM	1.5µF	5%	250V
C5039	1-117-834-11	FILM	5600pF	3%	1.5KV
C5040	1-137-378-11	MYLAR	0.22µF	5%	50V
C5041	1-137-420-11	MYLAR	0.047µF	10%	100V
C5042	1-162-116-00	CERAMIC	680pF	10%	2KV
C5043	1-162-116-00	CERAMIC	680pF	10%	2KV
C5045	1-162-114-00	CERAMIC	0.0047µF		2KV
C5047	1-137-399-11	MYLAR	0.1µF	10%	100V
C5048	1-137-399-11	MYLAR	0.1µF	10%	100V
C5049	1-126-933-11	ELECT	100µF	20%	16V
C5050	1-136-479-11	FILM	0.001µF	5%	50V
C5051	1-162-318-11	CERAMIC	0.001µF	10%	500V
C5052	1-126-972-11	ELECT	1000µF	20%	50V
C5061	1-102-973-00	CERAMIC	100pF	5%	50V
C5062	1-102-973-00	CERAMIC	100pF	5%	50V
C5063	1-102-973-00	CERAMIC	100pF	5%	50V
C5064	1-102-973-00	CERAMIC	100pF	5%	50V
C5065	1-102-973-00	CERAMIC	100pF	5%	50V
C5066	1-102-973-00	CERAMIC	100pF	5%	50V
C5071	1-107-718-91	ELECT	100µF	20%	50V
C5072	1-107-718-91	ELECT	100µF	20%	50V
C5073	1-126-968-11	ELECT	100µF	20%	50V
C5074	1-126-968-11	ELECT	100µF	20%	50V
C5075	1-107-718-91	ELECT	100µF	20%	50V
C5076	1-107-718-91	ELECT	100µF	20%	50V
C5079	1-126-968-11	ELECT	100µF	20%	50V
C5080	1-126-968-11	ELECT	100µF	20%	50V
C5085	1-101-002-00	CERAMIC	0.0022µF		50V
C5086	1-130-495-00	MYLAR	0.1µF	5%	50V
C5087	1-130-495-00	MYLAR	0.1µF	5%	50V
C5088	1-115-524-11	FILM	1.5µF	5%	250V
C5089	1-106-220-00	MYLAR	0.1µF	10%	100V
C5090	1-126-960-11	ELECT	1µF	20%	50V
C5091	1-126-942-61	ELECT	1000µF	20%	25V
C5092	1-126-942-61	ELECT	1000µF	20%	25V
C5093	1-137-150-11	MYLAR	0.01µF	5%	50V
C5094	1-137-150-11	MYLAR	0.01µF	5%	50V
C5095	1-126-964-11	ELECT	10µF	20%	50V
C5097	1-126-933-11	ELECT	100µF	20%	16V
C5098	1-126-933-11	ELECT	100µF	20%	16V
C5099	1-104-999-11	MYLAR	0.1µF	10%	200V
C5100	1-124-347-51	ELECT	100µF	20%	160V
C5103	1-107-641-11	ELECT	220µF	20%	160V
C5105	1-137-372-11	MYLAR	0.022µF	5%	50V
C5107	1-130-495-00	MYLAR	0.1µF	5%	50V
C5108	1-130-048-00	FILM	220pF	5%	50V
C5112	1-104-664-11	ELECT	47µF	20%	16V
C5113	1-130-495-00	MYLAR	0.1µF	5%	50V
C5114	1-136-479-11	FILM	0.001µF	5%	50V
C5122	1-164-096-11	CERAMIC	0.01µF		50V
C5123	1-104-664-11	ELECT	47µF	20%	16V
C5124	1-164-096-11	CERAMIC	0.01µF		50V
C5203	1-136-356-11	MYLAR	470pF	5%	50V
C5204	1-137-368-11	MYLAR	0.0047µF	5%	50V
C5208	1-136-479-11	FILM	0.001µF	5%	50V
C8001	1-107-655-11	ELECT	47µF	20%	250V
C8002	1-124-347-51	ELECT	100µF	20%	160V
C8003	1-124-347-51	ELECT	100µF	20%	160V
C8004	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C8005	1-106-387-00	MYLAR	0.068µF	10%	200V
C8006	1-126-959-11	ELECT	0.47µF	20%	50V
C8007	1-137-150-11	MYLAR	0.01µF	10%	100V
C8008	1-102-030-00	CERAMIC	330pF	10%	500V
C8009	1-102-244-00	CERAMIC	220pF	10%	500V
C8010	1-130-481-00	MYLAR	0.0068µF	5%	50V
C8011	1-126-934-11	ELECT	220µF	20%	16V
C8012	1-130-338-91	FILM	0.01µF	5%	630V
C8013	1-126-964-11	ELECT	10µF	20%	50V
C8014	1-102-228-00	CERAMIC	470pF	10%	500V
C8015	1-126-933-11	ELECT	100µF	20%	16V
C8016	1-126-964-11	ELECT	10µF	20%	50V
C8017	1-126-964-11	ELECT	10µF	20%	50V
C8018	1-117-838-11	FILM	8200pF	3%	1.5KV
C8019	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C8020	1-162-318-11	CERAMIC	0.001µF	10%	500V
C8023	1-126-767-11	ELECT	1000µF	20%	16V
C8024	1-126-968-11	ELECT	100µF	20%	50V
C8025	1-128-562-11	ELECT	47µF	20%	100V
C8026	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C8028	1-137-368-11	MYLAR	0.0047µF	5%	50V
C8029	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C8030	1-126-967-11	ELECT	47µF	20%	50V
C8032	1-106-387-00	MYLAR	0.068µF	10%	200V
C8033	1-130-495-00	MYLAR	0.1µF	5%	50V
C8034	1-126-967-11	ELECT	47µF	20%	50V
C8035	1-104-664-11	ELECT	47µF	20%	25V
C8037	1-130-495-00	MYLAR	0.1µF	5%	50V
C8038	1-126-967-11	ELECT	47µF	20%	50V
C8039	1-137-420-11	MYLAR	0.047µF	10%	100V
C8040	1-126-964-11	ELECT	10µF	20%	50V
C8041	1-130-495-00	MYLAR	0.1µF	5%	50V
C8042	1-126-967-11	ELECT	47µF	20%	50V
C8043	1-130-495-00	MYLAR	0.1µF	5%	50V
C8045	1-137-431-11	MYLAR	560pF	5%	50V
C8046	1-130-495-00	MYLAR	0.1µF	5%	50V

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C8047	1-130-495-00	MYLAR	0.1µF	5%	50V
C8048	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C8049	1-126-967-11	ELECT	47µF	20%	50V
C8050	1-126-967-11	ELECT	47µF	20%	50V
C8051	1-126-967-11	ELECT	47µF	20%	50V
C8052	1-163-239-11	CERAMIC CHIP	33pF	5%	50V
C8053	1-126-960-11	ELECT	1µF	20%	50V
C8054	1-126-960-11	ELECT	1µF	20%	50V
C8055	1-126-961-11	ELECT	2.2µF	20%	50V
C8059	1-126-965-11	ELECT	22µF	20%	50V
C8060	1-126-963-11	ELECT	4.7µF	20%	50V
C8061	1-126-965-11	ELECT	22µF	20%	50V
C8062	1-126-965-11	ELECT	22µF	20%	50V
C8064	1-130-495-00	MYLAR	0.1µF	5%	50V
C8065	1-126-964-11	ELECT	10µF	20%	50V
C8066	1-130-471-00	MYLAR	0.001µF	5%	50V
C8067	1-104-661-91	ELECT	330µF	20%	16V
C8068	1-137-410-11	MYLAR	0.001µF	10%	100V
C8069	1-126-967-11	ELECT	47µF	20%	50V
C8070	1-102-110-00	CERAMIC	220pF	10%	50V
C8071	1-126-963-11	ELECT	4.7µF	20%	50V
C8072	1-126-964-11	ELECT	10µF	20%	50V
C8073	1-126-967-11	ELECT	47µF	20%	50V
C8074	1-137-410-11	MYLAR	0.001µF	10%	100V
C8075	1-126-965-11	ELECT	22µF	20%	50V
C8076	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C8077	1-137-150-11	MYLAR	0.01µF	5%	50V
C8078	1-130-495-00	MYLAR	0.1µF	5%	50V
C8079	1-126-967-11	ELECT	47µF	20%	50V
C8080	1-126-967-11	ELECT	47µF	20%	50V
C8081	1-126-967-11	ELECT	47µF	20%	50V
C8082	1-137-366-11	MYLAR	0.0022µF	5%	50V
C8083	1-126-964-11	ELECT	10µF	20%	50V
C8084	1-126-967-11	ELECT	47µF	20%	50V
C8085	1-104-661-91	ELECT	330µF	20%	16V
C8086	1-137-150-11	MYLAR	0.01µF	10%	100V
C8089	1-137-399-11	MYLAR	0.1µF	10%	100V
C8090	1-126-964-11	ELECT	10µF	20%	50V
C8091	1-126-967-11	ELECT	47µF	20%	50V
C8092	1-126-964-11	ELECT	10µF	20%	50V
C8093	1-126-964-11	ELECT	10µF	20%	50V
C8094	1-126-964-11	ELECT	10µF	20%	50V
C8095	1-126-967-11	ELECT	47µF	20%	50V
C8096	1-126-967-11	ELECT	47µF	20%	50V
C8097	1-126-967-11	ELECT	47µF	20%	50V
C8098	1-126-967-11	ELECT	47µF	20%	50V
C8099	1-126-964-11	ELECT	10µF	20%	50V
C8100	1-162-114-00	CERAMIC	0.0047µF		2KV
C8102	1-102-125-00	CERAMIC	0.0047µF	10%	50V
C8103	1-126-964-11	ELECT	10µF	20%	50V
C8104	1-126-961-11	ELECT	2.2µF	20%	50V
C8109	1-102-125-00	CERAMIC	0.0047µF	10%	50V
C8111	1-126-933-11	ELECT	100µF	20%	16V
C8112	1-136-291-11	MYLAR	0.0068µF	5%	100V
C8113	1-102-125-00	CERAMIC	0.0047µF	10%	50V
C8114	1-104-664-11	ELECT	47µF	20%	25V
C8115	1-162-114-00	CERAMIC	0.0047µF		2KV

