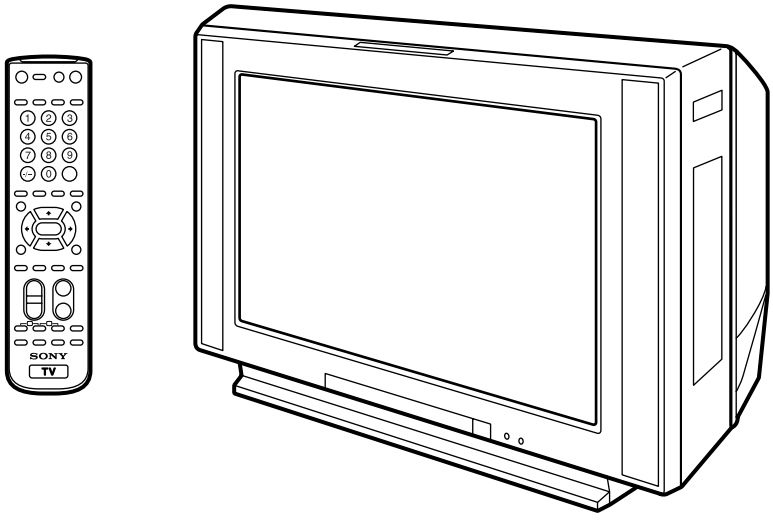
Self Diagnosis Supported model

SERVICE MANUAL BG-3S CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-EF34M31	RM-951	OCE	SCC-N99A-A
KV-EF34M61	RM-951	GE	SCC-U12D-A
KV-EF34M80	RM-951	ME	SCC-U16E-A

MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-EF34M90	RM-951	HK	SCC-U17C-A
KV-EF34M90	RM-951	JE	SCC-P01A-A
KV-EF34M91	RM-951	ME	SCC-U16D-A



MICROFILM

TRINITRON® COLOR TV

SONY®

SPECIFICATIONS

			Note
Power requirements	110-240 V AC, 50/60 Hz		
Power consumption (W)	Indicated on the rear of the TV		
Television system	B/G, I, D/K, M		
Color system	PAL, PAL 60, SECAM, NTSC4.43, NTSC3.58		
Stereo system	NICAM Stereo B/G, I; A2 Stereo (German) B/G		
Teletext language	English, Arabic, French		
Channel coverage			
B/G	VHF: E2 to E12 / UHF: E21 to E69 / CATV: S01 to S03, S1 to S41		
I	UHF: B21 to B68 / CATV: S01 to S03, S1 to S41		
D/K	VHF: C1 to C12, R1 to R12 / UHF: C13 to C57, R21 to R60 CATV: S01 to S03, S1 to S41, Z1 to Z39		
M	VHF: A2 to A13 / UHF: A14 to A79 / CATV: A-8 to A-2, A to W+4, W+6 to W+84		
Antenna	75-ohm external terminal		
Audio output (Speaker)	15W + 15W*		
Number of terminal			
(Video)	Input: 4 Output: 1	Phono jacks; 1 Vp-p, 75 ohms	
♪ (Audio)	Input: 4 Output: 1	Phono jacks; 500 mVrms	
(S Video)	Input: 2	Y : 1 Vp-p, 75 ohms, unbalanced, sync negative C : 0.286 Vp-p, 75 ohms	
(Component Video)	Input: 1	Phone jacks Y : 1 Vp-p, 75 ohms, sync negative C_B : 0.7 Vp-p, 75 ohms C_R : 0.7 Vp-p, 75 ohms Audio : 500 mVrms	
(Headphones)	Output: 1	Stereo minijack	
Picture tube	34 inch		
Tube size (mm)	859		Measured diagonally
Screen size (mm)	800		Measured diagonally
Dimension (w/h/d, mm)	859 × 660.5 × 573.5		
Mass (kg)	83		

* 10% distortion

Design and specifications are subject to change without notice.

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.

SAFETY-RELATED COMPONENT WARNING!!

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

TABLE OF CONTENTS

SELF DIAGNOSTIC FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER lamp will automatically begin to flash.
The number of times the lamp flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER lamp flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the remote commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

1. DIAGNOSTIC TEST INDICATORS

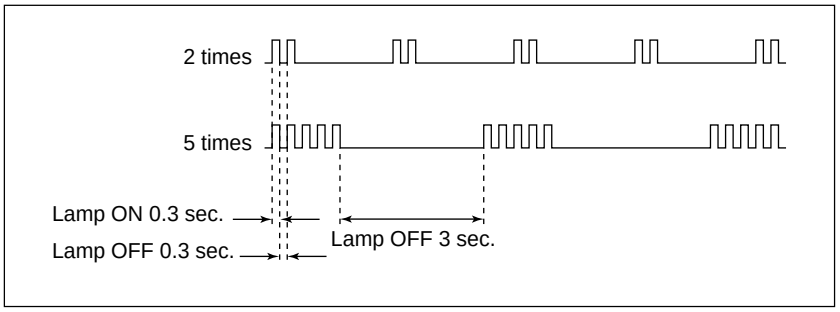
When an errors occurs, the STANDBY/TIMER lamp will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the lamp will identify the first of the problem areas.

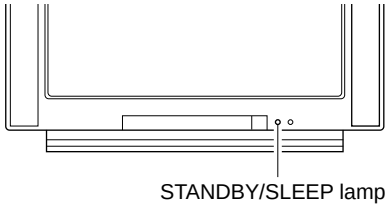
Result for all of the following diagnostic items are displayed on screen. No error has occured if the screen displays a "0".

Diagnostic Item Description	No. of times STANDBY/TIMER lamp flashes	Self-diagnostic display/Diagnostic result	Probable Cause Location	Detected Symptoms
• Power does not turn on	Does not light	—	• Power cord is not plugged in. • Fuse is burned out F4601 (F)	• Power does not come on. • No power is supplied to the TV. • AC power supply is faulty.
• +B overcurrent (OCP) or overvoltage (OVP) • Vertical deflection stopped • Horizontal deflection overdrive	2 times	002:000 or 002:001~255 003:001~255 004:001~255 at the same time	• H.OUT Q511 is shorted. (A board) • IC701 is shorted. (C board) • -13V is not supplied. (A board) • IC 503 faulty (A board)	• Power does not come on. • Load on power line is shorted. • Has entered standby state after horizontal raster. • Vertical deflection pulse is stopped. • Power line is shorted or power supply is stopped.
• White balance failure (no PICTURE)	5 times —	005:000 or 005:001~225 101:00 or 101:001~225	• G2 is improperly adjusted. (Note 2) • CRT problem. • Video OUT IC701 is faulty. (C board) • IC301 is faulty. (A board) • No connection A board to C board.	• No raster is generated. • CRT cathode current detection reference pulse output is small.
• Micro reset			• Discharge CRT (C Board) • Static discharge • External noise	• Power is shut down shortly, after this return back to normal. • Detect Micro latch up.

Note 1: If a + B overcurrent is detected, stoppage of the vertical deflection is detected simultaneously.
The symptom that is diagnosed first by the microcontroller is displayed on the screen.
Note 2: Refer to screen (G2) Adjustment in section 3-4 of this manual.

2. DISPLAY OF STANDBY/TIMER LIGHT FLASH COUNT





Diagnostic Item	Flash Count*
+B overcurrent/overvoltage Vertical deflection stopped	2 times
White balance failure	5 times

* One flash count is not used for self-diagnostic.

3. STOPPING THE STANDBY/TIMER FLASH

Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/TIMER lamp from flashing.

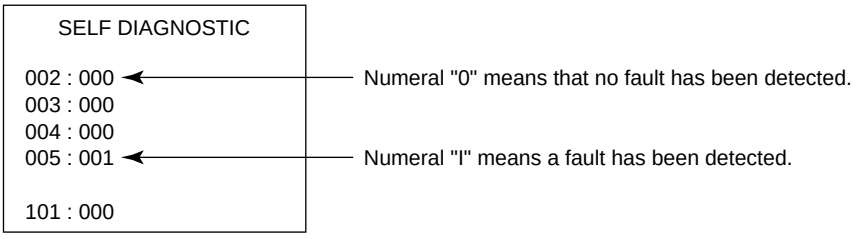
4. SELF-DIAGNOSTIC SCREEN DISPLAY

For errors with symptoms such as “power sometimes shuts off” or “screen sometimes goes out” that cannot be confirmed, it is possible to bring up past occurances of failure for confirmation on the screen:

[To Bring Up Screen Test]
In standby mode, press buttons on the remote commander sequentially in rapid succession as shown below:

Screen display ➡ channel 5 ➡ Sound volume - ➡ Power ON
⇧
Note that this differs from entering the service mode (mode volume +).

Self-Diagnosis screen display



5. HANDLING OF SELF-DIAGNOSTIC SCREEN DISPLAY

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to “0”.

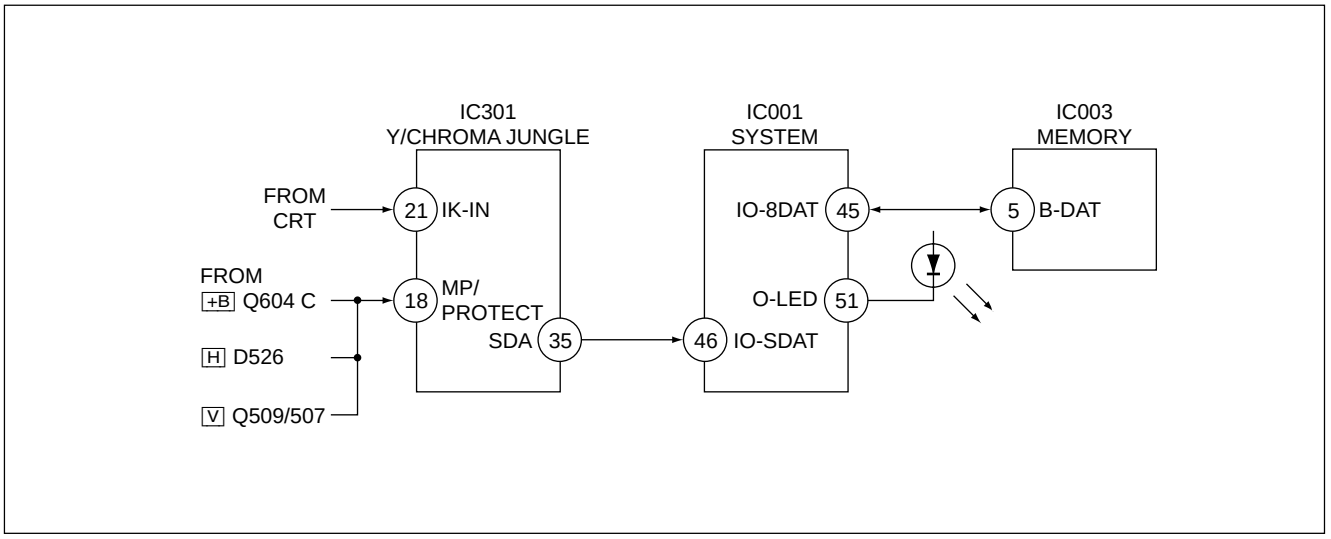
Unless the result display is cleared to “0”, the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

[Clearing the result display]
To clear the result display to “0”, press buttons on the remote commander sequentially as shown below when the diagnostic screen is being displayed.

Channel 8 ➡ 0

[Quitting Self-diagnostic screen]
To quit the entire self-diagnostic screen, turn off the power switch on the remote commander or the main unit.

6. SELF-DIAGNOSTIC CIRCUIT



+B overcurrent (OCP)	Occurs when an overcurrent on the +B(135) line is detected by Q604(A board). If Q604(A board) go to ON and the voltage to pin 18 of IC301(A board) should go down when V.SYNC is more than seven verticals in a period, the unit will automatically turn off.
Horizontal deflection overdrive	Occurs when an overdrive on H drive line is detected by D526(A board). Power supply will be shut down when detect it.
Vertical deflection stopped	Occurs when an absence of the vertical deflection pulse is detected by Q509(A board) and IC001(A board) shut down the power supply.
Vertical deflection overcurrent	Occurs when an overcurrent on V drive line is detected by Q507(A board). Power supply will be shut down when detect this by IC001(A board).
White balance failure	If the RGB levels* do not balance or become low level within 5 seconds, this error will be detected by IC301(A board). TV will stay on, but there will be no picture. * (Refers to the RGB levels of the AKB detection Ref pulse that detects IK.)

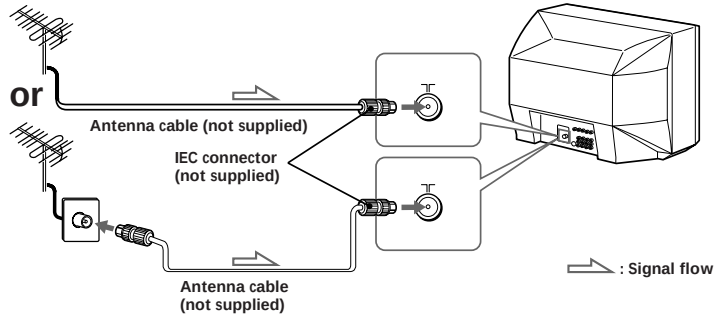
The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remein as in the manual.

Getting Started

Step 1

Connect the antenna

If you wish to connect a VCR, see the "Connecting a VCR" diagram below.

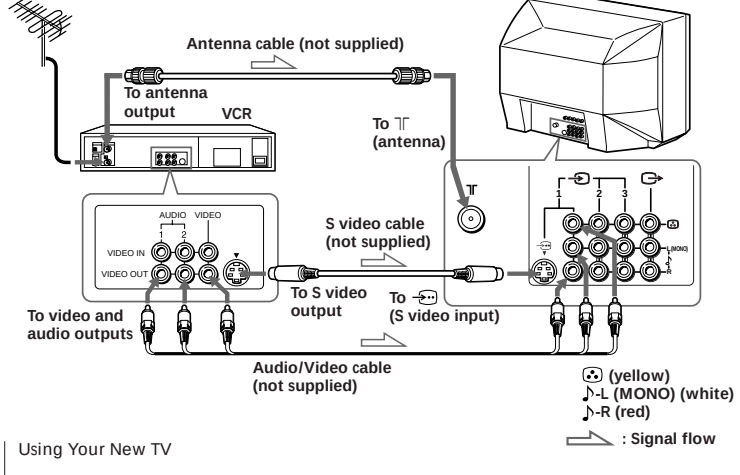


CAUTION

Do not connect the power cord until all other connections are complete; otherwise, a minimal current leakage through the antenna and/or other terminals to the ground could occur.

Connecting a VCR

To play a video tape, see page 10.

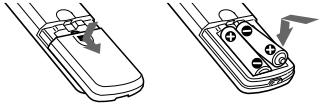


Notes

- If you connect a monaural VCR, connect the yellow plug to (the yellow jack) and the black plug to -L (MONO) (the white jack).
- If you connect a VCR to the (antenna) terminal, preset the signal output from the VCR to the program number 0 on the TV.
- Do not have concurrent connections of video equipment to the 3 (video input) jacks at the front and the 3 (video input) jacks at the rear of your TV; otherwise, the picture will not be displayed properly on the screen.
- When both the (S video input) and 1 (video input) are connected, the (S video input) is automatically selected. To view the video input to 1 (video input), disconnect the S video cable.

Step 2

Insert the batteries into the remote

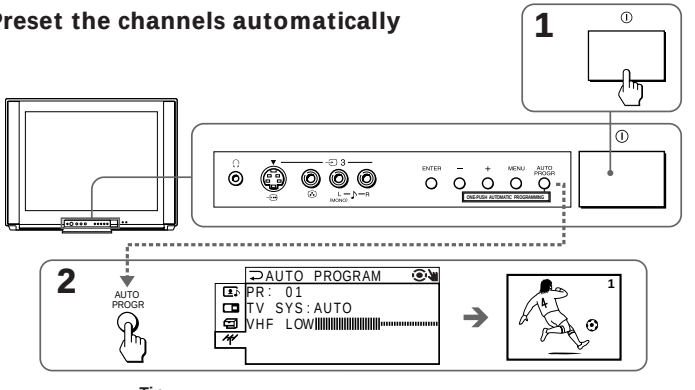


Note

- Do not use old batteries or different types of batteries together.

Step 3

Preset the channels automatically

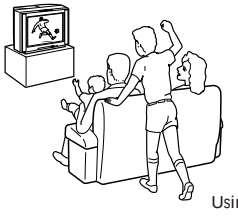


Tip

- To stop the automatic channel presetting, press MENU twice.

Now You Are Ready. . .

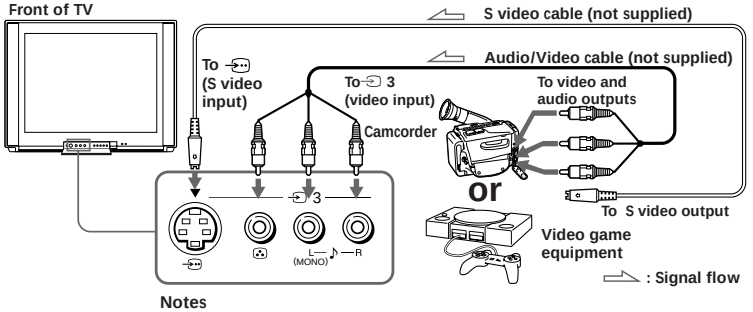
The channels are now automatically preset in your TV. To preset the channels manually, see page 37.



Connecting optional components

You can connect optional audio/video components, such as a VCR, multi disc player, camcorder, video game, or stereo system. For operations of the connected equipment, see pages 10 and 25.

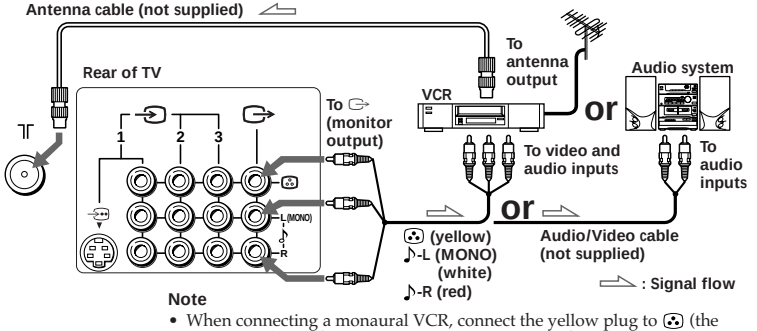
Connecting a camcorder/video game equipment using the ⇦ (video input) jacks



Notes

- You can also connect video equipment to the ⇦ 1, 2, or 3 (video input) jacks at the rear of your TV.
- Do not have concurrent connections of video equipment to the ⇦ 3 (video input) jacks at the front and the ⇦ 3 (video input) jacks at the rear of your TV; otherwise, the picture will not be displayed properly on the screen.
- When both the ⇦ (S video input) and ⇦ 1 (video input) are connected, the ⇦ (S video input) is automatically selected. To view the video input to ⇦ 1 (video input), disconnect the S video cable.

Connecting audio/video equipment using the ⇨ (monitor output) jacks

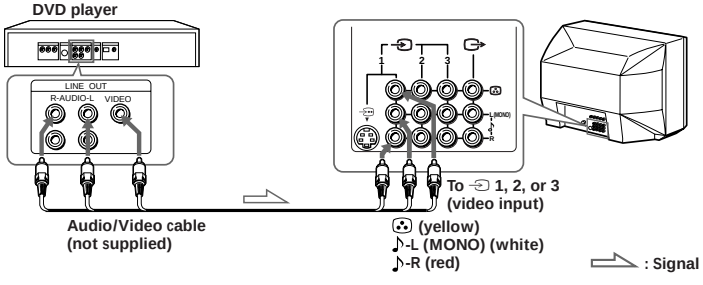


Note

- When connecting a monaural VCR, connect the yellow plug to (the yellow jack) and the black plug to ♪ -L (MONO) (the white jack).

Connecting a DVD player

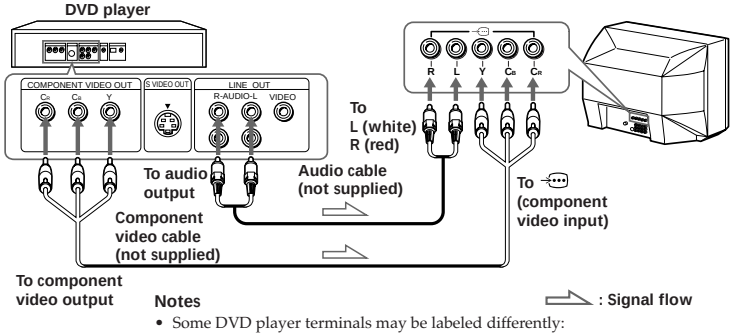
Connect ⇦ 1, 2, or 3 (video input) ♪/ (audio/video) connectors on your TV to LINE OUT on your DVD player.



Connecting a DVD player with component video output connectors

1 Connect R and L under (component video input) on your TV to the LINE OUT, AUDIO R and L output connectors on your DVD player.

2 Using a component video cable, connect Y, C_B, and C_R under (component video input) on your TV to the COMPONENT VIDEO OUT Y, C_B, and C_R output connectors on your DVD player.



Notes

- Some DVD player terminals may be labeled differently:

Connect	To (on the DVD player)
Y (green)	Y
C_B (blue)	C_b, B-Y or P_B
C_R (red)	C_r, R-Y or P_R

- Since the high quality pictures on a DVD disc contain a lot of information, picture noise may appear. In this case, adjust the sharpness ("SHARP") in the PERSONAL ADJUST menu of the PICTURE MODE menu (see page 30).
- Connect your DVD player directly to your TV. Connecting the DVD player through other video equipment will cause unwanted picture noise.

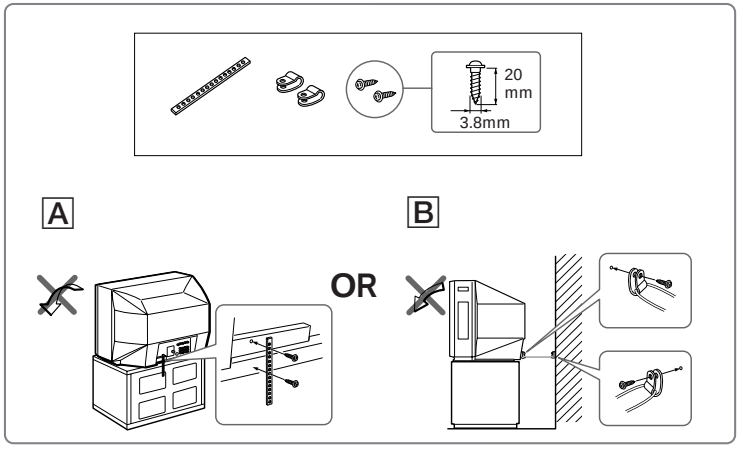
Securing the TV

To prevent the TV from falling, secure the TV using one of the following methods:

A With the supplied screws, attach the stabilizer band to the TV stand and to the rear of the TV using the provided hole.

OR

B Pass a cord or chain through the clamps and secure them to the rear of the TV and a wall or pillar.

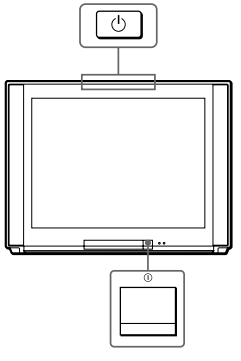


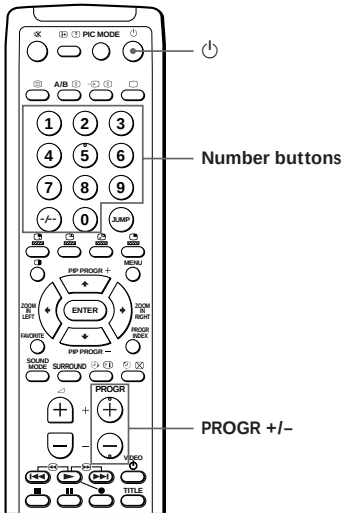
Note

- Use only the supplied screws. Use of other screws may damage the TV.

Watching the TV

This section explains various functions and operations used while watching the TV. Most operations can be done using the remote.

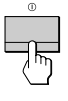




1 Press ⏻ to turn on the TV.

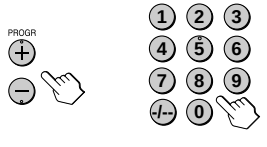
When the TV is in standby mode (the ⏻/⏲/⏲ indicator on the TV is lit red), press ⏻ on the remote or on the TV.

The PROGR +/–, 🔊 +/–, and ⏎ indicators on the TV light up.



2 Press PROGR +/– or the number buttons to select the TV channel.

For double digit numbers, press -/--, then the number (e.g., for 25, press -/--, then 2 and 5).



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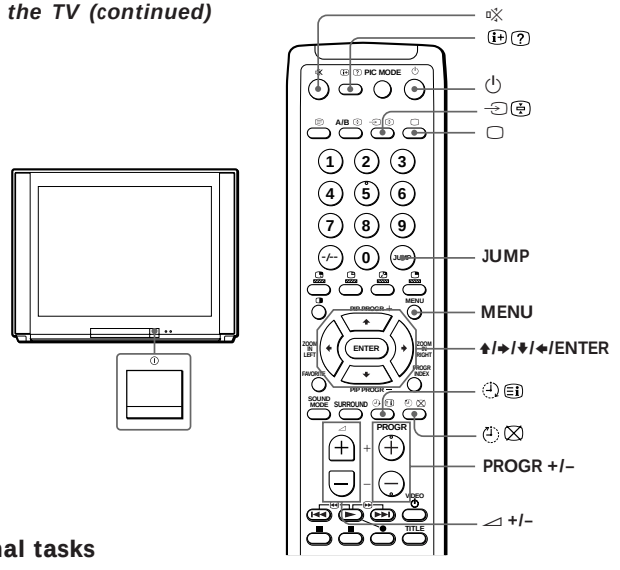


Additional tasks

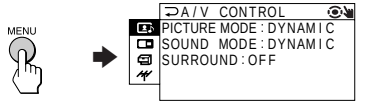
To	Press
Turn off temporarily	⏻. The ⏻/⏲/⏲ indicator on the TV lights up red.
Turn off completely	⏻ on the TV.
Adjust the volume	+/–.
Mute the sound	🔇.
Watch the video input (VCR, camcorder, etc.)	(or on the TV) to select "VIDEO 1," "VIDEO 2," "VIDEO 3," or "DVD." To return to the TV screen, press (or on the TV).
Jump back to the previous channel	JUMP.
Display the on-screen information*	.

* The picture, sound, and either the program number or video mode are displayed. The on-screen display for the picture and sound information disappears after about 3 seconds.

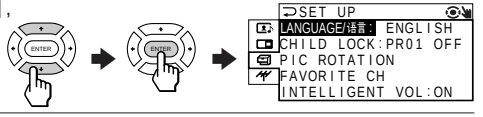
Changing the menu language

You can change the menu language as well as the on-screen language. For details on how to use the menu, see "Introducing the menu system" on page 27.

1 Press MENU.



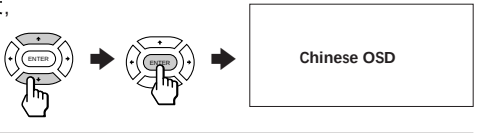
2 Press ↑ or ↓ to select , then press ENTER.



3 Make sure LANGUAGE/ 语言 is selected (highlighted), then press ENTER.

4 Press ↑ or ↓ to select 中文, then press ENTER.

The menu language changes to Chinese.



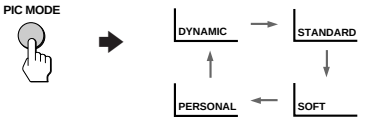
To return to the normal screen

Press MENU.

continued

Selecting the picture mode

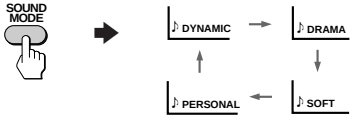
Press PIC MODE repeatedly until the desired picture mode is selected.



Select	To
DYNAMIC	receive high contrast pictures.
STANDARD	receive normal contrast pictures.
SOFT	receive mild contrast pictures.
PERSONAL	receive the last adjusted picture setting from the ADJUST option in the A/V CONTROL menu (see page 29).

Selecting the sound mode

Press SOUND MODE repeatedly until the desired sound mode is selected.



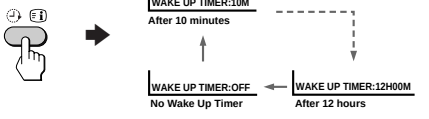
Select	To
DYNAMIC	listen to dynamic and clear sound that emphasizes both the low and high tones.
DRAMA	listen to sound that emphasizes voice and high tones.
SOFT	receive soft sound.
PERSONAL	receive the last adjusted sound setting from the ADJUST option in the A/V CONTROL menu (see page 29).

Tip

- You can also set the picture and sound modes using the menu (see "Changing the A/V CONTROL setting" on page 29).

Setting the Wake Up timer

1 Press ◴ until the desired period of time appears.



2 Select the TV channel or video mode you want to wake up to.

3 Press ⏻, or set the Sleep timer if you want the TV to turn off automatically.

The ⏻/⏀/◴ indicator on the TV lights up orange.

To cancel the Wake Up timer

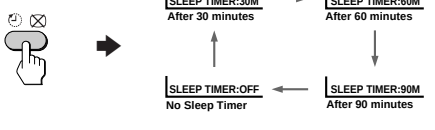
Press ◴ until "WAKE UP TIMER: OFF" appears, or turn off the TV's main power.