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<CONNECTOR>	
CN5001 *	1-564-506-11	PLUG, CONNECTOR 3P	
CN5002 *	1-573-964-11	PIN, CONNECTOR (PC BOARD) 6P	
CN5003 *	1-564-509-11	PLUG, CONNECTOR 6P	
CN5004 *	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
CN5005 *	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
CN5006 *	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
CN5007 *	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
CN5008 *	1-564-506-11	PLUG, CONNECTOR 3P	
CN5009 *	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
CN5010 *	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
CN5011 *	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
CN5012 *	1-564-507-11	PLUG, CONNECTOR 4P	
CN5013 *	1-564-507-11	PLUG, CONNECTOR 4P	
CN5014 *	1-564-507-11	PLUG, CONNECTOR 4P	
CN8001 *	1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P	
CN8002	1-695-915-11	TAB (CONTACT)	
CN8003 *	1-564-509-11	PLUG, CONNECTOR 6P	
CN8004 *	1-564-510-11	PLUG, CONNECTOR 7P	
CN8005 *	1-564-507-11	PLUG, CONNECTOR 4P	
CN8006 *	1-564-507-11	PLUG, CONNECTOR 4P	
CN8007 *	1-506-371-00	PIN, CONNECTOR 2P	
CN8008 *	1-506-371-00	PIN, CONNECTOR 2P	
CN8009	1-695-915-11	TAB (CONTACT)	
CN8010	1-695-915-11	TAB (CONTACT)	
CN8011 *	1-691-616-21	CONNECTOR, BOARD TO BOARD 15P	
CN8012 *	1-564-506-11	PLUG, CONNECTOR 3P	
		<DIODE>	
D5001	8-719-991-33	DIODE 1SS133T-77	
D5002	8-719-991-33	DIODE 1SS133T-77	
D5003	8-719-302-43	DIODE RGP10GPKG23	
D5004	8-719-991-33	DIODE 1SS133T-77	
D5005	8-719-109-89	DIODE MTZJ-T-77-5.6	
D5006	8-719-991-33	DIODE 1SS133T-77	
D5007	8-719-302-43	DIODE RGP10GPKG23	
D5008	8-719-991-33	DIODE 1SS133T-77	
D5009	8-719-979-85	DIODE RGP15GPKG23	
D5010	8-719-908-03	DIODE GP08DPKG23	
D5011	8-719-908-03	DIODE GP08DPKG23	
D5013	8-719-979-99	DIODE ERD08M-15	
D5014	8-719-991-33	DIODE 1SS133T-77	
D5015	8-719-018-82	DIODE RGP02-20EL-6394	
D5016	8-719-110-61	DIODE MTZJ-T-77-24A	
D5017	8-719-110-61	DIODE MTZJ-T-77-24A	
D5019	8-719-302-43	DIODE RGP10GPKG23	
D5020	8-719-302-43	DIODE RGP10GPKG23	
D5021	8-719-920-67	DIODE ERC91-02	
D5022	8-719-991-33	DIODE 1SS133T-77	
D5025	8-719-991-33	DIODE 1SS133T-77	
D5027	8-719-923-86	DIODE MTZJ-T-77-15	
D5028	8-719-991-33	DIODE 1SS133T-77	
D5029	8-719-018-82	DIODE RGP02-20EL-6394	
D8001	8-719-105-82	DIODE MA3051M-TX	
D8002	8-719-914-43	DIODE DAN202K-T-146	

REF. NO.	PART NO.	DESCRIPTION	REMARK
D8003	8-719-979-85	DIODE RGP15GPKG23	
D8004	8-719-914-43	DIODE DAN202K-T-146	
D8005	8-719-914-43	DIODE DAN202K-T-146	
D8006	8-719-914-43	DIODE DAN202K-T-146	
D8007	8-719-945-80	DIODE ERC06-15STP11	
D8008	8-719-106-81	DIODE MA3130H-TX	
D8009	8-719-106-81	DIODE MA3130H-TX	
D8010	8-719-054-52	DIODE D8LC20U-4015	
D8011	8-719-945-80	DIODE ERC06-15STP11	
D8013	8-719-920-67	DIODE ERC91-02E	
D8014	8-719-302-43	DIODE RGP10GPKG23	
D8015	8-719-914-43	DIODE DAN202K-T-146	
D8017	8-719-914-43	DIODE DAN202K-T-146	
D8018	8-719-983-14	DIODE MTZJ-T-77-3.9	
D8021	8-719-914-43	DIODE DAN202K-T-146	
D8023	8-719-914-43	DIODE DAN202K-T-146	
D8024	8-719-914-43	DIODE DAN202K-T-146	
D8025	8-719-914-43	DIODE DAN202K-T-146	
D8026	8-719-914-43	DIODE DAN202K-T-146	
D8027	8-719-914-43	DIODE DAN202K-T-146	
D8029	8-719-914-43	DIODE DAN202K-T-146	
D8030	8-719-400-75	DIODE MA3091-TX	
D8031	8-719-105-82	DIODE MA3051M-TX	
D8032	8-719-302-43	DIODE RGP10GPKG23	
D8033	8-719-914-43	DIODE DAN202K-T-146	
D8034	8-719-028-00	DIODE MA3033L-TX	
D8035	8-719-105-82	DIODE MA3051M-TX	
D8036	8-719-914-43	DIODE DAN202K-T-146	
D8037	8-719-914-43	DIODE DAN202K-T-146	
D8038	8-719-106-81	DIODE MA3130H-TX	
D8039	8-719-110-17	DIODE MTZN-T-77-10	
D8040	8-719-914-43	DIODE DAN202K-T-146	
D8041	8-719-106-81	DIODE MA3130H-TX	
D8042	8-759-157-40	DIODE HZT33-02TE	
D8045	8-719-400-75	DIODE MA3091-TX	
D8046	8-719-402-57	DIODE MA3150H-TX	
D8047	8-719-402-57	DIODE MA3150H-TX	
D8048	8-719-914-43	DIODE DAN202K-T-146	
D8050	8-719-914-43	DIODE DAN202K-T-146	
		<FERRITE BEAD>	
FB5001	1-410-396-41	FERRITE 0.45µH	
FB8001	1-410-396-41	FERRITE 0.45µH	
FB8002	1-410-396-41	FERRITE 0.45µH	
FB8003	1-410-397-21	FERRITE 1.1µH	
		<IC>	
IC5001	8-759-701-88	IC NJM7912FA	
IC5002	8-759-701-79	IC NJM7812FA	
IC5004	8-759-192-71	IC STV9379	
IC5005	8-749-014-67	IC STK392-020	
IC5006	8-749-014-67	IC STK392-020	
IC5008	8-759-103-93	IC LM393P	
IC5009	8-759-634-51	IC NJM4558D	
IC8002	8-759-103-93	IC LM393P	
IC8003	8-759-701-84	IC NJM7905FA	
IC8004	8-759-925-54	IC LM2940CT-5.0	
IC8006	8-759-103-93	IC LM393P	
IC8007	8-759-711-28	IC NJM2058D	
IC8008	8-759-135-80	IC LM358P	
IC8009	8-759-135-80	IC LM358P	
IC8010	8-759-103-93	IC LM393P	
IC8011	8-759-711-28	IC NJM2058D	
		<CHIP CONDUCTOR>	
JR8001	1-216-295-00	SHORT 0	
JR8002	1-216-295-00	SHORT 0	
JR8003	1-216-295-00	SHORT 0	
JR8004	1-216-295-00	SHORT 0	
		<COIL>	
L5001	1-412-533-21	INDUCTOR 47µH	
L5002	1-412-533-21	INDUCTOR 47µH	
L5003	1-412-533-21	INDUCTOR 47µH	
L5004	1-412-533-21	INDUCTOR 47µH	
L5007	1-419-352-11	COIL, HORIZONTAL LINEARITY	
L5009	1-412-524-11	INDUCTOR 8.2µH	
L5010	1-412-533-21	INDUCTOR 47µH	
L5011	1-412-533-21	INDUCTOR 47µH	
L5012	1-412-533-21	INDUCTOR 47µH	
L5013	1-412-533-21	INDUCTOR 47µH	
L5018	1-411-594-11	INDUCTOR 5mH	
L5019	1-459-109-00	COIL,DUST CORE	
L5020	1-414-177-11	INDUCTOR 1µH	
L8001	1-414-223-11	INDUCTOR 470µH	
L8002	1-406-977-21	INDUCTOR 100µH	
L8003	1-422-613-11	COIL, AIR CORE	
L8004	1-412-521-31	INDUCTOR 4.7µH	
L8005	1-412-533-21	INDUCTOR 47µH	
L8006	1-412-533-21	INDUCTOR 47µH	
L8007	1-412-521-31	INDUCTOR 4.7µH	
		<NEON LAMP>	
NL8001	1-517-778-21	LAMP, NEON	
NL8002	1-517-778-21	LAMP, NEON	
NL8003	1-517-778-21	LAMP, NEON	
NL8004	1-517-778-21	LAMP, NEON	
		<IC LINK>	
PS5001	1-533-595-31	LINK, IC	
PS5002	1-533-595-31	LINK, IC	
PS5003	1-533-595-31	LINK, IC	
PS5004	1-533-595-31	LINK, IC	
PS5005	1-533-595-31	LINK, IC	
PS5006	1-533-595-31	LINK, IC	
PS5007	1-533-595-31	LINK, IC	
PS5008	1-533-595-31	LINK, IC	
PS8001	1-533-593-11	LINK, IC	

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<TRANSISTOR>

REF. NO.	PART NO.	DESCRIPTION	REMARK
Q5002	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
Q5004	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q5005	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q5006	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q5008	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q5009	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
Q5010	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
Q5013	8-729-048-35	TRANSISTOR 2SC3997S-SONY-YB	
Q5014	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
Q5015	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q5016	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q5019	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q5022	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q5023	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
Q5024	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q5025	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
Q5026	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q5027	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q5029	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q5030	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
Q5031	8-729-038-83	TRANSISTOR 2SK2251-01-F19	
Q5034	8-729-231-55	TRANSISTOR 2SC2878AB-TPE2	
Q5035	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q5036	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
Q5037	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
Q8001	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q8002	8-729-122-12	TRANSISTOR 2SA1221-T-M	
Q8003	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q8004	8-729-823-81	TRANSISTOR 2SC4632LS-CB7	
Q8005	8-729-231-55	TRANSISTOR 2SC2878AB-TPE2	
Q8006	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q8007	8-729-048-35	TRANSISTOR 2SC3997-YB	
Q8008	8-729-024-30	TRANSISTOR IRFI640LF	
Q8009	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q8010	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q8013	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q8014	8-729-823-81	TRANSISTOR 2SC4632LS-CB7	
Q8015	8-729-140-93	TRANSISTOR 2SB734-T-4	
Q8016	8-729-140-96	TRANSISTOR 2SD774-T-34	
Q8017	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q8018	8-729-231-55	TRANSISTOR 2SC2878AB-TPE2	
Q8019	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q8020	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q8021	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q8022	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q8023	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q8024	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q8025	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q8026	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q8027	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q8028	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q8030	8-729-823-81	TRANSISTOR 2SC4632LS-CB7	
Q8031	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	

<RESISTOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK
R5002	1-249-417-11	CARBON	1K	5% 1/4W	
R5003	1-249-417-11	CARBON	1K	5% 1/4W	
R5004	1-249-425-11	CARBON	4.7K	5% 1/4W	
R5007	1-216-472-00	METAL OXIDE	39	5% 3W	(HR61KR1)
R5007	1-216-474-11	METAL OXIDE	82	5% 3W	(HR53KR1)
R5008	1-216-472-00	METAL OXIDE	39	5% 3W	(HR61KR1)
R5008	1-216-474-11	METAL OXIDE	82	5% 3W	(HR53KR1)
R5009	1-249-421-11	CARBON	2.2K	5% 1/4W	
R5011	1-247-843-11	CARBON	3.3K	5% 1/4W	
R5012	1-249-425-11	CARBON	4.7K	5% 1/4W	
R5013	1-249-425-11	CARBON	4.7K	5% 1/4W	
R5016	1-249-429-11	CARBON	10K	5% 1/4W	
R5017	1-249-433-11	CARBON	22K	5% 1/4W	
R5018	1-247-843-11	CARBON	3.3K	5% 1/4W	
R5020	1-249-437-11	CARBON	47K	5% 1/4W	
R5021	1-215-445-00	METAL	10K	1% 1/4W	
R5022	1-249-433-11	CARBON	22K	5% 1/4W	
R5023	1-249-433-11	CARBON	22K	5% 1/4W	
R5026	1-216-462-00	METAL OXIDE	8.2K	5% 2W	
R5027	1-215-897-11	METAL OXIDE	6.8K	5% 2W	
R5028	1-249-377-11	CARBON	0.47	5% 1/4W	
R5029	1-249-377-11	CARBON	0.47	5% 1/4W	
R5030	1-249-437-11	CARBON	47K	5% 1/4W	
R5031	1-216-435-11	METAL OXIDE	2.7K	5% 1W	
R5033	1-249-417-11	CARBON	1K	5% 1/4W	
R5034	1-249-429-11	CARBON	10K	5% 1/4W	
R5035	1-249-429-11	CARBON	10K	5% 1/4W	
R5039	1-249-429-11	CARBON	10K	5% 1/4W	
R5040	1-249-417-11	CARBON	1K	5% 1/4W	
R5042	1-249-425-11	CARBON	4.7K	5% 1/4W	
R5043	1-249-417-11	CARBON	1K	5% 1/4W	
R5046	1-216-389-11	METAL OXIDE	1	5% 3W	
R5047	1-215-450-00	METAL	16K	1% 1/4W	
R5049	1-215-905-11	METAL OXIDE	10	5% 3W	
R5050	1-247-807-31	CARBON	100	5% 1/4W	
R5051	1-249-435-11	CARBON	33K	5% 1/4W	
R5054	1-249-413-11	CARBON	470	5% 1/4W	
R5055	1-215-912-11	METAL OXIDE	150	5% 3W	
R5057	1-249-429-11	CARBON	10K	5% 1/4W	
R5058	1-249-430-11	CARBON	12K	5% 1/4W	
R5059	1-249-383-11	CARBON	1.5	5% 1/4W	
R5061	1-249-429-11	CARBON	10K	5% 1/4W	
R5062	1-247-735-11	SOLID	47	20% 1/2W	
R5063	1-247-807-31	CARBON	100	5% 1/4W	
R5067	1-214-800-11	METAL	2.2	1% 1/2W	
R5068	1-249-429-11	CARBON	10K	5% 1/4W	
R5069	1-249-429-11	CARBON	10K	5% 1/4W	
R5070	1-260-321-71	CARBON	270	5% 1/2W	
R5071	1-214-800-11	METAL	2.2	1% 1/2W	
R5072	1-247-807-31	CARBON	100	5% 1/4W	
R5073	1-215-433-00	METAL	3.3K	1% 1/4W	
R5074	1-249-437-11	CARBON	47K	5% 1/4W	