Notes

- The Wake Up timer starts immediately after the on-screen display disappears.
- If no buttons or controls are pressed for more than two hours after the TV is turned on using the Wake Up timer, the TV automatically goes into standby mode. To resume watching the TV, press any button or control on the TV or the remote.

Setting the Sleep timer

Press ◴ ⊠ until the desired period of time appears.



To cancel the Sleep timer

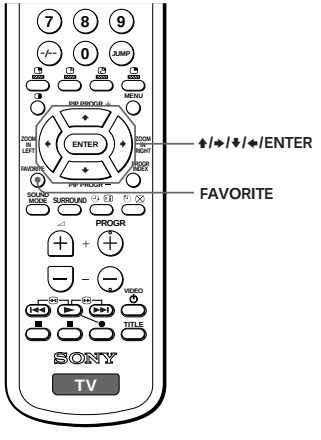
Press ◴ ⊠ until "SLEEP TIMER: OFF" appears, or turn the TV off.

Viewing your favorite channels

—FAVORITE CHANNEL

You can display seven "FAVORITE" channels for quick and easy selection.

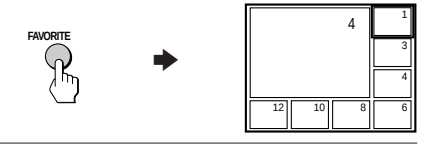
The last seven channels selected with the number buttons are displayed in AUTO mode. You can set up your own "FAVORITE" channels in MANUAL mode (see "Changing the favorite channel setting" on page 35).



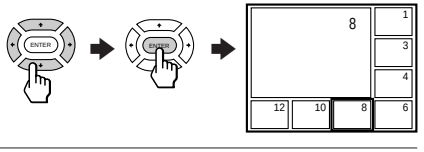
Selecting a favorite channel

1 Press FAVORITE.

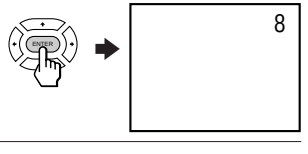
The last seven channels selected with the number buttons appear.



2 Press either ↑, →, ↓, or ← to select the desired channel, then press ENTER.



3 Press ENTER again.



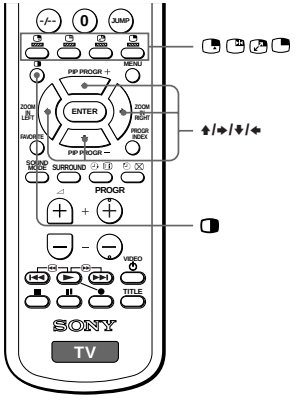
Note

- When you use your TV for the first time, seven factory set, random channels appear.

Watching two programs at the same time

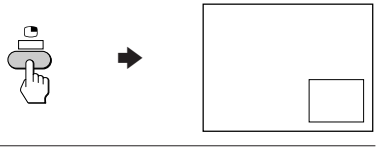
—PIP, TWIN

With the Picture-in-Picture (PIP) or TWIN pictures features, you can display a different TV program or video within or beside the main picture.



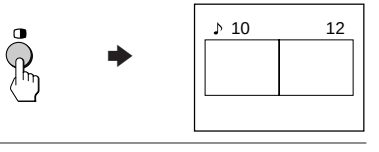
Displaying the PIP screen

Press ◔.



Displaying TWIN pictures

Press ◑.



To return to the normal screen

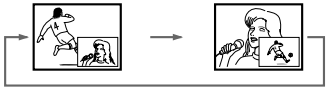
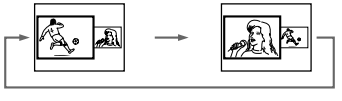
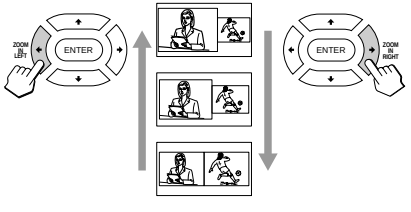
Press ◔ (when in the PIP screen) or ◑ (when in the TWIN picture screen).

Tips

- You can also display the PIP screen or TWIN pictures using the menu (see "Changing the MULTI PICTURE setting" on page 31).
- You can change the position of the PIP screen (see "Changing the MULTI PICTURE setting" on page 31).

continued

Additional PIP/TWIN pictures tasks

To	Press
change a TV program in the PIP screen or in the right TWIN picture	↑ or ↓. For a video input, press .
swap pictures between the main and PIP screens	
freeze the PIP screen	To unfreeze the screen, press the button again.
swap the right and left pictures of the TWIN pictures	
change the screen size of the TWIN pictures	ZOOM IN LEFT ← to increase the left screen size. ZOOM IN RIGHT → to increase the right screen size. 

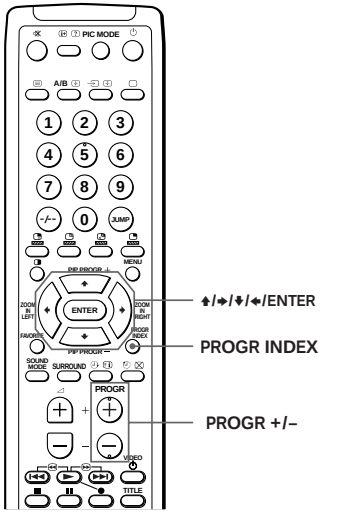
Notes

- The button does not function in the TWIN pictures mode.
- When you display a video input on the PIP screen at a faster/slower speed, the picture may be disrupted depending on the VCR type.
- If you display different color systems on the main screen and the PIP screen, the size of the PIP screen may be different and the PIP picture may be disrupted. This does not indicate a malfunction of the TV.
- In the TWIN picture screen, you can only operate and hear the sound of the main left screen (♪ appears on the screen).
- When the button is pressed, the TV screen flickers or goes blank for about one second before the TWIN pictures appear. This does not indicate a malfunction of the TV.

Displaying multiple programs

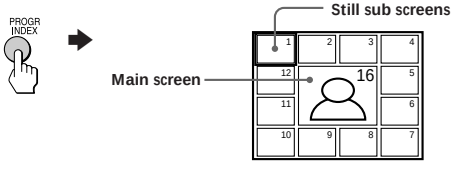
—PROGRAM INDEX

The PROGRAM INDEX feature displays all of the preset TV programs and the video inputs on twelve or seven sub screens for direct selection.

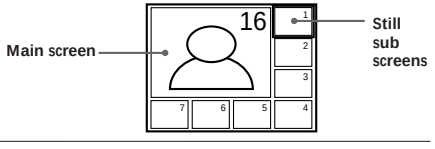


Press PROGR INDEX.

The first twelve preset programs appear one by one, clockwise from the upper left corner.



When the number of the preset TV programs is less than seven, the first seven preset programs appear one by one, clockwise from the upper right corner.



Tip

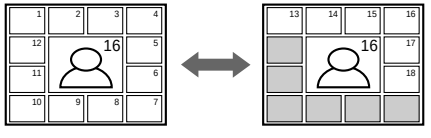
- When you press the PROGR INDEX button in the TWIN pictures mode, the left picture appears as the main screen of the PROGRAM INDEX mode.

continued

To view the next or the previous twelve preset programs

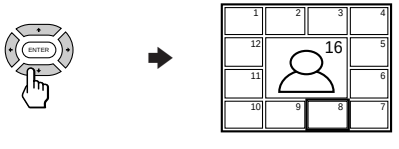
This works only when the number of the preset TV programs is more than twelve.

Press PROGR +/– on the remote or the TV.

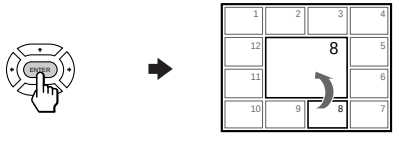


To select the desired program directly from the sub screens

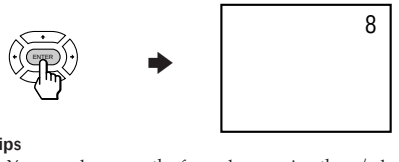
1 Press either ↑, →, ↓, or ← to move the frame to the screen of the program you want to watch.



2 Press ENTER.



3 Press ENTER again.



Tips

- You can also move the frame by pressing the +/– buttons on the TV. Press + to move the frame clockwise; press – to move the frame counterclockwise.
- Pressing the number buttons directly displays the program.

To return to the normal screen

Press PROGR INDEX again, or:

1 Select "PROGR INDEX" from the MULTI PICTURE menu.
2 Press ENTER.

Tip

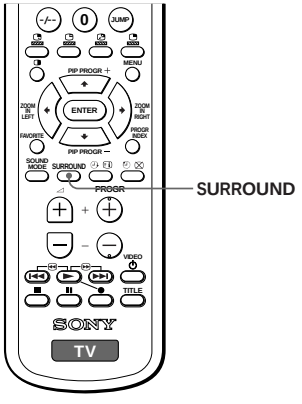
- You can also display multiple programs using the menu (see "Changing the MULTI PICTURE setting" on page 31).

Note

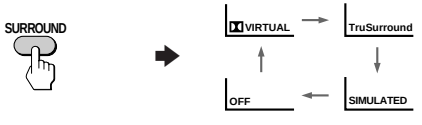
- When displaying multiple programs, only the sound of the main screen is heard.

Listening with surround sound

The surround feature enables you to enjoy the sound effects of a concert hall or movie theater.



Press SURROUND repeatedly until you receive the desired surround sound.



Select	To
VIRTUAL	listen to Dolby* Surround encoded sound.
TruSurround	listen to the surround sound that spreads out to the rear of a room.
SIMULATED	listen to monaural sound with a stereo-like effect.
OFF	turn off the surround sound.
	• SIMULATED uses SRS (MONO).

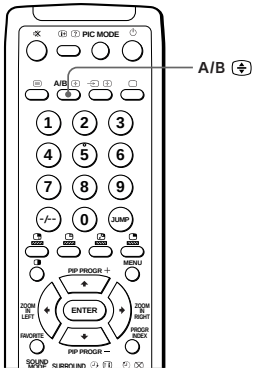
The Virtual Dolby Surround of this model consists of Dolby Pro Logic and TruSurround.

* Manufactured under license from Dolby Laboratories Licensing Corporation. DOLBY, the double-D symbol and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

"TruSurround™ is a trademark of SRS Labs, Inc. SRS and the SRS symbol are registered trademarks of SRS Labs, Inc. in the United States and selected foreign countries. SRS and TruSurround are incorporated under license from SRS Labs, Inc. and are protected under United States Patent Nos.4,748,669 and 4,841,572 with numerous additional issued and pending foreign patents."

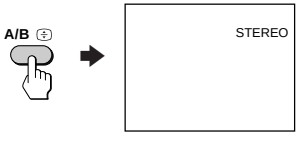
Selecting a stereo or bilingual program

You can enjoy stereo sound or bilingual programs of NICAM and A2 (German) stereo systems.



Press A/B repeatedly until you receive the sound mode you want.

The on-screen display changes to show the selected sound mode and the ⏻/CD/🕒 indicator on the TV lights up red.



When receiving a NICAM program

Broadcasting	On-screen display (Selected sound)
NICAM stereo	NICAM (Stereo sound) → MONO (Regular sound)
NICAM bilingual	NICAM MAIN (Main sound) → NICAM SUB (Sub sound) → MONO (Regular sound)
NICAM monaural	NICAM MAIN (Main sound) → MONO (Regular sound)

continued

When receiving an A2 (German) program

Broadcasting	On-screen display (Selected sound)
A2 (German) stereo	MONO (Regular sound) → STEREO (Stereo sound)
A2 (German) bilingual	MAIN (Main sound) → SUB (Sub sound)

Receiving area for NICAM and A2 (German) programs

System	Receiving area
NICAM	Hong Kong, Singapore, New Zealand, Malaysia, Thailand, etc.
A2 (German)	Australia, Malaysia, Thailand, etc.

Notes

- If the signal is very weak, the sound becomes monaural automatically.
- If the stereo sound is noisy when receiving a NICAM program, select "MONO." The sound becomes monaural, but the noise is reduced.

If the sound is distorted or noisy when receiving a monaural program through the ⅂ (antenna) terminal

Press A/B ⊕ repeatedly until "MONO" appears on the screen.

To cancel the monaural sound setting, press A/B ⊕ again until "AUTO" appears on the screen.

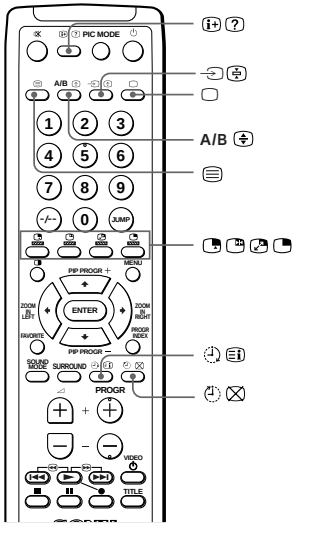
MONO → AUTO

Notes

- The "MONO" or "AUTO" setting is memorized for each program position.
- You cannot receive a stereo broadcast signal when the TV is in the "MONO" setting. Normally, set the TV to "AUTO."

Viewing Teletext

Some TV stations broadcast an information service called Teletext which allows you to receive various information, such as stock market reports and news.

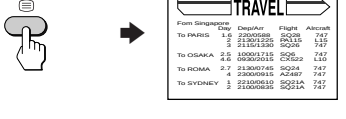


Displaying Teletext

1 Select a TV channel that carries the Teletext broadcast you want to watch.

2 Press ☰ to display the text.

A Teletext page (normally the index page) is displayed. If there is no Teletext broadcast, "100" is displayed at the top left corner of the screen.



To turn off Teletext

Press ▭.

continued

Viewing Teletext (continued)

Additional Teletext tasks

To	Do this
display a Teletext page on the TV picture	Press ☰. Each time you press ☰, the screen changes as follows: Teletext → Teletext and TV → TV.
check the contents of a Teletext service	Press 🕘 ⓘ. An overview of the Teletext contents, including page numbers, appears on the screen.
select a Teletext page	Press the number buttons to enter the three-digit page number of the desired Teletext page.* If you make a mistake, reenter the correct page number. To access the next or previous page, press PROGR□+/–.
hold (pause) a Teletext page (stop the page from scrolling)	Press ⏎ ⇳ to display the symbol "⇳" at the top left corner of the screen. To resume normal Teletext viewing, press ⏎ ⇳ or ☰.
reveal concealed information (e.g., an answer to a quiz)	Press ⓘ ?. To conceal the information, press the button again.
enlarge the Teletext display	Press A/B ⇳. Each time you press A/B ⇳, the Teletext display changes as follows: Enlarge upper half → Enlarge lower half → Normal size.
stand by for a Teletext page while watching a TV program	1 Enter the Teletext page number that you want to refer to, then press 🕘 ⊠. 2 When the page number is displayed, press ☰ to show the text.

* You can also select a Teletext page of any page number that appears in the colored column at the bottom of the screen using the corresponding color-coded button on the remote.

Using FASTEXT

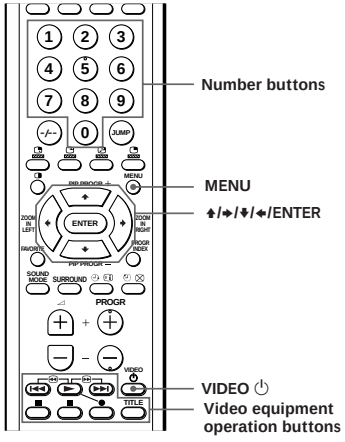
This feature allows you to quickly access a Teletext page that uses FASTEXT. When a FASTEXT program is broadcast, colored menus appear at the bottom of the screen. The color of each menu corresponds to the color-coded buttons on the remote (red, green, yellow, and blue).

To access a FASTEXT menu

Press the color-coded button on the remote corresponding to the menu you want. The menu page appears on the screen after a few seconds.

Operating optional components

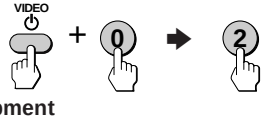
You can use the supplied remote to operate Sony video equipment such as Beta, 8mm, VHS, MDP, CD, or DVD.



Setting up the remote to work with other connected equipment

While holding down VIDEO ⏻, press the following number combinations to enter the equipment's code number (see the chart below).

For example, to operate a Sony 8 mm VCR:



Code numbers for Sony video equipment

To control	Hold down VIDEO ⏻ and press
DVD	00
VTR1 (Beta)	01
VTR2 (8mm)	02
VTR3 (VHS)	03
MDP	04
CD	06
MD	07

Notes

- If your video equipment is furnished with a COMMAND MODE selector, set this selector to the same position as the setting code.
- If the equipment does not have a certain function, the corresponding button on the remote will not operate.
- When you remove the batteries, the code number may revert to the factory setting.

continued

Operating optional components (continued)

Operating a VCR using the remote

To	Press
turn on/off	VIDEO ⏻
record	► while pressing ●.
play	►
stop	■
fast forward	▶▶
rewind the tape	◀◀
pause	❚❚ Press again to resume normal playback.
search the picture forward or backward	▶▶ or ◀◀ during playback. Release to resume normal playback.

Operating a DVD player using the remote

To	Press
turn on/off	VIDEO ⏻
play	►
stop	■
pause	❚❚ Press again to resume normal playback.
step through different tracks of an audio disc	▶▶I to step forward or I◀◀ to step backward.
display the Title menu	TITLE
display the menu	MENU while holding down ●.
select the menu item	↑/↓/←/→ while holding down ●.

Operating an MDP using the remote

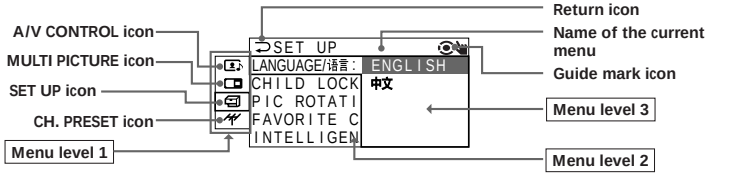
To	Press
turn on/off	VIDEO ⏻
play	►
stop	■
pause	❚❚ Press again to resume normal playback.
search the picture forward or backward	▶▶ or ◀◀ during playback. Release to resume normal playback.

Operating a CD/MD using the remote

To	Press
turn on/off	VIDEO ⏻
play	►
stop	■
pause	❚❚ Press again to resume normal playback.
go to the next/previous tracks	▶▶I or I◀◀
go forward/backward quickly in a track	▶▶ or ◀◀ during playback. Release to resume normal playback.

Introducing the menu system

The MENU button lets you open a menu and change the settings of your TV. The following is an overview of the menu system.

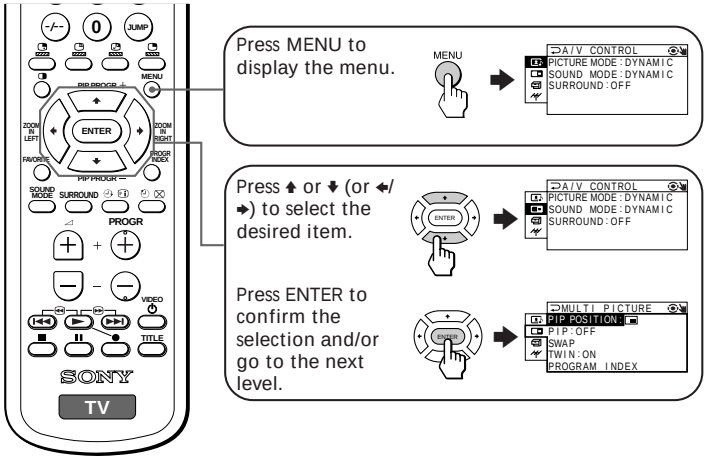


Level 1	Level 2	Level 3/Function
A/V CONTROL	PICTURE MODE	Select the picture mode: DYNAMIC → STANDARD → SOFT → PERSONAL → ADJUST
	ADJUST	Adjust the PERSONAL option: PICTURE → COLOR → BRIGHT → HUE → SHARP
	SOUND MODE	Select the sound mode: DYNAMIC → DRAMA → SOFT → PERSONAL → ADJUST
	ADJUST	Adjust the PERSONAL option: BASS → TREBLE → BALANCE → BBE*
	SURROUND	Select the surround mode: VIRTUAL → TruSurround → SIMULATED → OFF
MULTI PICTURE	PIP POSITION	Change the position of the sub screen.
	PIP	Activate or deactivate the PIP feature.
	SWAP	Swap the pictures between the main and sub screens.
	TWIN	Display a TV program or video beside the main screen.
	PROGRAM INDEX	Display all the preset TV programs at the same time.
SET UP	LANGUAGE/ 语言	Change the menu language: ENGLISH ↔ 中文 (CHINESE)
	CHILD LOCK	Lock out specific channels.
	PIC ROTATION	Rotate the picture.
	FAVORITE CH	Set favorite channels.
	INTELLIGENT VOL	Adjust the volume automatically.
CH. PRESET	AUTO PROGRAM	Preset channels automatically.
	MANUAL PROGRAM	Preset channels manually.
	SKIP	Skip unwanted or unused program numbers.
	TV SYS	Select the TV system: AUTO → B/G → I → D/K → M
	COL SYS	Select the color system: AUTO → PAL → SECAM → NTSC3.58 → NTSC4.43

* The BBE is manufactured by Sony Corporation under license from BBE Sound, Inc. It is covered by U.S. Patent No. 4,638,258 and No. 4,482,866. The word "BBE" and the BBE symbol are the trademarks of BBE Sound, Inc.

continued

How to use the menu



Other menu operations

To	Press
Adjust the setting value	↑/← or ↓/→
Move to the next/previous menu level	→ or ←
Cancel the menu	MENU

Tips

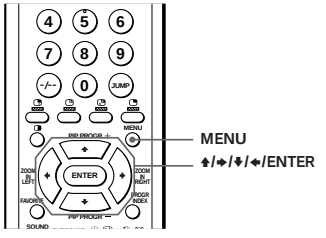
- If you want to exit from Menu level 2 to Menu level 1, press ↑ or ↓ until the return icon (⮌) is highlighted, then press ENTER.
- The MENU, ENTER, and +/– buttons on the TV can also be used for the operations above.

Note

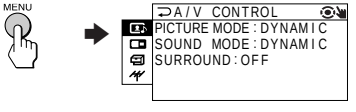
- If more than 60 seconds elapse between entries, the menu screen automatically disappears.

Changing the A/V CONTROL setting

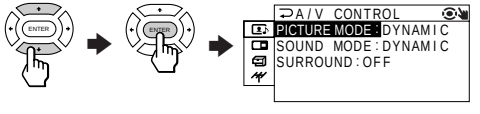
The A/V CONTROL menu allows you to adjust the picture and sound settings.



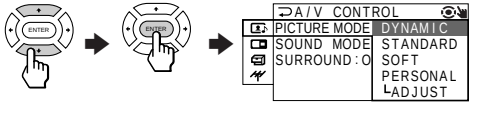
1 Press MENU.



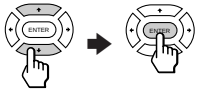
2 Press ↑ or ↓ to select , then press ENTER.



3 Press ↑ or ↓ to select either PICTURE MODE, SOUND MODE, or SURROUND, then press ENTER.



4 Press ↑ or ↓ to select the desired option, then press ENTER.



For	Select
PICTURE MODE	either DYNAMIC, STANDARD, SOFT, PERSONAL*, or ADJUST.
SOUND MODE	either DYNAMIC, DRAMA, SOFT, PERSONAL*, or ADJUST.
SURROUND	either VIRTUAL, TruSurround, SIMULATED, or OFF.

* When the PERSONAL mode is selected, the last adjusted picture/sound settings from the ADJUST option are received (see next page).

Tip

- For details on the options under the PICTURE/SOUND MODE and SURROUND modes, see pages 12 and 20 respectively.

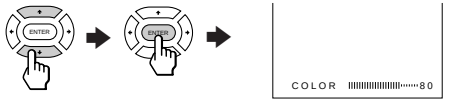
To return to the normal screen

Press MENU.

Changing the A/V CONTROL setting (continued)

Adjusting the ADJUST options under PICTURE MODE

1 Press ↑ or ↓ to select the desired item (e.g., COLOR), then press ENTER.



2 Adjust the value according to the following table, then press ENTER.

For	Press ↓/← to	Press ↑/→ to
PICTURE	decrease picture contrast	increase picture contrast
COLOR	decrease color intensity	increase color intensity
BRIGHT	darken the picture	brighten the picture
HUE*	increase red picture tones	increase green picture tones
SHARP	soften the picture	sharpen the picture

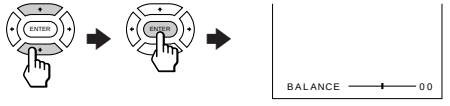
* You can adjust HUE for the NTSC color system only.

3 Repeat the above steps to adjust other items.

The adjusted settings will be received when you select PERSONAL.

Adjusting the ADJUST options under SOUND MODE

1 Press ↑ or ↓ to select the desired item (e.g., BALANCE), then press ENTER.



2 Adjust the value according to the following table, then press ENTER.

For	Press
BASS	↓/← to decrease the bass, ↑/→ to increase the bass
TREBLE	↓/← to decrease the treble, ↑/→ to increase the treble
BALANCE	↓/← to increase the left speaker's volume, ↑/→ to increase the right speaker's volume
BBE	↑/↓ to select HIGH, LOW, or OFF. BBE can produce clear sound, emphasizing both low and high tones.

3 Repeat the above steps to adjust other items.

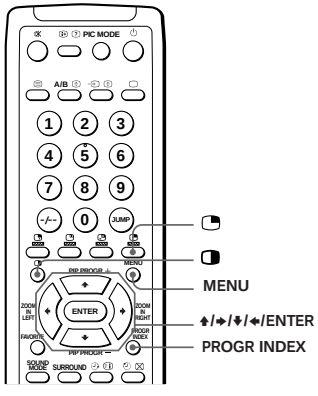
The adjusted settings will be received when you select PERSONAL.

Tip

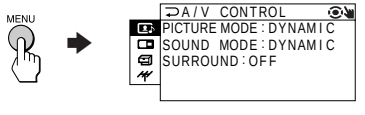
- For details on the menu system and how to use the menu, refer to "Introducing the menu system" on page 27.

Changing the MULTI PICTURE setting

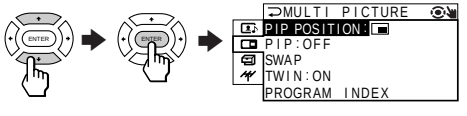
The MULTI PICTURE menu allows you to use the Picture-in-Picture (PIP), TWIN pictures, or PROGRAM INDEX features.



1 Press MENU.



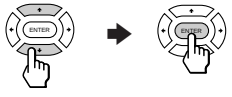
2 Press ↑ or ↓ to select , then press ENTER.

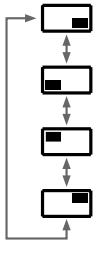


continued

Changing the MULTI PICTURE setting (continued)

3 Press ↑ or ↓ to select the desired option (see the table below), then press ENTER.



Select	To
PIP POSITION	change the position of the PIP screen. Press ↑ or ↓ to select the desired position, then press ENTER. 
PIP	display the PIP screen within the main picture. Press ↑ or ↓ to select "ON," then press ENTER. To cancel, press ◔ or select "OFF," then press ENTER.
SWAP	swap the main and PIP screens, or right and left pictures of the TWIN pictures.
TWIN	display a different TV program or video beside the main picture. Press ↑ or ↓ to select "ON," then press ENTER. To cancel, press ◑ or select "OFF," then press ENTER.
PROGRAM INDEX	view multiple programs on the sub-screens. To cancel, press PROGR INDEX.

To return to the normal screen

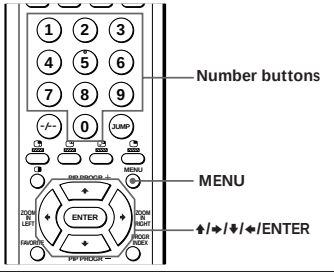
Press MENU.

Tip

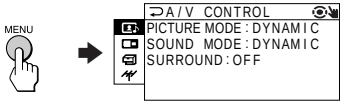
- For details on the menu system and how to use the menu, see "Introducing the menu system" on page 27.

Changing the SET UP setting

The SET UP menu allows you to: change the menu language (see page 11), block channels, adjust the picture position, program your favorite channels, and adjust the volume automatically.

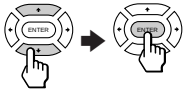


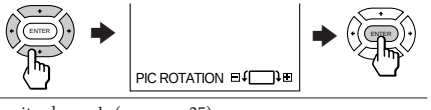
1 Press MENU.



2 Press ↑ or ↓ to select , then press ENTER.

3 Press ↑ or ↓ to select the desired option, then press ENTER.



Select	To
LANGUAGE/ 语言	change the menu language (see page 11).
CHILD LOCK	block channels (see page 34).
PIC ROTATION	adjust the picture position when it is not aligned with the TV screen. Press ↑ or → to adjust the position clockwise, then press ENTER. Press ↓ or ← to adjust the position counterclockwise, then press ENTER. 
FAVORITE CH	select your favorite channels (see page 35).
INTELLIGENT VOL	adjust the volume of each TV program automatically. Press ↑ or ↓ to select "ON," then press ENTER. To cancel, select "OFF," then press ENTER.