REF. NO.	PART NO.	DESCRIPTION			REMARK
R5075	1-215-445-00	METAL	10K	1%	1/4W
R5076	1-215-857-11	METAL OXIDE	10	5%	1W
R5077	1-216-477-11	METAL OXIDE	270	5%	3W
R5081	1-247-807-31	CARBON	100	5%	1/4W
R5082	1-247-807-31	CARBON	100	5%	1/4W
R5083	1-247-807-31	CARBON	100	5%	1/4W
R5084	1-247-807-31	CARBON	100	5%	1/4W
R5085	1-247-807-31	CARBON	100	5%	1/4W
R5086	1-247-807-31	CARBON	100	5%	1/4W
R5087	1-247-843-11	CARBON	3.3K	5%	1/4W
R5088	1-247-843-11	CARBON	3.3K	5%	1/4W
R5089	1-247-843-11	CARBON	3.3K	5%	1/4W
R5090	1-247-843-11	CARBON	3.3K	5%	1/4W
R5091	1-249-417-11	CARBON	1K	5%	1/4W
R5092	1-249-417-11	CARBON	1K	5%	1/4W
R5093	1-247-843-11	CARBON	3.3K	5%	1/4W
R5095	1-247-843-11	CARBON	3.3K	5%	1/4W
R5097	1-249-417-11	CARBON	1K	5%	1/4W
R5098	1-249-405-11	CARBON	100	5%	1/4W
R5099	1-249-417-11	CARBON	1K	5%	1/4W
R5100	1-249-405-11	CARBON	100	5%	1/4W
R5101	1-214-808-11	METAL	4.7	1%	1/2W
R5102	1-214-808-11	METAL	4.7	1%	1/2W
R5103	1-214-808-11	METAL	4.7	1%	1/2W
R5104	1-214-808-11	METAL	4.7	1%	1/2W
R5105	1-214-808-11	METAL	4.7	1%	1/2W
R5106	1-214-808-11	METAL	4.7	1%	1/2W
R5107	1-249-417-11	CARBON	1K	5%	1/4W
R5108	1-249-417-11	CARBON	1K	5%	1/4W
R5109	1-214-808-11	METAL	4.7	1%	1/2W
R5110	1-214-808-11	METAL	4.7	1%	1/2W
R5111	1-214-808-11	METAL	4.7	1%	1/2W
R5112	1-214-808-11	METAL	4.7	1%	1/2W
R5113	1-214-808-11	METAL	4.7	1%	1/2W
R5114	1-214-808-11	METAL	4.7	1%	1/2W
R5117	1-214-808-11	METAL	4.7	1%	1/2W
R5118	1-214-808-11	METAL	4.7	1%	1/2W
R5121	1-214-808-11	METAL	4.7	1%	1/2W
R5122	1-214-808-11	METAL	4.7	1%	1/2W
R5123	1-214-808-11	METAL	4.7	1%	1/2W
R5124	1-214-808-11	METAL	4.7	1%	1/2W
R5127	1-214-808-11	METAL	4.7	1%	1/2W
R5128	1-214-808-11	METAL	4.7	1%	1/2W
R5129	1-214-808-11	METAL	4.7	1%	1/2W
R5130	1-214-808-11	METAL	4.7	1%	1/2W
R5131	1-214-808-11	METAL	4.7	1%	1/2W
R5132	1-214-808-11	METAL	4.7	1%	1/2W
R5133	1-214-808-11	METAL	4.7	1%	1/2W
R5134	1-214-808-11	METAL	4.7	1%	1/2W
R5135	1-214-808-11	METAL	4.7	1%	1/2W
R5136	1-214-808-11	METAL	4.7	1%	1/2W
R5137	1-214-808-11	METAL	4.7	1%	1/2W
R5138	1-214-808-11	METAL	4.7	1%	1/2W
R5143	1-249-429-11	CARBON	10K	5%	1/4W
R5144	1-249-429-11	CARBON	10K	5%	1/4W
R5145	1-249-429-11	CARBON	10K	5%	1/4W
R5146	1-249-429-11	CARBON	10K	5%	1/4W
R5147	1-249-429-11	CARBON	10K	5%	1/4W
R5148	1-249-429-11	CARBON	10K	5%	1/4W
R5149	1-249-429-11	CARBON	10K	5%	1/4W
R5150	1-249-429-11	CARBON	10K	5%	1/4W
R5151	1-249-429-11	CARBON	10K	5%	1/4W
R5152	1-249-429-11	CARBON	10K	5%	1/4W
R5153	1-249-429-11	CARBON	10K	5%	1/4W
R5154	1-249-429-11	CARBON	10K	5%	1/4W
R5155	1-249-425-11	CARBON	4.7K	5%	1/4W
R5156	1-215-425-00	METAL	1.5K	1%	1/4W
R5165	1-260-312-11	CARBON	47	5%	1/2W
R5166	1-247-887-00	CARBON	220K	5%	1/4W
R5167	1-260-312-11	CARBON	47	5%	1/2W
R5168	1-260-312-11	CARBON	47	5%	1/2W
R5169	1-249-429-11	CARBON	10K	5%	1/4W
R5170	1-215-471-00	METAL	120K	1%	1/4W
R5171	1-215-449-00	METAL	15K	1%	1/4W
R5172	1-247-895-91	CARBON	470K	5%	1/4W
R5173	1-247-895-91	CARBON	470K	5%	1/4W
R5174	1-249-439-11	CARBON	68K	5%	1/4W
R5175	1-216-395-00	METAL OXIDE	3.3	5%	3W
R5177	1-215-469-00	METAL	100K	1%	1/4W
R5179	1-249-425-11	CARBON	4.7K	5%	1/4W
R5180	1-249-421-11	CARBON	2.2K	5%	1/4W
R5181	1-249-422-11	CARBON	2.7K	5%	1/4W
R5182	1-247-895-91	CARBON	470K	5%	1/4W
R5183	1-249-422-11	CARBON	2.7K	5%	1/4W
R5184	1-249-417-11	CARBON	1K	5%	1/4W
R5186	1-249-425-11	CARBON	4.7K	5%	1/4W
R5187	1-249-431-11	CARBON	15K	5%	1/4W
R5188	1-249-429-11	CARBON	10K	5%	1/4W
R5189	1-215-421-00	METAL	1K	1%	1/4W
R5190	1-249-377-11	CARBON	0.47	5%	1/4W
R5191	1-249-417-11	CARBON	1K	5%	1/4W
R5192	1-215-429-00	METAL	2.2K	1%	1/4W
R5193	1-215-465-00	METAL	68K	1%	1/4W
R5194	1-215-425-00	METAL	1.5K	1%	1/4W
R5195	1-215-449-00	METAL	15K	1%	1/4W
R5196	1-215-445-00	METAL	10K	1%	1/4W
R5197	1-247-807-31	CARBON	100	5%	1/4W
R5200	1-249-429-11	CARBON	10K	5%	1/4W
R5203	1-249-436-11	CARBON	39K	5%	1/4W
R5204	1-249-429-11	CARBON	10K	5%	1/4W
R5205	1-249-429-11	CARBON	10K	5%	1/4W
R5207	1-216-375-00	METAL OXIDE	3.3	5%	2W
R5208	1-216-375-00	METAL OXIDE	3.3	5%	2W
R5214	1-249-429-11	CARBON	10K	5%	1/4W
R5215	1-249-437-11	CARBON	47K	5%	1/4W
R5216	1-249-422-11	CARBON	2.7K	5%	1/4W
R5217	1-249-429-11	CARBON	10K	5%	1/4W
R5218	1-249-417-11	CARBON	1K	5%	1/4W
R8001	1-249-425-11	CARBON	4.7K	5%	1/4W
R8002	1-249-431-11	CARBON	15K	5%	1/4W
R8003	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R8004	1-260-328-11	CARBON	1K	5%	1/2W
R8005	1-215-925-11	METAL OXIDE	22K	5%	3W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R8006	1-260-123-11	CARBON	100K	5%	1/2W
R8007	1-215-925-11	METAL OXIDE	22K	5%	3W
R8008	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R8009	1-216-435-11	METAL OXIDE	2.7K	5%	1W
R8010	1-216-025-00	RES-CHIP	100	5%	1/10W
R8011	1-216-065-00	RES-CHIP	4.7K	5%	1/10W
R8012	1-215-918-00	METAL OXIDE	1.5K	5%	3W
R8013	1-216-065-00	RES-CHIP	4.7K	5%	1/10W
R8014	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8015	1-216-049-00	RES-CHIP	1K	5%	1/10W
R8016	1-215-918-00	METAL OXIDE	1.5K	5%	3W
R8017	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8018	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8019	1-215-905-11	METAL OXIDE	10	5%	3W
R8020	1-215-918-00	METAL OXIDE	1.5K	5%	3W
R8021	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8022	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8023	1-215-870-11	METAL OXIDE	1.5K	5%	1W
R8024	1-249-427-11	CARBON	6.8K	5%	1/4W
R8026	1-215-902-11	METAL OXIDE	47K	5%	2W
R8027	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R8028	1-216-089-00	RES-CHIP	47K	5%	1/10W
R8030	1-215-902-11	METAL OXIDE	47K	5%	2W
R8031	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8032	1-215-918-00	METAL OXIDE	1.5K	5%	3W
R8033	1-215-902-11	METAL OXIDE	47K	5%	2W
R8034	1-215-918-00	METAL OXIDE	1.5K	5%	3W
R8035	1-215-918-00	METAL OXIDE	1.5K	5%	3W
R8036	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R8037	1-216-085-00	RES-CHIP	33K	5%	1/10W
R8038	1-216-374-00	METAL OXIDE	2.7	5%	2W
R8039	1-216-375-00	METAL OXIDE	3.3	5%	2W
R8041	1-215-902-11	METAL OXIDE	47K	5%	2W
R8044	1-216-049-00	RES-CHIP	1K	5%	1/10W
R8046	1-216-025-00	RES-CHIP	100	5%	1/10W
R8049	1-216-049-00	RES-CHIP	1K	5%	1/10W
R8050	1-260-117-11	CARBON	33K	5%	1/2W
R8051	1-216-025-00	RES-CHIP	100	5%	1/10W
R8055	1-260-087-11	CARBON	100	5%	1/2W
R8057	1-216-045-00	RES-CHIP	680	5%	1/10W
R8058	1-216-077-91	RES-CHIP	15K	5%	1/10W
R8059	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R8060	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R8064	1-216-377-11	METAL OXIDE	4.7	5%	2W
R8067	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R8069	1-216-445-11	METAL OXIDE	12	5%	2W
R8070	1-260-316-51	CARBON	100	5%	1/2W
R8071	1-216-113-00	RES-CHIP	470K	5%	1/10W
R8074	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R8075	1-260-316-51	CARBON	100	5%	1/2W
R8076	1-216-105-91	RES-CHIP	220K	5%	1/10W
R8077	1-216-091-00	RES-CHIP	56K	5%	1/10W
R8080	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R8081	1-216-077-91	RES-CHIP	15K	5%	1/10W
R8082	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8083	1-216-077-91	RES-CHIP	15K	5%	1/10W
R8084	1-216-049-00	RES-CHIP	1K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R8085	1-249-377-11	CARBON	0.47	5%	1/4W
R8086	1-216-065-00	RES-CHIP	4.7K	5%	1/10W
R8087	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8091	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R8092	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8093	1-216-049-00	RES-CHIP	1K	5%	1/10W
R8094	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R8095	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R8096	1-216-045-00	RES-CHIP	680	5%	1/10W
R8097	1-216-081-00	RES-CHIP	22K	5%	1/10W
R8099	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R8101	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R8102	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8103	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R8105	1-216-689-11	RES-CHIP	39K	5%	1/10W
R8106	1-216-089-00	RES-CHIP	47K	5%	1/10W
R8107	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R8108	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R8109	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R8110	1-208-810-11	METAL CHIP	15K	0.5%	1/10W
R8111	1-208-774-11	METAL CHIP	470	0.5%	1/10W
R8112	1-216-077-91	RES-CHIP	15K	5%	1/10W
R8113	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8114	1-216-025-00	RES-CHIP	100	5%	1/10W
R8115	1-216-089-00	RES-CHIP	47K	5%	1/10W
R8116	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8117	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R8118	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R8119	1-208-774-11	METAL CHIP	470	0.5%	1/10W
R8120	1-216-049-00	RES-CHIP	1K	5%	1/10W
R8121	1-249-377-11	CARBON	0.47	5%	1/4W
R8122	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8123	1-208-822-11	METAL CHIP	47K	0.5%	1/10W
R8125	1-208-822-11	METAL CHIP	47K	0.5%	1/10W
R8126	1-216-081-00	RES-CHIP	22K	5%	1/10W
R8127	1-216-037-00	RES-CHIP	330	5%	1/10W
R8128	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8129	1-208-822-11	METAL CHIP	47K	0.5%	1/10W
R8132	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R8133	1-208-832-11	METAL CHIP	120K	0.5%	1/10W
R8134	1-208-834-11	METAL CHIP	150K	0.5%	1/10W
R8135	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8136	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8137	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R8138	1-216-025-00	RES-CHIP	100	5%	1/10W
R8139	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8140	1-208-822-11	METAL CHIP	47K	0.5%	1/10W
R8154	1-216-043-91	RES-CHIP	560	5%	1/10W
R8155	1-216-049-00	RES-CHIP	1K	5%	1/10W
R8156	1-214-745-00	METAL	4.7K	1%	1/4W
R8157	1-208-774-11	METAL CHIP	470	0.5%	1/10W
R8160	1-214-747-00	METAL	5.6K	1%	1/4W
R8161	1-215-423-00	METAL	1.2K	1%	1/4W
R8162	1-214-757-00	METAL	15K	1%	1/4W
R8163	1-214-757-00	METAL	15K	1%	1/4W
R8164	1-214-757-00	METAL	15K	1%	1/4W
R8165	1-214-757-00	METAL	15K	1%	1/4W

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

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

REF. NO.	PART NO.	DESCRIPTION			REMARK
R8166	1-208-814-91	METAL CHIP	22K	0.5% 1/10W	
R8167	1-216-057-00	RES-CHIP	2.2K	5% 1/10W	
R8168	1-208-802-11	METAL CHIP	6.8K	0.5% 1/10W	
R8170	1-216-097-91	RES-CHIP	100K	5% 1/10W	
R8171	1-216-097-91	RES-CHIP	100K	5% 1/10W	
R8172	1-216-073-00	RES-CHIP	10K	5% 1/10W	
R8173	1-208-812-11	METAL CHIP	18K	0.5% 1/10W	
R8174	1-216-025-00	RES-CHIP	100	5% 1/10W	
R8175	1-216-073-00	RES-CHIP	10K	5% 1/10W	
R8176	1-216-073-00	RES-CHIP	10K	5% 1/10W	
R8177	1-216-462-00	METAL OXIDE	8.2K	5% 2W	
R8178	1-215-897-11	METAL OXIDE	6.8K	5% 2W	
R8181	1-215-900-11	METAL OXIDE	22K	5% 2W	
R8182	1-215-901-00	METAL OXIDE	33K	5% 2W	
R8183	1-260-292-11	CARBON	1	5% 1/2W	
R8186	1-216-037-00	RES-CHIP	330	5% 1/10W	
R8187	1-215-901-00	METAL OXIDE	33K	5% 2W	
R8188	1-216-466-71	METAL OXIDE	39K	5% 2W	
R8189	1-260-117-11	CARBON	33K	5% 1/2W	
R8190	1-208-798-11	METAL CHIP	4.7K	0.5% 1/10W	
R8191	1-208-806-11	METAL CHIP	10K	0.5% 1/10W	
R8192	1-208-802-11	METAL CHIP	6.8K	0.5% 1/10W	
R8193	1-208-814-91	METAL CHIP	22K	0.5% 1/10W	
⋈ R8194 ⚠		CARBON			1/4W
R8195	1-208-814-91	METAL CHIP	22K	0.5% 1/10W	
⋈ R8196 ⚠		CARBON			1/4W
R8197	1-260-087-11	CARBON	100	5% 1/2W	
R8198	1-214-769-00	METAL	47K	1% 1/4W	
R8199	1-260-288-11	CARBON	0.47	5% 1/2W	
R8200	1-260-127-11	CARBON	220K	5% 1/2W	
⋈ R8201 ⚠		METAL			1/4W
⋈ R8202 ⚠		METAL			1/4W
R8203	1-208-826-11	METAL CHIP	68K	0.5% 1/10W	
R8204	1-208-832-11	METAL CHIP	120K	0.5% 1/10W	
R8208	1-260-087-11	CARBON	100	5% 1/2W	
R8213	1-249-413-11	CARBON	470	5% 1/4W	
R8214	1-216-379-11	METAL OXIDE	6.8	5% 2W	
R8215	1-216-097-91	RES-CHIP	100K	5% 1/10W	
R8216	1-216-093-91	RES-CHIP	68K	5% 1/10W	
R8217	1-216-079-00	RES-CHIP	18K	5% 1/10W	
R8218	1-216-067-00	RES-CHIP	5.6K	5% 1/10W	
R8219	1-216-067-00	RES-CHIP	5.6K	5% 1/10W	
R8220	1-216-079-00	RES-CHIP	18K	5% 1/10W	
R8221	1-216-097-91	RES-CHIP	100K	5% 1/10W	
R8222	1-216-093-91	RES-CHIP	68K	5% 1/10W	
R8223	1-216-079-00	RES-CHIP	18K	5% 1/10W	
R8224	1-216-067-00	RES-CHIP	5.6K	5% 1/10W	
R8225	1-260-087-11	CARBON	100	5% 1/2W	
R8227	1-216-067-00	RES-CHIP	5.6K	5% 1/10W	
R8228	1-216-067-00	RES-CHIP	5.6K	5% 1/10W	
R8229	1-216-093-91	RES-CHIP	68K	5% 1/10W	
R8230	1-216-073-00	RES-CHIP	10K	5% 1/10W	
		<SPARK GAP>			
SG8002	1-519-422-11	GAP, SPARK			

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<TRANSFORMER>	
T5001	1-437-209-11	TRANSFORMER, HORIZONTAL DRIVE	
T5002	1-431-966-11	TRANSFORMER, FERRITE (HOT)	
T8001 ⚠	1-437-209-11	TRANSFORMER, HORIZONTAL DRIVE	
T8002 ⚠	1-431-955-11	TRANSFORMER, FERRITE (LOT)	
T8003 ⚠	1-453-285-11	FBT ASSY NX-4007//J1P4	
		<THERMISTOR>	
TH5001	1-800-193-00	THERMISTOR	

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* A-1373-794-A U BOARD, COMPLETE
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		<CAPACITOR>	
C3501	1-107-823-11	CERAMIC CHIP 0.47µF 10%	16V
C3502	1-163-038-11	CERAMIC CHIP 0.1µF	25V
C3504	1-107-823-11	CERAMIC CHIP 0.47µF 10%	16V
C3505	1-107-823-11	CERAMIC CHIP 0.47µF 10%	16V
		<CONNECTOR>	
CN3501*	1-564-522-11	PLUG, CONNECTOR 7P	
		<DIODE>	
D3501	8-719-073-01	DIODE MA111-TX	
D3502	8-719-073-01	DIODE MA111-TX	
D3503	8-719-158-15	DIODE UDZ-TE-17-5.6B	
D3504	8-719-158-15	DIODE UDZ-TE-17-5.6B	
D3505	8-719-977-28	DIODE UDZ-TE-17-10B	
D3506	8-719-977-28	DIODE UDZ-TE-17-10B	
D3507	8-719-977-28	DIODE UDZ-TE-17-10B	
D3508	8-719-977-28	DIODE UDZ-TE-17-10B	
		<JACK>	
J3501	1-764-143-11	JACK 3P (CONTROL S IN)	
J3502	1-764-143-11	JACK 3P (CONTROL S OUT)	
J3503	1-793-795-11	JACK BLOCK, PIN 2P (VIDEO 5 (DTV) HD/VD)	
		<TRANSISTOR>	
Q3501	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q3502	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q3503	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q3504	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q3505	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3506	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q3507	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	

U G

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

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<RESISTOR>			
R3501	1-216-089-91	RES-CHIP	47K	5%	1/10W
R3502	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3503	1-216-009-91	RES-CHIP	22	5%	1/10W
R3504	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3506	1-216-009-91	RES-CHIP	22	5%	1/10W
R3507	1-216-097-91	RES-CHIP	100K	5%	1/10W
R3508	1-216-097-91	RES-CHIP	100K	5%	1/10W
R3510	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3511	1-216-295-11	SHORT	0		
R3512	1-216-073-00	RES-CHIP	10K	5%	1/10W
R3513	1-216-097-91	RES-CHIP	100K	5%	1/10W
R3514	1-216-097-91	RES-CHIP	100K	5%	1/10W
R3515	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3516	1-216-025-11	RES-CHIP	100	5%	1/10W
R3517	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3518	1-216-025-11	RES-CHIP	100	5%	1/10W

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* A-1316-547-A G BOARD, COMPLETE
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1-533-223-11 CLIP, FUSE
4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

C6001 ⚠	1-104-708-11	MYLAR	0.47µF	20%	250V
C6002 ⚠	1-104-706-11	MYLAR	0.22µF	20%	250V
C6003 ⚠	1-119-894-51	CERAMIC	2200pF	20%	250V
C6004	1-119-894-51	CERAMIC	2200pF	20%	250V
C6006	1-161-964-91	CERAMIC	0.0047µF		250V
C6007	1-161-964-91	CERAMIC	0.0047µF		250V
C6008 ⚠	1-119-868-11	ELECT(BLOCK)	820µF	20%	450V
C6009	1-107-671-91	ELECT	22µF	20%	400V
C6010 ⚠	1-161-964-61	CERAMIC	0.0047µF		250V
C6011 ⚠	1-117-227-11	MYLAR	1µF	10%	450V
C6012	1-126-968-11	ELECT	100µF	20%	50V
C6013	1-126-964-11	ELECT	10µF	20%	50V
C6014	1-104-664-11	ELECT	47µF	20%	25V
C6015	1-137-605-11	MYLAR	0.01µF	10%	250V
C6016	1-126-961-11	ELECT	2.2µF	20%	50V
C6017	1-126-968-11	ELECT	100µF	20%	50V
C6018	1-102-112-00	CERAMIC	330pF	10%	50V
C6019	1-102-112-00	CERAMIC	330pF	10%	50V
C6020	1-136-165-00	MYLAR	0.1µF	5%	50V
C6021	1-126-960-11	ELECT	1µF	20%	50V
C6022	1-137-219-11	FILM	0.015µF	5%	0V
C6023	1-115-405-11	FILM	0.039µF	3%	1KV
C6025	1-125-969-91	CERAMIC	680pF	10%	1KV
C6026	1-125-969-91	CERAMIC	680pF	10%	1KV
C6027	1-126-964-11	ELECT	10µF	20%	50V
C6028	1-136-479-11	FILM	0.001µF	2%	50V
C6035	1-126-964-11	ELECT	10µF	20%	50V
C6036	1-136-165-00	MYLAR	0.1µF	5%	50V
C6037	1-126-964-11	ELECT	10µF	20%	50V
C6102	1-104-665-11	ELECT	100µF	20%	25V
C6103	1-104-664-11	ELECT	47µF	20%	25V
C6104	1-101-810-00	CERAMIC	100pF	5%	500V
C6105	1-101-810-00	CERAMIC	100pF	5%	500V
C6108	1-104-664-11	ELECT	47µF	20%	25V
C6113	1-107-639-11	ELECT	47µF	20%	160V
C6114	1-107-641-11	ELECT	220µF	20%	160V
C6115	1-104-665-11	ELECT	100µF	20%	25V
C6116	1-126-968-11	ELECT	100µF	20%	50V
C6117	1-128-546-11	ELECT	10000µF	20%	10V
C6118	1-126-943-11	ELECT	2200µF	20%	25V
C6119	1-126-943-11	ELECT	2200µF	20%	25V
C6120	1-128-549-11	ELECT	3300µF	20%	35V
C6121	1-128-549-11	ELECT	3300µF	20%	35V
C6122	1-126-943-11	ELECT	2200µF	20%	25V
C6123	1-107-641-11	ELECT	220µF	20%	160V
C6124	1-128-549-11	ELECT	3300µF	20%	35V
C6125	1-128-549-11	ELECT	3300µF	20%	35V
C6126	1-104-665-11	ELECT	100µF	20%	25V
C6127	1-107-639-11	ELECT	47µF	20%	160V
C6128	1-128-549-11	ELECT	3300µF	20%	35V
C6129	1-128-549-11	ELECT	3300µF	20%	35V
C6131	1-104-665-11	ELECT	100µF	20%	25V
C6132	1-104-665-11	ELECT	100µF	20%	25V
C6133	1-104-665-11	ELECT	100µF	20%	25V
C6134	1-126-968-11	ELECT	100µF	20%	50V
C6135	1-126-968-11	ELECT	100µF	20%	50V
C6137	1-104-666-11	ELECT	220µF	20%	25V
C6140	1-104-665-11	ELECT	100µF	20%	25V
C6145	1-126-918-11	ELECT	4700µF	20%	6.3V
C6150	1-136-165-00	MYLAR	0.1µF	5%	50V
C6155	1-102-129-00	CERAMIC	0.01µF	10%	50V
C6156	1-102-050-00	CERAMIC	0.01µF	99%	500V
C6157	1-102-129-00	CERAMIC	0.01µF	10%	50V
C6158	1-102-129-00	CERAMIC	0.01µF	10%	50V
C6159	1-102-129-00	CERAMIC	0.01µF	10%	50V
C6160	1-102-129-00	CERAMIC	0.01µF	10%	50V

<CONNECTOR>

CN6004 *	1-580-843-11	PIN, CONNECTOR (POWER)	
CN6101 *	1-564-510-11	PLUG, CONNECTOR 7P	
CN6102 *	1-691-757-11	PIN, CONNECTOR (PC BOARD) 8P	
CN6103	1-695-915-11	TAB (CONTACT)	
CN6104 *	1-564-512-11	PLUG, CONNECTOR 9P	
CN6105 *	1-564-509-11	PLUG, CONNECTOR 6P	
CN6106 *	1-573-964-11	PIN, CONNECTOR (PC BOARD) 6P	
CN6108	1-695-915-11	TAB (CONTACT)	

<DIODE>

D6001	8-719-068-00	DIODE	ERC04-06SE
D6002 ⚠	8-719-033-58	DIODE	RBV-1506
D6003	8-719-068-00	DIODE	ERC04-06SE
D6004	8-719-921-88	DIODE	MTZJ-13B
D6005	8-719-979-64	DIODE	µF4005PKG23