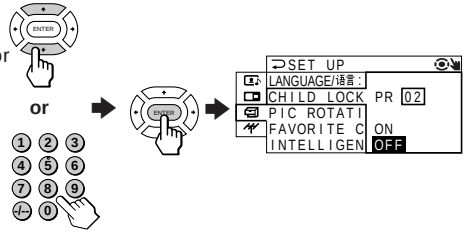
To return to the normal screen

Press MENU.

continued

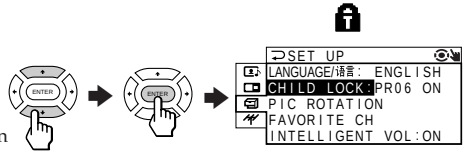
Blocking the channels (CHILD LOCK)

1 After selecting CHILD LOCK, press either ↑ or ↓, or the number buttons (or PROGR +/–) to select the desired channel, then press ENTER.

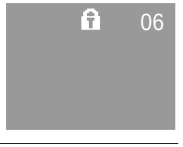


2 Press ↑ or ↓ to select ON, then press ENTER.
To unlock the channel, select OFF.

The lock symbol ( ) appears on the screen when ON is selected.



If a locked channel is selected, the lock symbol appears on the screen.



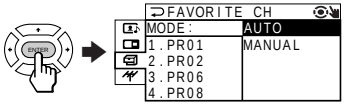
3 Repeat steps 1 and 2 to lock other channels.

To return to the normal screen

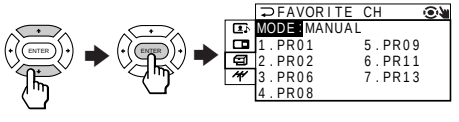
Press MENU.

Changing the favorite channel setting

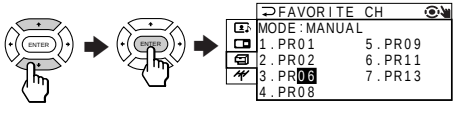
1 After selecting FAVORITE CH, make sure MODE is selected, then press ENTER.



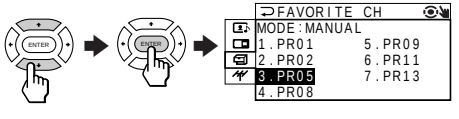
2 Press ↑ or ↓ to select MANUAL, then press ENTER.



3 Press ↑ or ↓ to select the program you want to change, then press ENTER.



4 Press ↑ or ↓ to change the number, then press ENTER.



5 Repeat steps 3 and 4 to set other channels.

To return to the normal screen

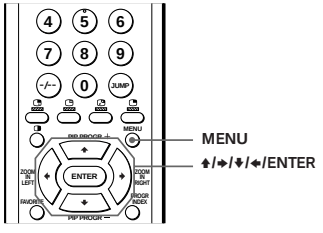
Press MENU.

Note

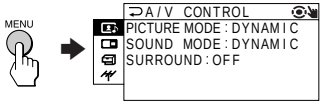
- If you press the PROGR +/– buttons or number buttons in step 4 above, the TV will tune into the channel.

Changing the CH. PRESET setting

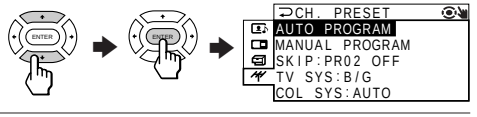
The CH. PRESET menu allows you to adjust the setup of your TV. For example, you can manually tune in a channel with a weak signal that fails to be tuned in by automatic presetting.



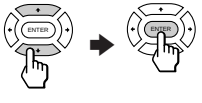
1 Press MENU.



2 Press ↑ or ↓ to select , then press ENTER.



3 Press ↑ or ↓ to select the desired option, then press ENTER.



Select	To
AUTO PROGRAM	preset channels automatically.
MANUAL PROGRAM	preset channels manually. See "Presetting channels manually" on page 37.
SKIP	skip unwanted or unused channel. 1 Press either ↑ or ↓, or the number buttons (or PROGR +/–) until the unused or unwanted channel number appears, then press ENTER. 2 Select "ON," then press ENTER. 3 To disable other channels, repeat steps 1 and 2. To restore the skipped channel, select "OFF" in step 2.
TV SYS	select the TV system.
COL SYS	select the color system. Normally, set this to "AUTO."

To return to the normal screen

Press MENU.

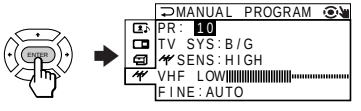
Tip

- For details on the menu system and how to use the menu, refer to "Introducing the menu system" on page 27.

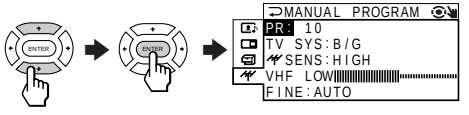
Presetting channels manually

1 After selecting MANUAL PROGRAM, select the program number to which you want to preset a channel.

(1) Make sure "PR" is selected, then press ENTER.



(2) Press ↑ or ↓ until the program number you want to preset (e.g., program number 10) appears on the menu, then press ENTER.

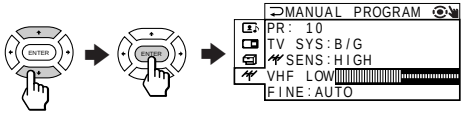


Tip

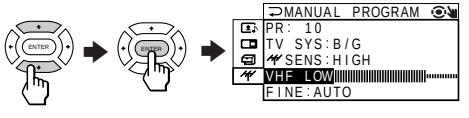
- You can also select the program number with the PROGR +/– or number buttons.

2 Select the desired channel.

(1) Press ↑ or ↓ to select either VHF LOW, VHF HIGH, or UHF, then press ENTER.

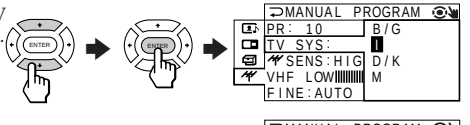


(2) Press ↑ or ↓ until the desired channel's broadcast appears on the TV screen, then press ENTER.

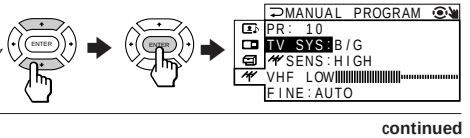


3 If the sound of the desired channel is abnormal, select the appropriate TV system.

(1) Press ↑ or ↓ to select TV SYS, then press ENTER.



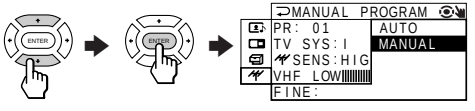
(2) Press ↑ or ↓ until the sound becomes normal, then press ENTER.



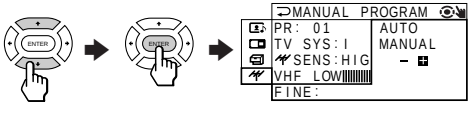
continued

4 If you are not satisfied with the picture and sound quality, you may be able to improve them by using the FINE tuning feature.

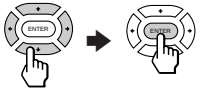
(1) Press ↑ or ↓ to select FINE, then press ENTER.



(2) Press ↑ or ↓ to select MANUAL, then press ENTER.

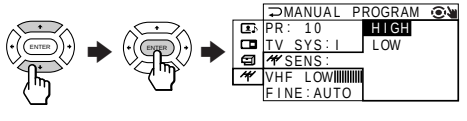


(3) Press either ↑, →, ↓, or ← until the picture and sound quality are optimal, then press ENTER.
The + or – icon on the menu flashes while tuning.

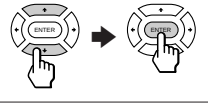


5 If the TV signal is too strong and the picture is distorted, you can adjust the TV reception sensitivity.

(1) Press ↑ or ↓ to select SENS, then press ENTER.



(2) Press ↑ or ↓ to select LOW, then press ENTER.



To return to the normal screen

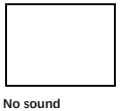
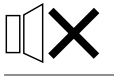
Press MENU.

Notes

- The TV system (TV SYS) and the TV reception sensitivity (SENS) settings are memorized for each program number.
- If you preset a locked channel, that channel will be unlocked.

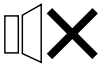
Troubleshooting

If you have any problem while viewing your TV, please check the following troubleshooting guide. If the problem persists, contact your Sony dealer.

Symptom	Solutions	Possible cause
Snowy picture  **Noisy sound** 	• Check the antenna cable and connection on the TV, VCR, and at the wall. (page 4)	• The connection is loose or the cable is damaged.
	• Display the CH. PRESET menu and select "MANUAL PROGRAM" to preset the channel again. (page 37)	• The channel presetting is inappropriate or incomplete.
	• Check the antenna type (VHF/UHF). Contact a Sony dealer for advice.	• The antenna type is inappropriate.
	• Adjust the antenna direction. Contact a Sony dealer for advice.	• The antenna direction needs adjustment.
	• Try using a booster.	• Signal transmission is low.
Distorted picture  **Noisy sound** 	• Display the CH. PRESET menu and select "MANUAL PROGRAM." Then, select " SENS: LOW." (page 38) • Turn off or disconnect the booster if it is in use.	• Broadcast signals are too strong.
Good picture  **Noisy sound** 	• If the sound of all the channels is noisy, display the CH. PRESET menu and select the appropriate TV system (TV SYS), then select "AUTO PROGRAM" to preset the channels again. (page 36) • If the sound of some channels is noisy, select the channel, then display the CH. PRESET menu and select the appropriate TV system (TV SYS). (page 37)	• The TV system setting is inappropriate.
No picture  **No sound** 	• Check the power cord, antenna, and the VCR connections.	• The power cord, antenna, or VCR is not connected.
	• Press ⏻ (power). • Press ① (main power) on the TV to turn off the TV for about five seconds, then turn it on again.	• The TV is not turned on.

continued

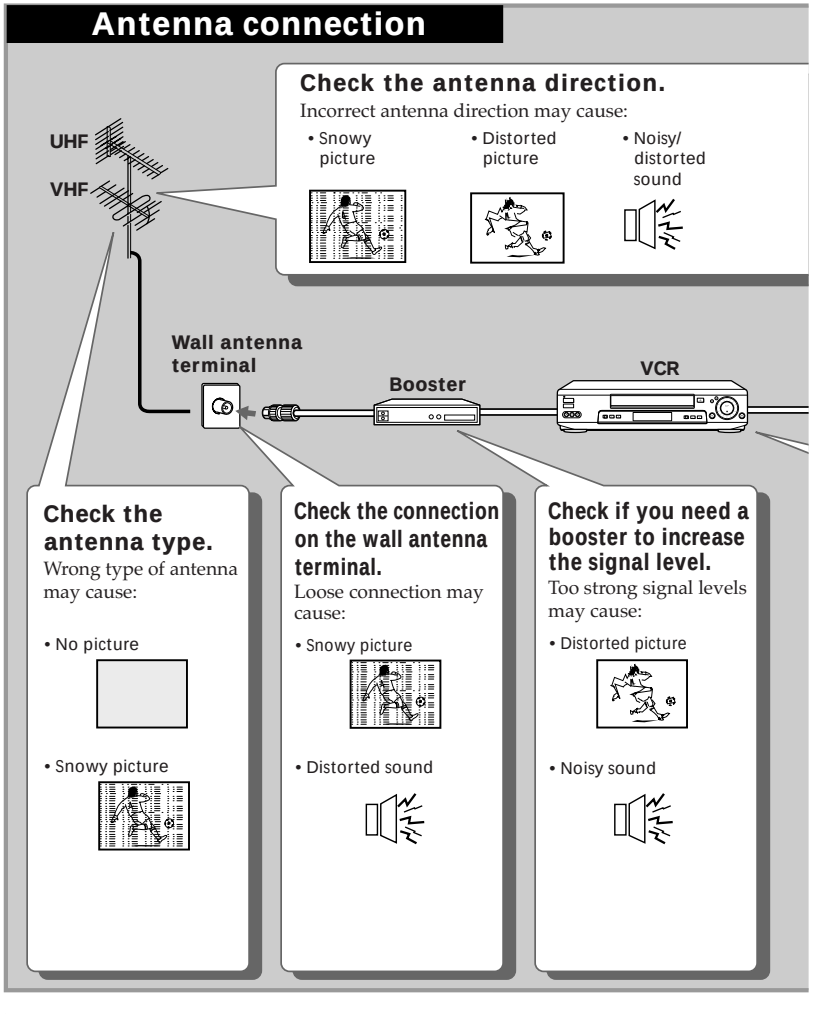
Troubleshooting (continued)

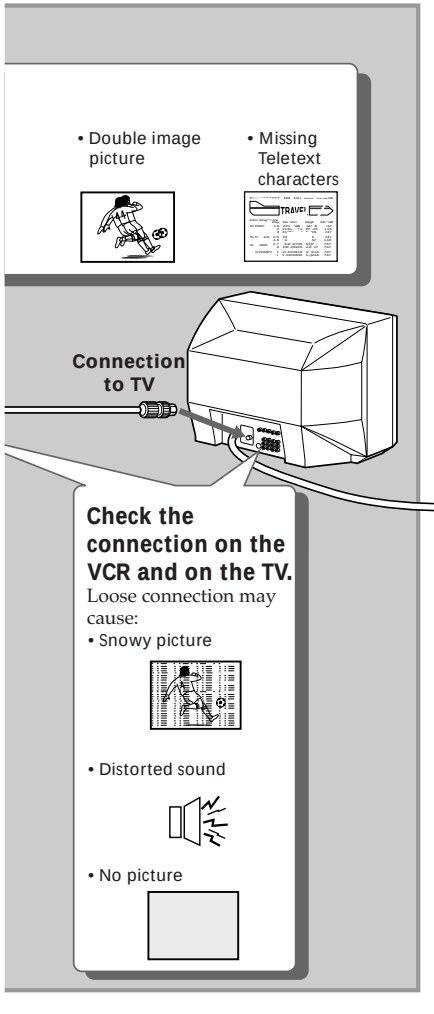
Symptom	Solutions	Possible cause
Good picture  **No sound** 	• Press + to increase the volume level.	• The volume level is too low.
	• Press to cancel the muting.	• The sound is muted.
	• Press A/B until better sound is heard.	• The broadcast signal has a transmission problem.
Dotted lines or stripes 	• Do not use a hair dryer or other equipment near the TV. • Adjust the antenna direction for minimum interference. Contact a Sony dealer for advice.	• There is local interference from cars, neon signs, hair dryers, power generators, etc.
Double images or "ghosts" 	• Use a highly directional antenna.	• Broadcast signals are reflected by nearby mountains or buildings.
	• Adjust the antenna direction. Contact a Sony dealer for advice.	• The antenna direction needs adjustment.
	• Turn off or disconnect the booster if it is in use.	• Use of a booster is inappropriate.
No color 	• Display the A/V CONTROL menu and select "ADJUST" in PICTURE MODE, then adjust the COLOR level. (page 30)	• The color level setting is too low.
	• Display the CH. PRESET menu and check the color system (COL SYS) setting (usually set this to AUTO). (page 36)	• The color system setting is inappropriate.
	• Adjust the antenna direction. Contact a Sony dealer for advice.	• The antenna direction needs adjustment.
Abnormal color patches 	• Locate external speakers or other equipment away from the TV. Press ⏻ (main power) on the TV to turn off the TV for about five minutes, then turn it on again.	• There is magnetic disturbance from external speakers or other equipment.
TV cannot receive stereo broadcast signal.	• Press A/B until "AUTO" appears on the screen.	• The stereo reception setting is inappropriate.