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

REF. NO.	PART NO.	DESCRIPTION	REMARK
D6006	8-719-059-23	DIODE P6KE200AG23	
D6007	8-719-991-33	DIODE 1SS133T-77	
D6009	8-719-982-26	DIODE MTZJ-T-77-33B	
D6010	8-719-991-33	DIODE 1SS133T-77	
D6011	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D6012	8-719-991-33	DIODE 1SS133T-77	
D6013	8-719-991-33	DIODE 1SS133T-77	
D6014	8-719-991-33	DIODE 1SS133T-77	
D6015	8-719-063-73	DIODE D1NL20U-TR	
D6016	8-719-979-64	DIODE µF4005PKG23	
D6017	8-719-110-53	DIODE MTZJ-T-77-20C	
D6018	8-719-979-64	DIODE µF4005PKG23	
D6019	8-719-110-53	DIODE MTZJ-T-77-20C	
D6020	8-719-210-53	DIODE 11ES4-TA1B	
D6021	8-719-110-53	DIODE MTZJ-T-77-20C	
D6022	8-719-110-53	DIODE MTZJ-T-77-20C	
D6023	8-719-991-33	DIODE 1SS133T-77	
D6024	8-719-991-33	DIODE 1SS133T-77	
D6031	8-719-210-53	DIODE 11ES4-TA1B	
D6032	8-719-979-64	DIODE µF4005PKG23	
D6033	8-719-991-33	DIODE 1SS133T-77	
D6034	8-719-991-33	DIODE 1SS133T-77	
D6035	8-719-110-31	DIODE MTZJ-T-77-12B	
D6101	8-719-210-53	DIODE 11ES4-TA1B	
D6102	8-719-057-96	DIODE D10SC6M-4012	
D6103	8-719-052-90	DIODE D1NL40-TR2	
D6104	8-719-031-78	DIODE S2L40F	
D6105	8-719-052-91	DIODE D4SBS4-F	
D6106	8-719-052-90	DIODE D1NL40-TR2	
D6107	8-719-031-78	DIODE S2L40F	
D6108	8-719-057-96	DIODE D10SC6M-4012	
D6109	8-719-049-92	DIODE SF10SC3L	
D6110	8-719-982-27	DIODE MTZJ-T-77-33C	
D6111	8-719-991-33	DIODE 1SS133T-77	
D6112	8-719-991-33	DIODE 1SS133T-77	
D6113	8-719-991-33	DIODE 1SS133T-77	
D6114	8-719-072-30	DIODE D25SC6MRF04	
D6116	8-719-072-29	DIODE D25SC6MF04	
D6117	8-719-988-31	DIODE D10SC6MR	
D6119	8-719-110-31	DIODE MTZJ-T-77-12B	
D6120	8-719-063-73	DIODE D1NL20U-TR	
D6121	8-719-921-63	DIODE MTZJ-T-77-7.5B	
D6122	8-719-991-33	DIODE 1SS133T-77	
D6123	8-719-991-33	DIODE 1SS133T-77	
D6124	8-719-991-33	DIODE 1SS133T-77	
D6125	8-719-991-33	DIODE 1SS133T-77	
		<FUSE>	
F6001 ⚠	1-532-299-00	FUSE, GLASS TUBE T5A 250V	
F6002 ⚠	1-533-350-00	FUSE 4A 250V	
F6105 ⚠	1-576-360-21	FUSE, MULTIPLE 5A	
F6106 ⚠	1-576-360-21	FUSE, MULTIPLE 5A	
		<FERRITE BEAD>	
FB6001	1-410-397-21	FERRITE 1.1µH	
FB6002	1-410-397-21	FERRITE 1.1µH	
FB6005	1-410-397-21	FERRITE 1.1µH	
FB6006	1-410-397-21	FERRITE 1.1µH	
FB6007	1-410-397-21	FERRITE 1.1µH	
FB6101	1-410-397-21	FERRITE 1.1µH	
FB6102	1-410-397-21	FERRITE 1.1µH	
		<IC>	
IC6001	8-759-468-89	IC TOP209P	
IC6002	8-759-185-47	IC IR2112	
IC6003	8-759-077-25	IC IR3M02	
IC6005⚠	8-749-010-64	PHOTO COUPLER PC123FY2	
IC6011⚠	8-749-010-64	PHOTO COUPLER PC123FY2	
IC6101	8-749-920-61	IC SE135N-LF12	
IC6102	8-759-103-93	IC µPC393C	
IC6103	8-759-198-31	IC µPC1093J-1-T	
IC6104	8-759-450-47	IC BA05T	
IC6301	8-759-198-31	IC µPC1093J-1-T	
		<COIL>	
L6001 ⚠	1-431-116-11	TRANSFORMER, LINE FILTER	
L6002 ⚠	1-431-116-11	TRANSFORMER, LINE FILTER	
L6003	1-406-971-21	INDUCTOR 10µH	
L6103	1-412-523-25	INDUCTOR 6.8µH	
L6104	1-412-523-25	INDUCTOR 6.8µH	
L6105	1-412-525-31	INDUCTOR 10µH	
L6106	1-412-525-31	INDUCTOR 10µH	
L6107	1-406-659-11	INDUCTOR 10µH	
L6108	1-412-525-31	INDUCTOR 10µH	
L6109	1-412-525-31	INDUCTOR 10µH	
L6110	1-412-525-31	INDUCTOR 10µH	
L6111	1-412-525-31	INDUCTOR 10µH	
L6112	1-412-525-31	INDUCTOR 10µH	
		<IC LINK>	
PS6101⚠	1-533-597-31	LINK, IC 5A	
PS6102⚠	1-533-597-31	LINK, IC 5A	
PS6103⚠	1-533-790-31	LINK, IC 7A	
PS6104⚠	1-533-790-31	LINK, IC 7A	
		<TRANSISTOR>	
Q6001	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q6002	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q6003	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q6004	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q6005	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
Q6006	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
Q6007	8-729-028-10	TRANSISTOR IRFI744G-LF36	
Q6008	8-729-028-10	TRANSISTOR IRFI744G-LF36	
Q6011	8-729-140-97	TRANSISTOR 2SB734-T-2	
Q6012	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
Q6013	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q6101	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
Q6102	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	

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

REF. NO.	PART NO.	DESCRIPTION			REMARK
Q6103	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q6104	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q6106	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA			
		<RESISTOR>			
R6000	1-260-128-91	CARBON	270K	5% 1/2W	
R6001 ⚠	1-218-265-11	METAL	8.2M	5% 1W	
R6002	1-219-759-11	CARBON	1M	5% 1/2W	
R6004	1-260-131-11	CARBON	470K	5% 1/2W	
R6005	1-249-401-11	CARBON	47	5% 1/4W	
R6006 ⚠	1-260-123-11	CARBON	100K	5% 1/2W	
R6007	1-247-880-00	CARBON	120K	5% 1/4W	
R6008	1-260-128-91	CARBON	270K	5% 1/2W	
R6009 ⚠	1-260-123-11	CARBON	100K	5% 1/2W	
R6010	1-205-997-11	CEMENTED	2.2	5% 10W	
R6011	1-249-437-11	CARBON	47K	5% 1/4W	
R6012	1-212-849-00	FUSIBLE	4.7	5% 1/4W	
R6013	1-247-895-91	CARBON	470K	5% 1/4W	
R6014	1-249-437-11	CARBON	47K	5% 1/4W	
R6015	1-249-437-11	CARBON	47K	5% 1/4W	
R6016	1-249-437-11	CARBON	47K	5% 1/4W	
R6017	1-249-417-11	CARBON	1K	5% 1/4W	
R6018	1-249-433-11	CARBON	22K	5% 1/4W	
R6019	1-249-429-11	CARBON	10K	5% 1/4W	
R6020	1-249-425-11	CARBON	4.7K	5% 1/4W	
R6021	1-247-791-91	CARBON	22	5% 1/4W	
R6022	1-249-437-11	CARBON	47K	5% 1/4W	
R6023	1-247-895-91	CARBON	470K	5% 1/4W	
R6024	1-249-397-11	CARBON	22	5% 1/4W	
R6025	1-249-397-11	CARBON	22	5% 1/4W	
R6026	1-249-425-11	CARBON	4.7K	5% 1/4W	
R6027	1-249-425-11	CARBON	4.7K	5% 1/4W	
R6028	1-215-427-00	METAL	1.8K	1% 1/4W	
R6029	1-249-433-11	CARBON	22K	5% 1/4W	
R6030	1-249-437-11	CARBON	47K	5% 1/4W	
R6031	1-249-425-11	CARBON	4.7K	5% 1/4W	
R6032	1-249-417-11	CARBON	1K	5% 1/4W	
R6033	1-215-444-00	METAL	9.1K	1% 1/4W	
R6034	1-249-417-11	CARBON	1K	5% 1/4W	
R6039	1-249-429-11	CARBON	10K	5% 1/4W	
R6040	1-249-429-11	CARBON	10K	5% 1/4W	
R6041	1-249-429-11	CARBON	10K	5% 1/4W	
R6042	1-249-433-11	CARBON	22K	5% 1/4W	
R6043	1-260-134-11	CARBON	820K	5% 1/2W	
R6101	1-215-437-00	METAL	4.7K	1% 1/4W	
R6102	1-215-479-00	METAL	270K	1% 1/4W	
R6103	1-215-437-00	METAL	4.7K	1% 1/4W	
R6104	1-215-413-00	METAL	470	1% 1/4W	
R6105	1-249-417-11	CARBON	1K	5% 1/4W	
R6106	1-249-417-11	CARBON	1K	5% 1/4W	
R6108	1-249-425-11	CARBON	4.7K	5% 1/4W	
R6109	1-249-425-11	CARBON	4.7K	5% 1/4W	
R6110	1-249-417-11	CARBON	1K	5% 1/4W	
R6111	1-215-900-11	METAL OXIDE	22K	5% 2W	
R6112	1-249-417-11	CARBON	1K	5% 1/4W	
R6113	1-249-429-11	CARBON	10K	5% 1/4W	
R6115	1-249-409-11	CARBON	220	5% 1/4W	
R6116	1-249-429-11	CARBON	10K	5% 1/4W	
R6117	1-249-413-11	CARBON	470	5% 1/4W	
R6118	1-216-361-00	METAL OXIDE	0.22	5% 2W	
R6119	1-249-429-11	CARBON	10K	5% 1/4W	
R6120	1-249-429-11	CARBON	10K	5% 1/4W	
R6121	1-249-429-11	CARBON	10K	5% 1/4W	
R6122	1-249-377-11	CARBON	0.47	5% 1/4W	
R6123	1-249-377-11	CARBON	0.47	5% 1/4W	
R6124	1-249-377-11	CARBON	0.47	5% 1/4W	
R6125	1-249-425-11	CARBON	4.7K	5% 1/4W	
R6126	1-249-417-11	CARBON	1K	5% 1/4W	
R6128	1-249-417-11	CARBON	1K	5% 1/4W	
R6129	1-249-421-11	CARBON	2.2K	5% 1/4W	
R6130	1-249-425-11	CARBON	4.7K	5% 1/4W	
R6132	1-249-417-11	CARBON	1K	5% 1/4W	
R6133	1-249-425-11	CARBON	4.7K	5% 1/4W	
R6134	1-249-417-11	CARBON	1K	5% 1/4W	
R6135	1-249-425-11	CARBON	4.7K	5% 1/4W	
R6136	1-249-425-11	CARBON	4.7K	5% 1/4W	
R6141	1-249-401-11	CARBON	47	5% 1/4W	
R6142	1-249-425-11	CARBON	4.7K	5% 1/4W	
R6143	1-249-425-11	CARBON	4.7K	5% 1/4W	
R6301	1-215-454-00	METAL	24K	1% 1/4W	
R6302	1-215-431-00	METAL	2.7K	1% 1/4W	
R6303	1-249-417-11	CARBON	1K	5% 1/4W	
		<RELAY>			
RY6001⚠	1-515-999-11	RELAY, POWER			
RY6002⚠	1-515-999-11	RELAY, POWER			
		<TRANSFORMER>			
T6001 ⚠	1-429-807-11	TRANSFORMER, CONVERTER (PIT)			
T6002 ⚠	1-431-897-11	TRANSFORMER, CONVERTER (PIT)			
T6003 ⚠	1-431-732-11	TRANSFORMER, CONVERTER (SRT)			
		<VARISTOR>			
VD6001	1-801-073-31	VARISTOR TNR14V471K660			
VD6002	1-801-073-31	VARISTOR TNR14V471K660			
**********					
*	A-1380-624-A	K BOARD, COMPLETE			
		**********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C2001	1-126-960-11	ELECT	1µF	20% 50V	
C2002	1-126-960-11	ELECT	1µF	20% 50V	
C2003	1-126-964-11	ELECT	10µF	20% 50V	
C2004	1-126-964-11	ELECT	10µF	20% 50V	
C2005	1-104-664-11	ELECT	47µF	20% 25V	

REF. NO.	PART NO.	DESCRIPTION			REMARK
C2006	1-126-964-11	ELECT	10µF	20%	50V
C2007	1-126-960-11	ELECT	1µF	20%	50V
C2008	1-126-960-11	ELECT	1µF	20%	50V
C2009	1-126-964-11	ELECT	10µF	20%	50V
C2010	1-126-964-11	ELECT	10µF	20%	50V
C2011	1-126-964-11	ELECT	10µF	20%	50V
C2012	1-104-664-11	ELECT	47µF	20%	25V
C2013	1-104-664-11	ELECT	47µF	20%	25V
C2014	1-104-665-11	ELECT	100µF	20%	25V
C2015	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2016	1-130-495-00	MYLAR	0.1µF	5%	50V
C2017	1-104-760-11	CERAMIC CHIP	0.047µF	10%	50V
C2019	1-126-960-11	ELECT	1µF	20%	50V
C2021	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2022	1-104-664-11	ELECT	47µF	20%	25V
C2023	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2025	1-104-665-11	ELECT	100µF	20%	25V
C2028	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V
C2029	1-126-963-11	ELECT	4.7µF	20%	50V
C2030	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C2031	1-104-664-11	ELECT	47µF	20%	25V
C2032	1-126-933-11	ELECT	100µF	20%	16V
C2033	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2034	1-104-664-11	ELECT	47µF	20%	25V
C2035	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V
C2036	1-126-963-11	ELECT	4.7µF	20%	50V
C2037	1-126-964-11	ELECT	10µF	20%	50V
C2038	1-126-964-11	ELECT	10µF	20%	50V
C2039	1-126-960-11	ELECT	1µF	20%	50V
C2040	1-126-960-11	ELECT	1µF	20%	50V
C2041	1-104-664-11	ELECT	47µF	20%	25V
C2045	1-126-965-11	ELECT	22µF	20%	50V
C2046	1-104-664-11	ELECT	47µF	20%	25V
C2047	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2049	1-163-227-11	CERAMIC CHIP	10pF	0.50pF	50V
C2050	1-163-091-00	CERAMIC CHIP	8pF	0.25pF	50V
C2051	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2052	1-104-664-11	ELECT	47µF	20%	25V
C2053	1-104-664-11	ELECT	47µF	20%	25V
C2054	1-126-935-11	ELECT	470µF	20%	16V
C2055	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2056	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2057	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2058	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C2059	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2060	1-126-933-11	ELECT	100µF	20%	16V
C2062	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V
C2063	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V
C2064	1-126-964-11	ELECT	10µF	20%	50V
C2065	1-126-964-11	ELECT	10µF	20%	50V
C2066	1-104-664-11	ELECT	47µF	20%	25V
C2067	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C2068	1-104-664-11	ELECT	47µF	20%	25V
C2069	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C2070	1-130-495-00	MYLAR	0.1µF	5%	50V
C2071	1-128-549-11	ELECT	3300µF	20%	35V
C2072	1-130-495-00	MYLAR	0.1µF	5%	50V
C2073	1-104-664-11	ELECT	47µF	20%	25V
C2074	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C2075	1-104-664-11	ELECT	47µF	20%	25V
C2076	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C2077	1-128-549-11	ELECT	3300µF	20%	35V
C2078	1-104-664-11	ELECT	47µF	20%	25V
C2079	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C2080	1-104-664-11	ELECT	47µF	20%	25V
C2081	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C2083	1-126-965-11	ELECT	22µF	20%	50V
C2084	1-104-664-11	ELECT	47µF	20%	25V
C2085	1-163-014-00	CERAMIC CHIP	0.0027µF	5%	50V
C2086	1-163-014-00	CERAMIC CHIP	0.0027µF	5%	50V
C2087	1-126-961-11	ELECT	2.2µF	20%	50V
C2089	1-130-495-00	MYLAR	0.1µF	5%	50V
C2090	1-130-495-00	MYLAR	0.1µF	5%	50V
C2091	1-130-495-00	MYLAR	0.1µF	5%	50V
C2092	1-130-495-00	MYLAR	0.1µF	5%	50V
C2093	1-126-961-11	ELECT	2.2µF	20%	50V
C2095	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V
C2096	1-130-495-00	MYLAR	0.1µF	5%	50V
C2097	1-130-495-00	MYLAR	0.1µF	5%	50V
C2098	1-130-495-00	MYLAR	0.1µF	5%	50V
C2099	1-130-495-00	MYLAR	0.1µF	5%	50V

<CONNECTOR>

CN2002*	1-691-135-11	PIN, CONNECTOR (PC BOARD) 4P
CN2003*	1-564-513-11	PLUG, CONNECTOR 10P
CN2004*	1-564-510-11	PLUG, CONNECTOR 7P
CN2005*	1-691-757-11	PIN, CONNECTOR (PC BOARD) 8P

<DIODE>

D2001	8-719-400-75	DIODE MA3091-TX
D2002	8-719-400-75	DIODE MA3091-TX
D2003	8-719-400-75	DIODE MA3091-TX
D2004	8-719-400-75	DIODE MA3091-TX
D2008	8-719-073-01	DIODE MA111-TX
D2009	8-719-073-01	DIODE MA111-TX
D2010	8-719-073-01	DIODE MA111-TX
D2012	8-719-073-01	DIODE MA111-TX
D2013	8-719-073-01	DIODE MA111-TX
D2014	8-719-073-01	DIODE MA111-TX
D2017	8-719-073-01	DIODE MA111-TX
D2019	8-719-988-61	DIODE 1SS355TE-17
D2020	8-719-073-01	DIODE MA111-TX
D2021	8-719-073-01	DIODE MA111-TX
D2022	8-719-073-01	DIODE MA111-TX
D2023	8-719-073-01	DIODE MA111-TX
D2024	8-719-988-61	DIODE 1SS355TE-17
D2025	8-719-400-75	DIODE MA3091-TX
D2026	8-719-400-75	DIODE MA3091-TX
D2027	8-719-400-75	DIODE MA3091-TX
D2028	8-719-400-75	DIODE MA3091-TX
D2029	8-719-402-92	DIODE MA3220M-TX
D2030	8-719-402-92	DIODE MA3220M-TX

K

REF. NO.	PART NO.	DESCRIPTION	REMARK
D2031	8-719-402-92	DIODE MA3220M-TX	
D2032	8-719-402-92	DIODE MA3220M-TX	
D2033	8-719-977-28	DIODE UDZS-TE17-10B	
D2034	8-719-977-28	DIODE UDZS-TE17-10B	
D2050	8-719-402-92	DIODE MA3220M-TX	
D2051	8-719-402-92	DIODE MA3220M-TX	
D2052	8-719-402-92	DIODE MA3220M-TX	
D2053	8-719-402-92	DIODE MA3220M-TX	
D2054	8-719-402-92	DIODE MA3220M-TX	
D2055	8-719-402-92	DIODE MA3220M-TX	
D2056	8-719-402-92	DIODE MA3220M-TX	
D2057	8-719-402-92	DIODE MA3220M-TX	
D2058	8-719-977-28	DIODE UDZS-TE17-10B	
D2059	8-719-977-28	DIODE UDZS-TE17-10B	
		<FERRITE BEAD>	
FB2001	1-414-135-11	FERRITE 0µH	
FB2002	1-414-551-11	FERRITE 0µH	
FB2003	1-414-551-11	FERRITE 0µH	
FB2004	1-414-551-11	FERRITE 0µH	
		<IC>	
IC2001	8-759-634-51	IC NJM4558D	
IC2002	8-759-190-89	IC TDA7265	
IC2003	8-759-352-91	IC PST9143NL	
IC2004	8-759-544-72	IC TDA7312	
IC2005	8-759-549-74	IC TC9447F-003	
IC2006	8-759-231-53	IC MC7805CT	
IC2007	8-759-198-03	IC PQ09RF21	
IC2008	8-759-231-58	IC MC7812CT	
IC2009	8-759-634-51	IC NJM4558D	
		<JACK>	
J2001	1-785-083-11	JACK BLOCK, PIN 2P	
J2002	1-785-083-21	JACK BLOCK, PIN 2P	
		<COIL>	
L2003	1-414-175-11	INDUCTOR 0.47µH	
		<TRANSISTOR>	
Q2001	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2002	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2003	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2004	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2005	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2006	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2007	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2008	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2009	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2010	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2011	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q2012	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2013	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2015	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2016	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q2017	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q2018	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
		<RESISTOR>	
R2001	1-216-041-00	RES-CHIP 470 5% 1/10W	
R2002	1-216-113-00	RES-CHIP 470K 5% 1/10W	
R2003	1-216-113-00	RES-CHIP 470K 5% 1/10W	
R2004	1-216-041-00	RES-CHIP 470 5% 1/10W	
R2005	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R2006	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R2007	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R2008	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R2009	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R2010	1-216-113-00	RES-CHIP 470K 5% 1/10W	
R2011	1-216-041-00	RES-CHIP 470 5% 1/10W	
R2012	1-216-113-00	RES-CHIP 470K 5% 1/10W	
R2013	1-216-041-00	RES-CHIP 470 5% 1/10W	
R2014	1-216-069-00	RES-CHIP 6.8K 5% 1/10W	
R2015	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R2016	1-216-069-00	RES-CHIP 6.8K 5% 1/10W	
R2017	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R2018	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R2019	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R2020	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R2021	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R2022	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R2023	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R2024	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R2025	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R2026	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R2027	1-216-077-91	RES-CHIP 15K 5% 1/10W	
R2028	1-216-041-00	RES-CHIP 470 5% 1/10W	
R2029	1-216-077-91	RES-CHIP 15K 5% 1/10W	
R2030	1-216-083-00	RES-CHIP 27K 5% 1/10W	
R2031	1-216-083-00	RES-CHIP 27K 5% 1/10W	
R2032	1-216-025-11	RES-CHIP 100 5% 1/10W	
R2033	1-216-025-11	RES-CHIP 100 5% 1/10W	
R2034	1-216-041-00	RES-CHIP 470 5% 1/10W	
R2035	1-216-041-00	RES-CHIP 470 5% 1/10W	
R2036	1-216-041-00	RES-CHIP 470 5% 1/10W	
R2037	1-216-079-00	RES-CHIP 18K 5% 1/10W	
R2039	1-216-079-00	RES-CHIP 18K 5% 1/10W	
R2040	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R2041	1-216-041-00	RES-CHIP 470 5% 1/10W	
R2042	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R2043	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R2044	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R2045	1-216-025-11	RES-CHIP 100 5% 1/10W	
R2046	1-216-025-11	RES-CHIP 100 5% 1/10W	
R2047	1-216-025-11	RES-CHIP 100 5% 1/10W	
R2048	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R2049	1-216-085-00	RES-CHIP 33K 5% 1/10W	
R2050	1-216-025-11	RES-CHIP 100 5% 1/10W	