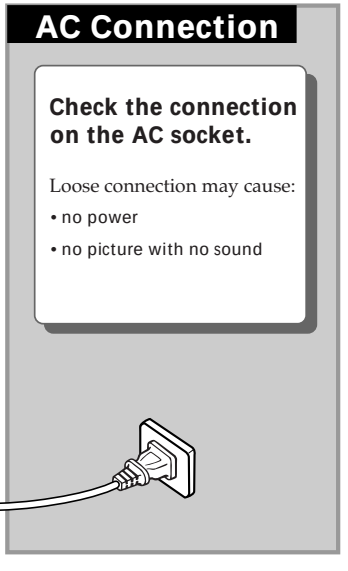
Symptom	Solutions	Possible cause
Stereo broadcast sound switches on and off or is distorted.	• Check the antenna cable and connection on the TV, VCR, and on the wall.	• The connection is loose or the cable is damaged.
	• Adjust the antenna direction. Contact a Sony dealer for advice.	• The antenna direction needs adjustment.
or **The sound switches between stereo and monaural frequently.**	• Press A/B until better sound is heard. (page 21)	• The broadcast signal has a transmission problem.
"100" appears on the top of the screen and there is no Teletext display.	—	• The channel carries no Teletext broadcast.
Teletext display is incomplete (snowy picture or double images).	• Check the antenna cable and connection on the TV, VCR, and at the wall. (page 4)	• The connection is loose or the cable is damaged.
	• Adjust the antenna direction. Contact a Sony dealer for advice.	• The antenna direction needs adjustment.
	• Try using a booster.	• The signal transmission is too low.
Picture slant 	• Display the SET UP menu and adjust "PIC ROTATION" so that the picture is aligned to the TV screen. (page 33)	• Terrestrial magnetism is affecting your TV set.
TV cabinet creaks.	—	• Changes in room temperature sometimes make the TV cabinet expand or contract, causing a noise. This does not indicate a malfunction.
A small "boom" sound is heard when the TV is turned on.	—	• The TV's demagnetizing function is working. This does not indicate a malfunction.

Troubleshooting shortcuts

For better viewing, check the following connections.





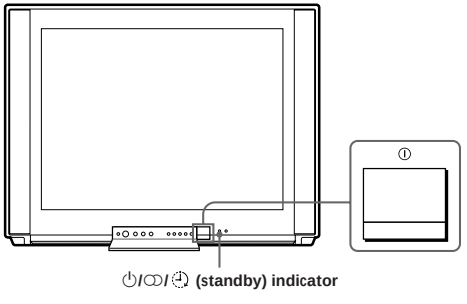


For more information, refer to "Troubleshooting" on page 39, or consult your dealer for guidance.

Self-diagnosis function

Your TV is equipped with a self-diagnosis function. If there is a problem with your TV, the ⏻/⏀/🕘 (standby) indicator flashes red. The number of times the ⏻/⏀/🕘 indicator flashes indicates the possible causes.

Front of TV



1 Check that the red flashes of the ⏻/⏀/🕘 indicator are about 3 seconds per interval.

2 Count the number of times the ⏻/⏀/🕘 indicator flashes.

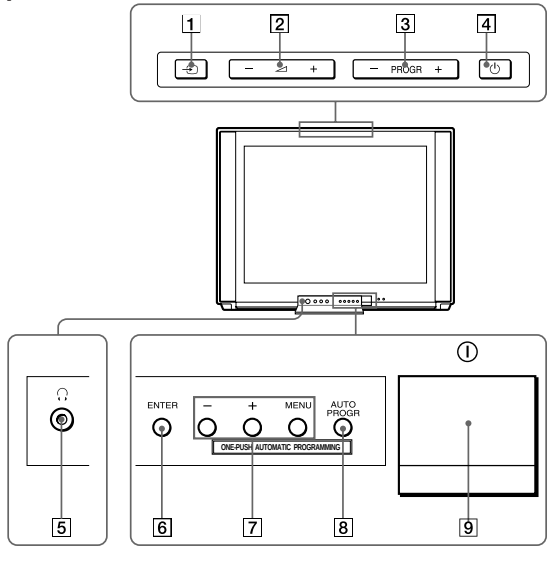
3 Press ⏻ (main power) to turn off your TV.

4 Inform your nearest Sony service center about the number of times the ⏻/⏀/🕘 indicator flashed.
Be sure to note the model name and serial number located on the rear of your TV.

Identifying parts and controls

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

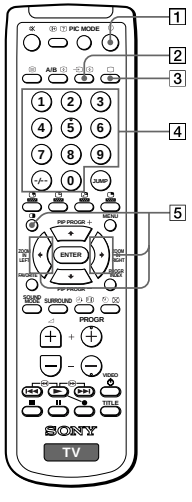
Front panel



1 ⏎ (TV/video) button (10)
2 ◿ +/– (volume) buttons (10)
3 PROGR +/– (program) buttons (9)
4 ⏻ (power) button (9)
5 🎧 (headphones) jack
6 ENTER button (28)
7 MENU +/– buttons (28)
8 AUTO PROGR (program) button (5)
9 ⏻ (main power) button (9)

continued

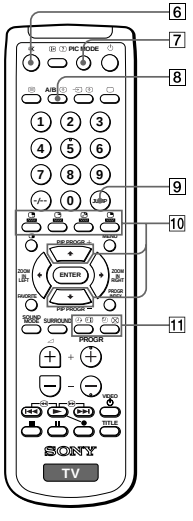
Remote control



1 ⏻ (power) button (9)
2 (video) button (10)
3 ▭ (TV) button (10)
4 Number buttons (9)
5 TWIN pictures operation buttons (15 – 16)
- ◑ (TWIN)
- ZOOM IN LEFT ◆
- ZOOM IN RIGHT ◆

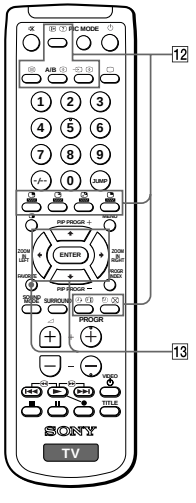
The names/symbols of buttons on the remote are indicated in different colors to represent the available functions.

Label color	Button function
White	For general TV and PROGRAM INDEX operations
Green	For Teletext operations
Yellow	For PIP operations



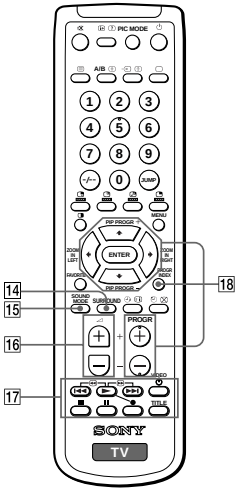
6 (muting) button (10)
7 PIC MODE button (12)
8 A/B button (21)
9 JUMP button (10)
10 PIP operation buttons (15 – 16)
- (TV/video)
- (freeze)
- (swap)
- (PIP)
- ▲/▼—for changing PIP PROGR

11 Timer setting buttons (13)
- (wake up timer)
- (sleep timer)



12 Teletext operation buttons (23– 24)
- (text)
- (enlarge)
- (reveal)
- (hold)
- Red
- Green
- Yellow
- Blue
- (index)
- (text clear)

13 FAVORITE button (14)
- ▲/◆/▼/◆/ENTER

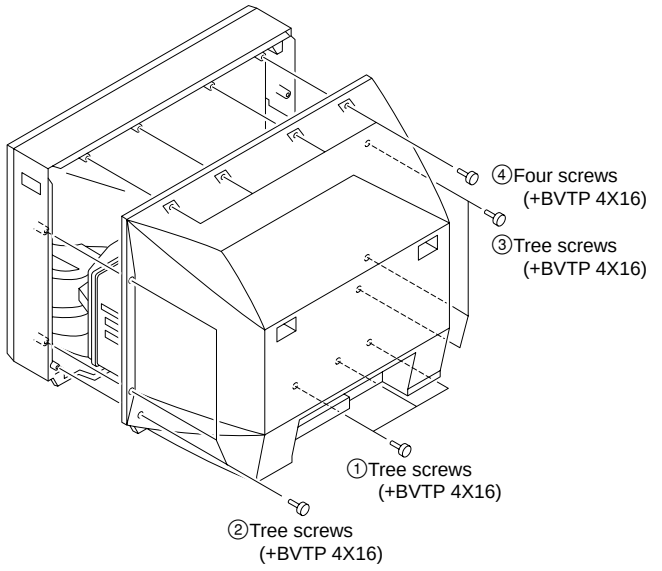


14 SURROUND button (20)
15 SOUND MODE button (12)
16 (volume) +/– buttons (10)
17 DVD, VCR, MDP, CD, MD operation buttons (26)
- ▶▶I/▶▶ (fastforward/search forward)
- ▶ (play)
- I◀◀/◀◀ (rewind/search backward)
- ● (record)
- ■ (stop)
- ❚❚ (pause)
- VIDEO ⏻ (power)
- TITLE

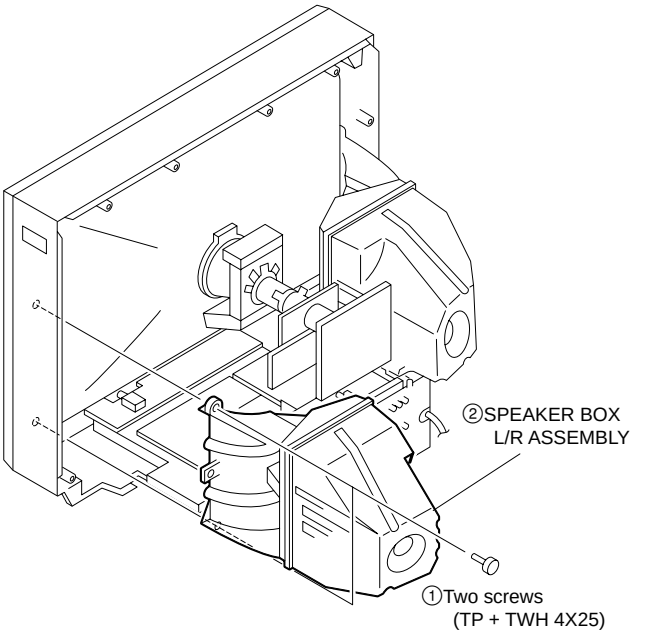
18 PROGRAM INDEX operation buttons (17 – 19)
- PROGR INDEX
- ▲/◆/▼/◆/ENTER
- PROGR +/–

SECTION 2
DISASSEMBLY

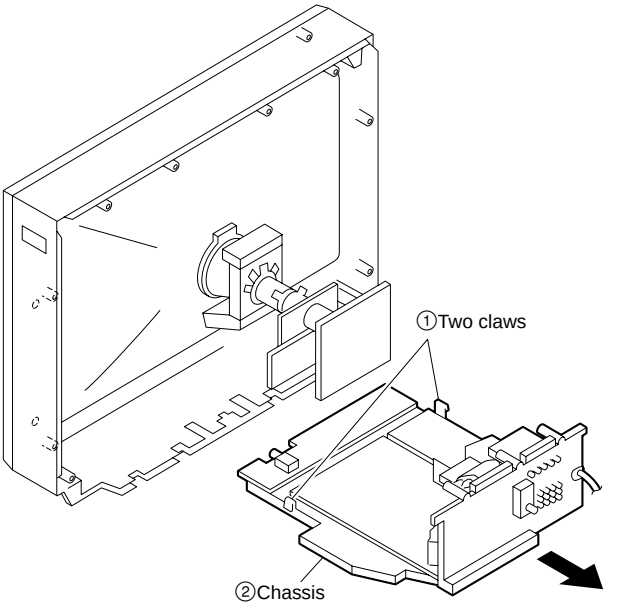
2-1. REAR PANEL REMOVAL



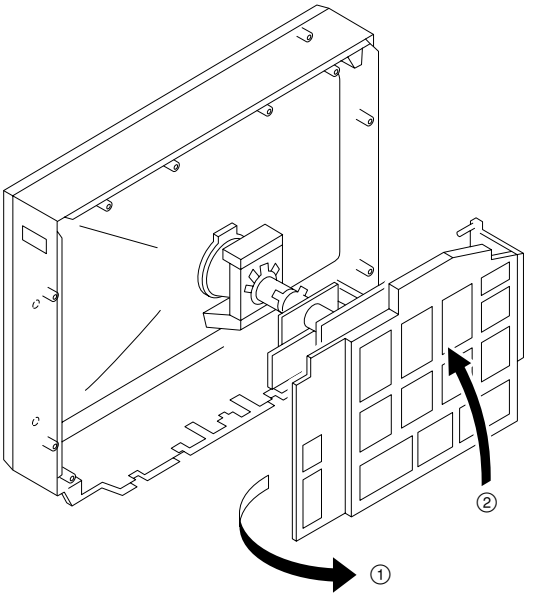
2-2. SPEAKER BOX REMOVAL



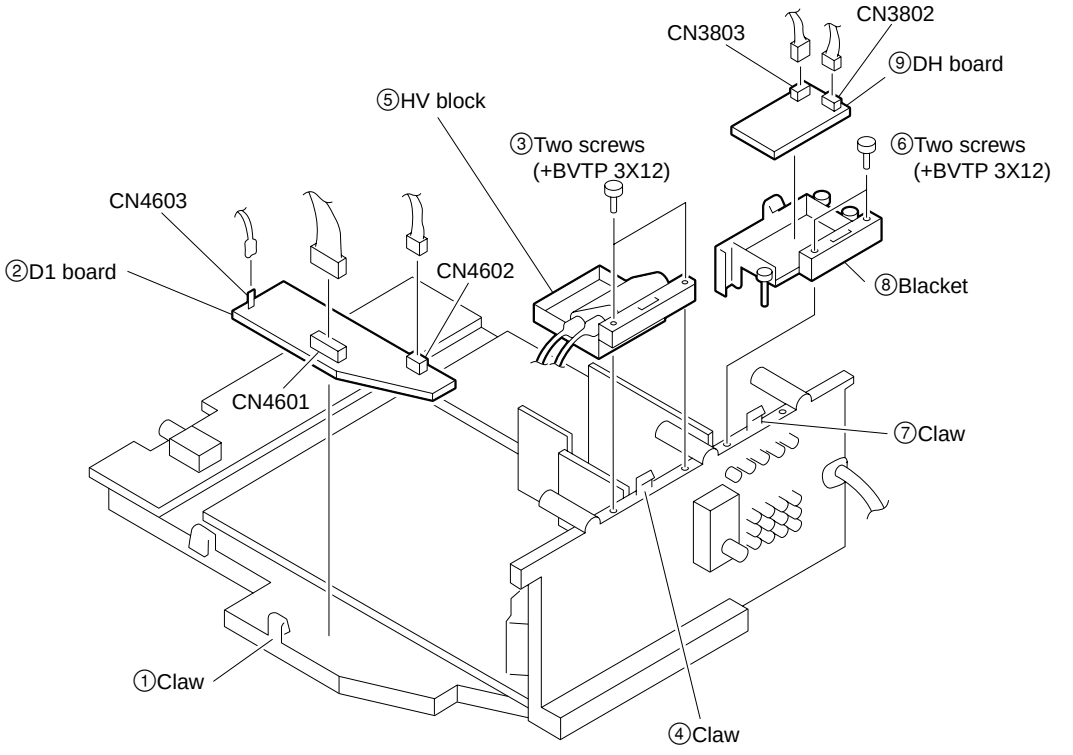
2-3. CHASSIS ASSY REMOVAL



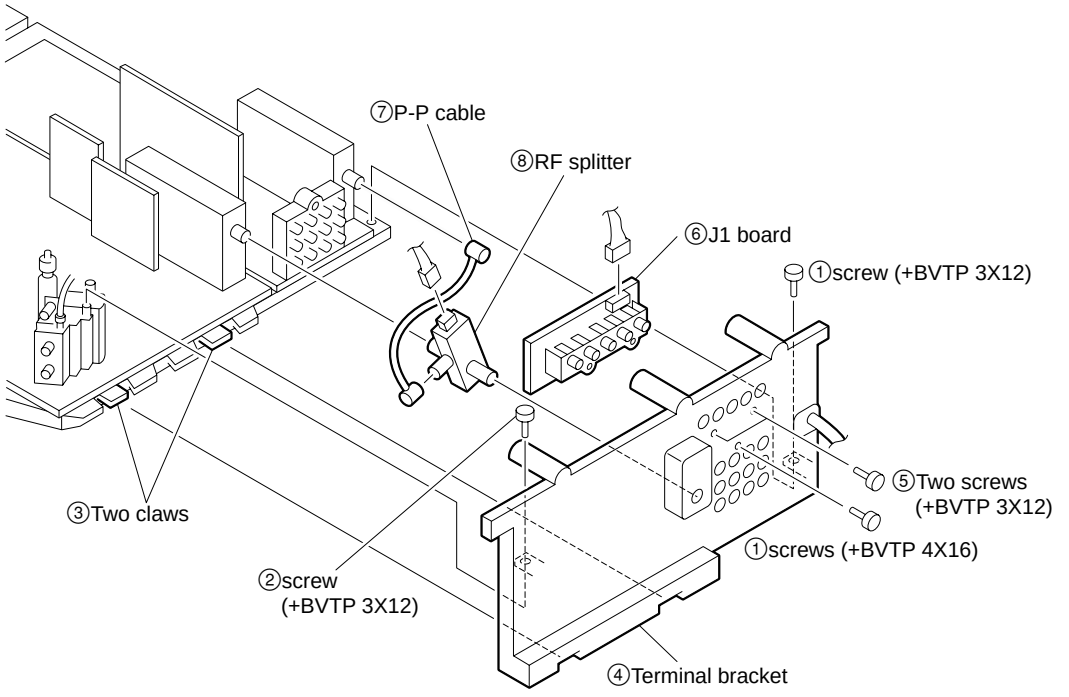
2-4. SERVICE POSITION



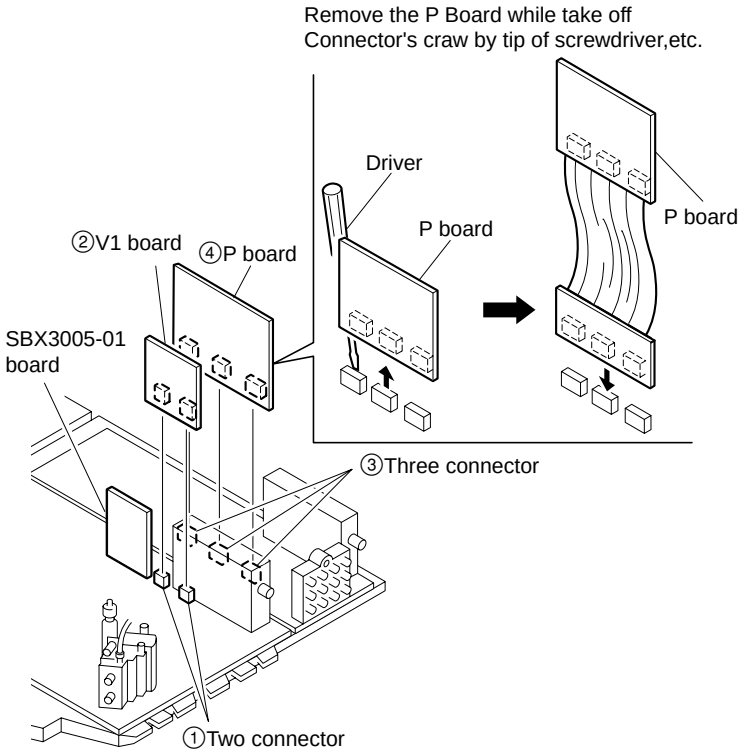
2-5. D1 AND DH BOARDS REMOVAL



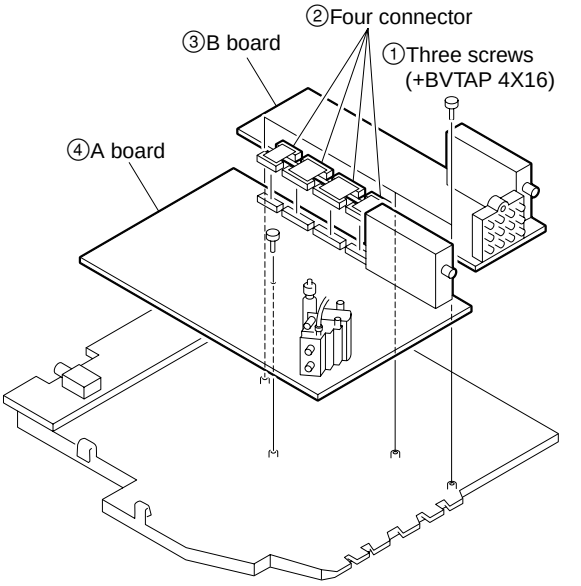
2-6. J1 BOARD AND RF SPLITTER REMOVAL



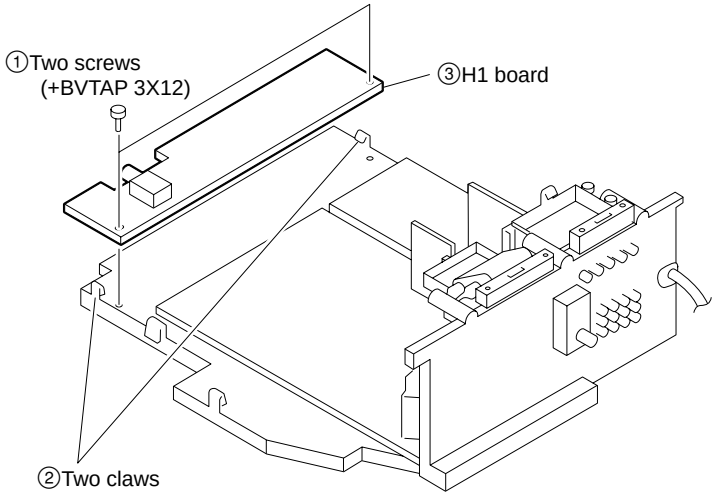
2-7. V1 AND P BOARDS REMOVAL



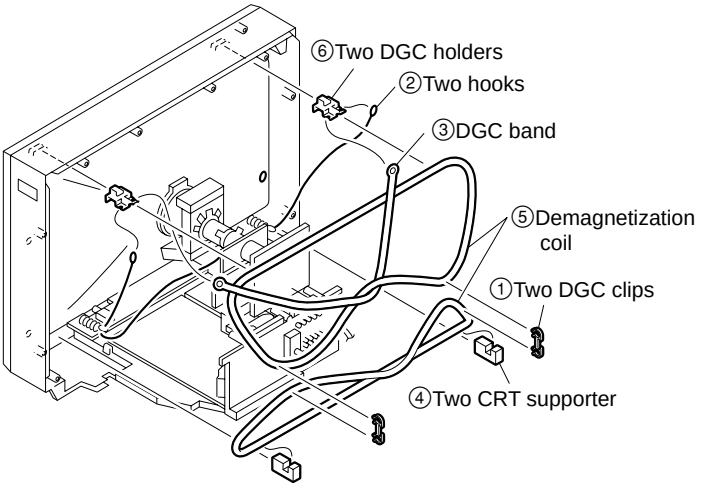
2-8. A AND B BOARDS REMOVAL



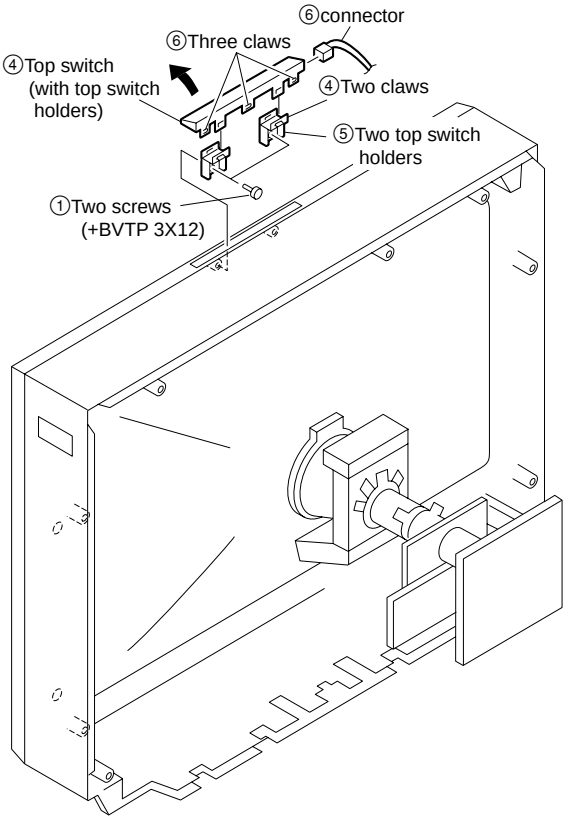
2-9. H1 BOARD REMOVAL



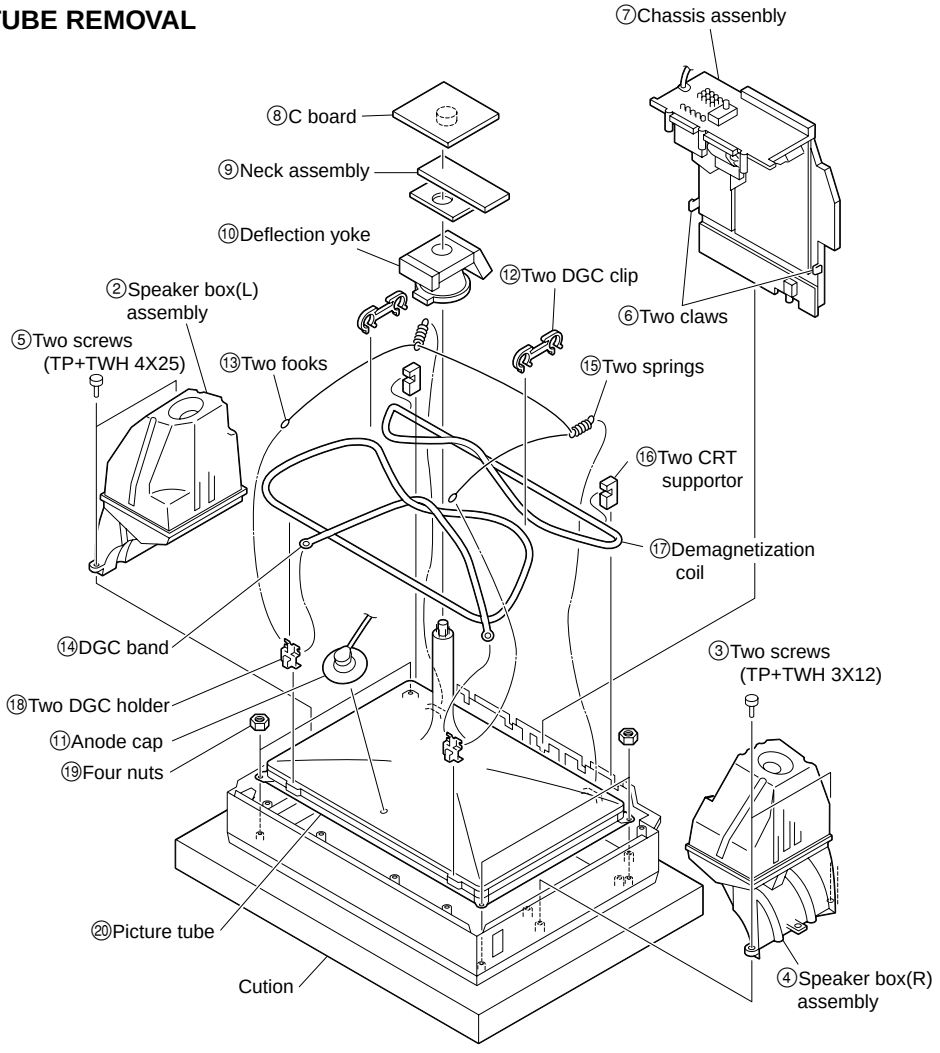
2-10. DEMAGNETIZATION COIL REMOVAL



2-11. TOP SWITCH REMOVAL



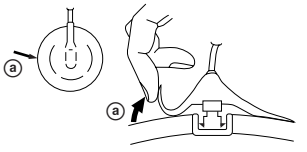
2-12. PICTURE TUBE REMOVAL



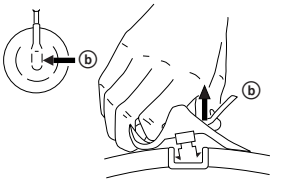
• REMOVAL OF ANODE-CAP

NOTE : After removing the anode, short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT.

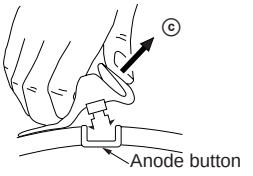
• REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.