REF. NO.	PART NO.	DESCRIPTION			REMARK
R2051	1-216-097-91	RES-CHIP	100K	5%	1/10W
R2052	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2053	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2054	1-216-077-91	RES-CHIP	15K	5%	1/10W
R2055	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2056	1-216-089-91	RES-CHIP	47K	5%	1/10W
R2057	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2058	1-216-075-00	RES-CHIP	12K	5%	1/10W
R2059	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2060	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2063	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2064	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2065	1-216-025-11	RES-CHIP	100	5%	1/10W
R2066	1-215-865-11	METAL OXIDE	220	5%	1W
R2068	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R2069	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2071	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R2072	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2073	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2074	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2075	1-216-081-00	RES-CHIP	22K	5%	1/10W
R2076	1-216-081-00	RES-CHIP	22K	5%	1/10W
R2077	1-216-121-91	RES-CHIP	1M	5%	1/10W
R2079	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2081	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R2082	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2083	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2084	1-216-025-11	RES-CHIP	100	5%	1/10W
R2085	1-216-035-00	RES-CHIP	270	5%	1/10W
R2086	1-216-035-00	RES-CHIP	270	5%	1/10W
R2087	1-215-911-11	METAL OXIDE	100	5%	3W
R2088	1-215-911-11	METAL OXIDE	100	5%	3W
R2089	1-215-886-11	METAL OXIDE	100	5%	2W
R2091	1-215-911-11	METAL OXIDE	100	5%	3W
R2092	1-215-911-11	METAL OXIDE	100	5%	3W
R2093	1-216-025-11	RES-CHIP	100	5%	1/10W
R2094	1-216-025-11	RES-CHIP	100	5%	1/10W
R2095	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R2096	1-216-067-00	RES-CHIP	5.6K	5%	1/10W
R2097	1-216-357-00	METAL OXIDE	4.7	5%	1W
R2098	1-216-357-00	METAL OXIDE	4.7	5%	1W
R2099	1-216-089-91	RES-CHIP	47K	5%	1/10W
R2100	1-216-089-91	RES-CHIP	47K	5%	1/10W
R2101	1-216-079-00	RES-CHIP	18K	5%	1/10W
R2102	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2103	1-216-079-00	RES-CHIP	18K	5%	1/10W
R2104	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2105	1-216-089-91	RES-CHIP	47K	5%	1/10W
R2106	1-216-089-91	RES-CHIP	47K	5%	1/10W
R2107	1-216-025-11	RES-CHIP	100	5%	1/10W
R2108	1-216-025-11	RES-CHIP	100	5%	1/10W
		<RELAY>			
RY2001	1-755-028-11	RELAY			
RY2002	1-755-028-11	RELAY			

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<TERMINAL BOARD>			
TB2001	1-694-441-11	TERMINAL, PUSH (CENTER SPEAKER IN)			
		<CRYSTAL>			
X2001	1-781-590-21	VIBRATOR, CRYSTAL 33.8688mHz			
**********					
*	A-1372-873-A	HA BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C3101	1-136-165-00	MYLAR	0.1µF	5%	50V
C3102	1-136-165-00	MYLAR	0.1µF	5%	50V
		<CONNECTOR>			
CN3101*	1-564-521-11	PLUG, CONNECTOR 6P			
CN3103*	1-564-518-11	PLUG, CONNECTOR 3P			
CN3201*	1-564-526-11	PLUG, CONNECTOR 11P			
		<DIODE>			
D3101	8-719-053-43	DIODE SLR-325VCT31			
D3102	8-719-053-43	DIODE SLR-325VCT31			
D3201	8-719-108-12	DIODE RD9.1EW-T1			
D3202	8-719-108-12	DIODE RD9.1EW-T1			
D3203	8-719-108-12	DIODE RD9.1EW-T1			
D3204	8-719-108-12	DIODE RD9.1EW-T1			
D3205	8-719-108-12	DIODE RD9.1EW-T1			
D3206	8-719-108-12	DIODE RD9.1EW-T1			
		<JACK>			
J3201	1-565-931-11	TERMINAL BLOCK, S 3P (VIDEO 2 INPUT)			
		<RESISTOR>			
R3101	1-215-417-00	METAL	680	1%	1/4W
R3102	1-215-421-00	METAL	1K	1%	1/4W
R3103	1-215-423-00	METAL	1.2K	1%	1/4W
R3104	1-215-427-00	METAL	1.8K	1%	1/4W
R3105	1-215-433-00	METAL	3.3K	1%	1/4W
R3201	1-247-804-11	CARBON	75	5%	1/4W
R3202	1-249-417-11	CARBON	1K	5%	1/4W
R3203	1-247-804-11	CARBON	75	5%	1/4W
R3204	1-247-804-11	CARBON	75	5%	1/4W
R3205	1-247-895-91	CARBON	470K	5%	1/4W
R3206	1-247-895-91	CARBON	470K	5%	1/4W
R3207	1-215-441-00	METAL	6.8K	1%	1/4W
R3209	1-215-451-00	METAL	18K	1%	1/4W

HA HC S

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

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<SWITCH>	
S3101	1-572-198-11	SWITCH, KEYBOARD (POWER)	
S3102	1-572-198-11	SWITCH, KEYBOARD (CHANNEL +)	
S3103	1-572-198-11	SWITCH, KEYBOARD (CHANNEL -)	
S3104	1-572-198-11	SWITCH, KEYBOARD (VOLUME +)	
S3105	1-572-198-11	SWITCH, KEYBOARD (VOLUME -)	
S3106	1-572-198-11	SWITCH, KEYBOARD (TV/VIDEO)	
S3107	1-572-198-11	SWITCH, KEYBOARD (FLASH FOCUS)	
S3108	1-572-198-11	SWITCH, KEYBOARD (SET UP)	
**********			
*	A-1372-874-A	HC BOARD, COMPLETE	
		**********	
		<CONNECTOR>	
CN3301*	1-564-518-11	PLUG, CONNECTOR 3P	
		<DIODE>	
D3301	8-719-066-43	DIODE GP1U28Y	
D3302	8-719-109-89	DIODE MTZJ-T-77-5.6B	
D3303	8-719-109-89	DIODE MTZJ-T-77-5.6B	
		<RESISTOR>	
R3301	1-247-807-31	CARBON 100 5% 1/4W	
R3302	1-247-807-31	CARBON 100 5% 1/4W	
**********			
*	A-1390-933-A	S BOARD, COMPLETE	
		**********	
		<CONNECTOR>	
CN3001*	1-564-506-11	PLUG, CONNECTOR 3P	
		<DIODE>	
D3001	8-719-109-89	DIODE MTZJ-T-77-5.6	
		<SWITCH>	
S3001	1-528-911-21	BATTERY, SOLAR	
**********			

REF. NO.	PART NO.	DESCRIPTION	REMARK
		MISCELLANEOUS	
		**********	
⚠	1-223-925-51	RESISTOR ASSY (HIGH-VOLTAGE)	FOCUS PACK
	1-251-321-12	SELECTOR, ANTENNA	
⚠	1-451-510-11	DEFLECTION YORK	
	1-452-790-21	NECK ASSY	
	1-500-021-11	CLAMP, SLEEVE FERRITE	
	1-529-403-21	SPEAKER (6.6cm)	
	1-529-643-11	SPEAKER (13cm) (HR53KR1)	
	1-529-644-11	SPEAKER (16cm) (HR61KR1)	
	1-543-653-11	CORE ASSY, BEAD (DIVISION TYPE)	
*	1-556-945-21	CABLE, P-P	
*	1-557-056-31	CABLE, P-P	
⚠	1-757-131-11	CORD, AC POWER(WITH CONNECTOR)	
⚠	8-598-955-13	BLOCK ASSY, HIGH-VOLTAGE	
⚠	8-733-570-15	CRT 07MXC2(G)(HEATER)	
⚠	8-733-572-15	CRT 07MXC3(R)(HEATER) (HR53KR1)	
⚠	8-733-573-15	CRT 07MXC4(R)(HEATER) (HR61KR1)	
⚠	8-733-575-15	CRT 07MAC3(B)(HEATER) (HR53KR1)	
⚠	8-733-576-15	CRT 07MAC4(B)(HEATER) (HR61KR1)	
**********			
		ACCESSORIES AND PACKING MATERIALS	
		**********	
*	4-041-426-01	BAG, PROTECTION (HR53KR1)	
*	4-042-463-01	SHEET, PROTECTION	
	4-077-551-11	MANUAL, INSTRUCTION	
*	4-075-779-01	INDIVIDUAL CARTON (HR53KR1)	
*	4-075-780-01	BOARD BOTTOM (HR53KR1)	
*	4-075-781-01	TRAY (HR53KR1)	
*	4-075-782-01	CUSHION (UPPER) (ASSY) (HR53KR1)	
*	4-075-785-01	CUSHION (LOWER) (ASSY) (HR53KR1)	
*	4-075-788-01	INDIVIDUAL CARTON (HR61KR1)	
*	4-075-789-01	BOARD BOTTOM (HR61KR1)	
*	4-075-790-01	TRAY (HR61KR1)	
*	4-075-791-01	CUSHION (UPPER) (ASSY) (HR61KR1)	
*	4-075-794-01	CUSHION (LOWER) (ASSY) (HR61KR1)	
*	4-076-420-01	BAG, PROTECTION (HR61KR1)	
		REMOTE COMMANDER	
		**********	
	1-476-309-11	REMOTE COMMANDER (RM-Y902K)	
	9-933-736-01	COVER, BATTERY (FOR RM-Y902K)	

9-965-421-01

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