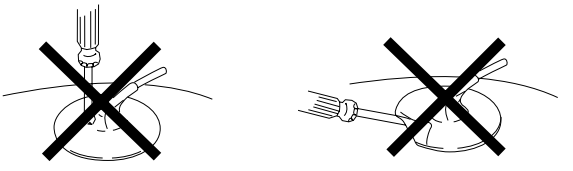
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ.

• HOW TO HANDLE AN ANODE-CAP

① Do not damage the surface of anode-caps with sharp shaped objects.

② Do not press the rubber too hard so as not to damage the inside of anode-cap.
A metal fitting called the shatter-hook terminal is built into the rubber.

③ Do not turn the foot of rubber over too hard.
The shatter-hook terminal will stick out or damage the rubber.



SECTION 3
SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switches should be set as follows unless otherwise noted:
PICTURE control ..... normal
BRIGHTNESS control ..... normal

Perform the adjustments in the following order :

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required.

1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

Preparation :

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING ADJUSTMENT

1. Input a white signal with the pattern generator.
   Contrast, Brightness } normal
2. Position neck assy as shown in Fig3-1.
3. Set the pattern generator raster signal to a green raster.
4. Move the deflection yoke to the rear and adjust with the purity control so that the green is at the center and the blue and the red take up equally sized areas on each side.
   (See Figures 3-1 through 3-3.)
5. Move the deflection yoke forward and adjust so that the entire screen is green. (See Figure 3-2.)
6. Switch the raster signal to blue, then to green and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws and DY spacers.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it.
   (See Figure 3-4.)

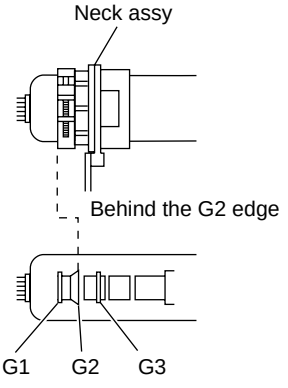


Fig. 3-1

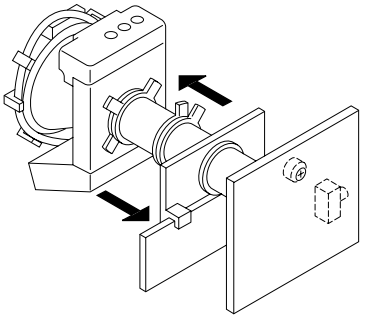


Fig. 3-2

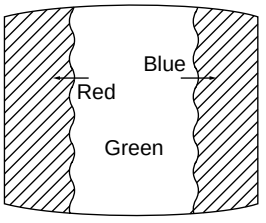


Fig. 3-3

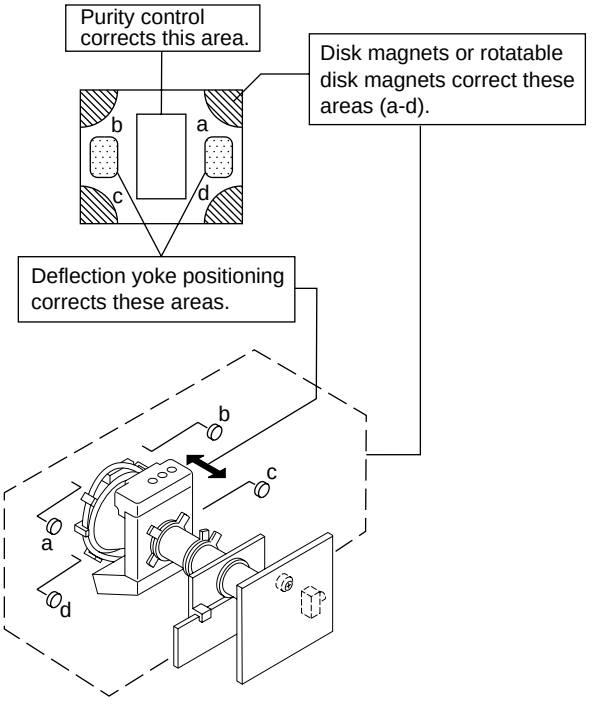


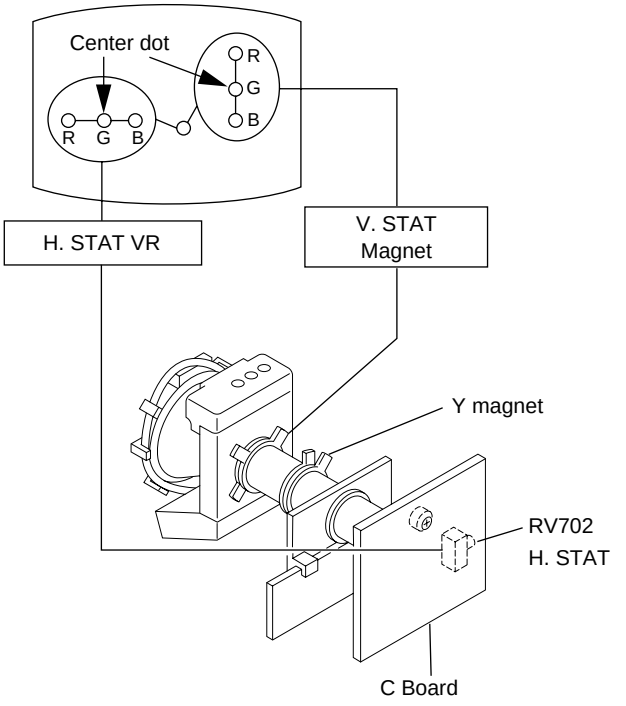
Fig. 3-4

3-2. CONVERGENCE ADJUSTMENT

Preparation :

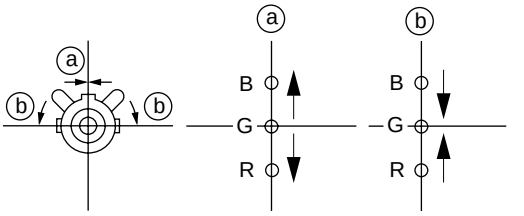
- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Set the PICTURE and BRIGHTNESS 50%.
- Cross hatch / Dot pattern.

(1) Horizontal and Vertical Static Convergence

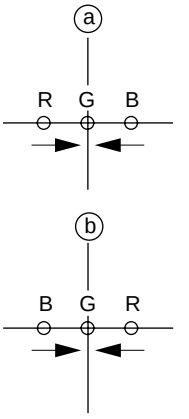


1. (Moving horizontally), adjust the H.STAT control so that the red, green and blue dots are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue dots are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green and blue dots together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other, so be sure to perform adjustments while tracking.)

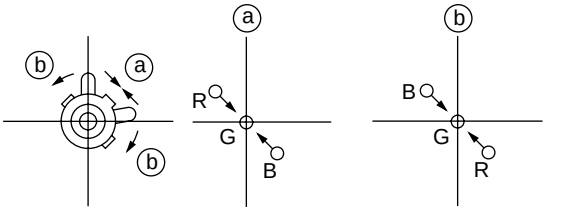
① V. STAT

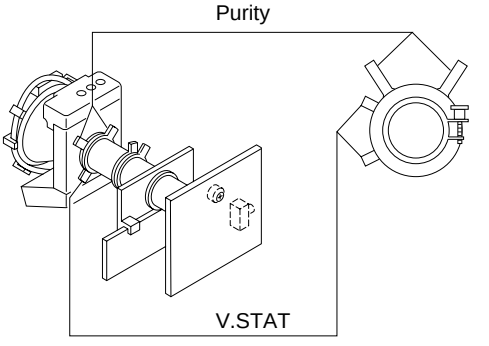


② H. STAT VR



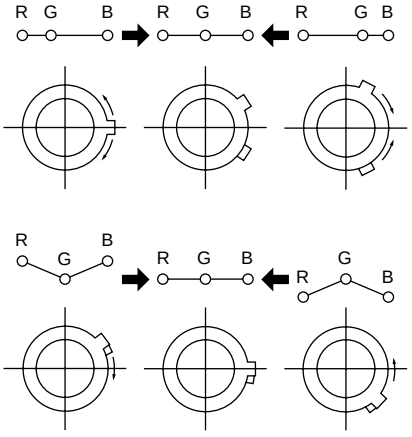
③





④ BMC (Hexapole) Magnet.

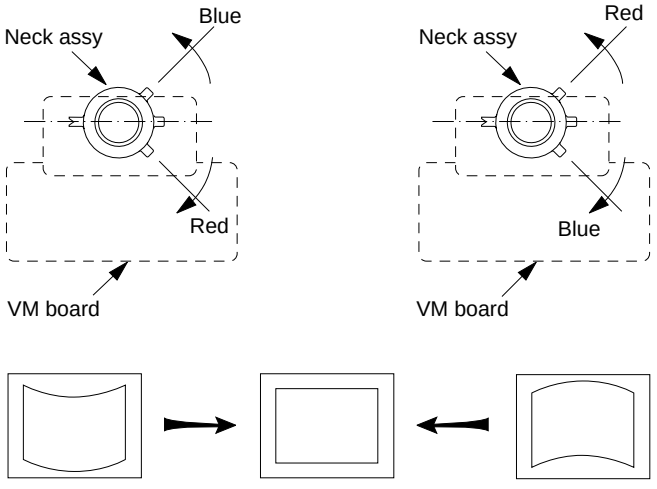
If the red, green and blue dots are not balanced or aligned, then use the BMC magnet to adjust in the manner described below.



⑤ Y separation axis correction magnet adjustment.

1. Receive the cross-hatch signal and adjust [PICTURE] to [MIN] and [BRIGHTNESS] to [STANDARD] .

2. Adjust the Y separation axis correction magnet on the neck assembly so that the horizontal lines at the top and bottom of the screen are straight.



Note

1. The Red and Blue magnets should be equally far from the horizontal center line.
2. Do not separate the Red and Blue magnets too far. (Less than 8 mm)

(2) Dynamic Convergence Adjustment

Preparation:

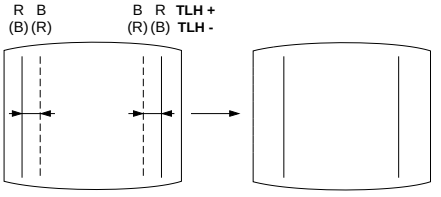
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence
- Set the PICTURE and BRIGHTNESS to normal.

1. Adjust TLH. (TLH correction piece)

① Receive the dot/hatch pattern signal and adjust picture quality by the menu.

② Correct horizontal mis-convergence of red and blue of both sides on the X axis.

When red is outside insert BMC magnet to right side (THL+) views from DY neck. And when blue is outside, insert it to left side (THL–) and take both sides.



2. Adjust XCV core.

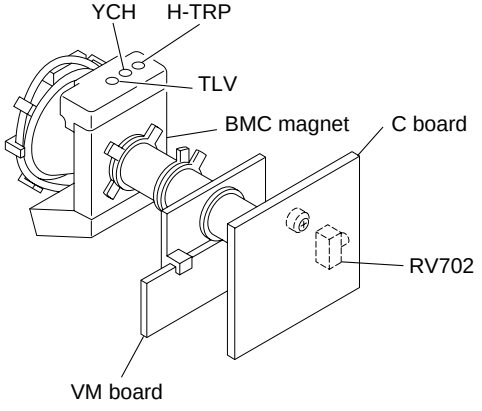
To able to become balance of XCV on the X axis well.

3. Adjust V-TILT.

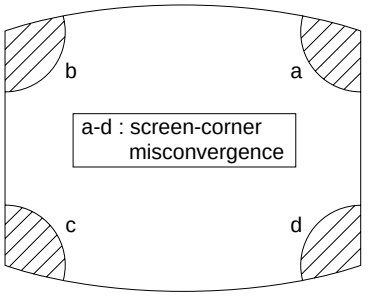
Correct the vertical mis-convergence of red and blue of vertically sides on the Y axis.

4. Adjust YCH.

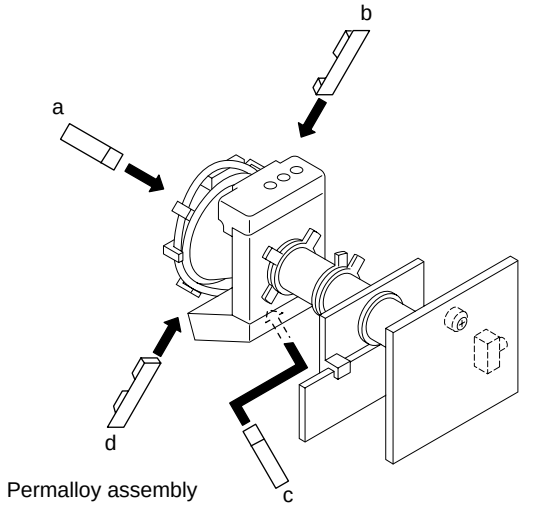
Adjust horizontal mis-convergence of red and blue of vertically sides on the Y axis. Mentioned above steps 2 to 4 are adjusting respectively perform minuteness tracking.



(3) Screen-corner Convergence



Fix a Permalloy assy corresponding to the misconverged areas.

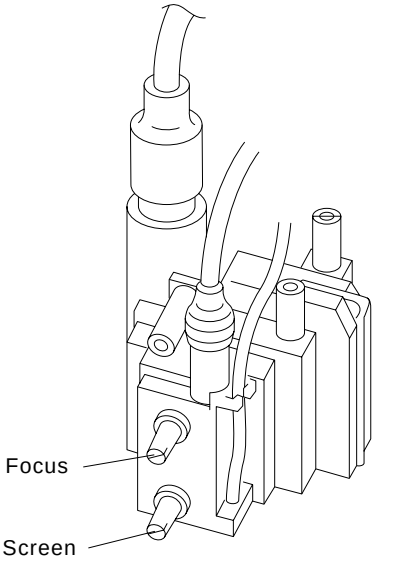


3-3. FOCUS ADJUSTMENT

Note

Focus adjustment should be completed before W/B adjustment.

(1) Receive digital monoscope pattern.
(2) Set "A/V CONTROL" to "STANDARD".
(3) Adjust FOCUS VR so that the center of the screen becomes justfocus.
(4) Change the receiving signal to white pattern and blue back.
(5) Confirm MAGENTA RING should not be over the limit sample. In case MAGENTA RING is over the limit sample, adjust FOCUS VR to take tracking of MAGENTA RING and FOCUS.



FLYBACK TRANSFORMER (T503)

3-4. NECK ASSY TWIST ADJUSTMENT

(1) Receive dot/hatch pattern.
(2) Turn FOCUS VR fully counter-clockwise.
(3) Confirm the dot shape at the screen center. (Fig. 3-4)
(4) Resume FOCUS VR.

Note

In case of turning NECK ASSY, loosen the screw 3 turns. Do not move the position.

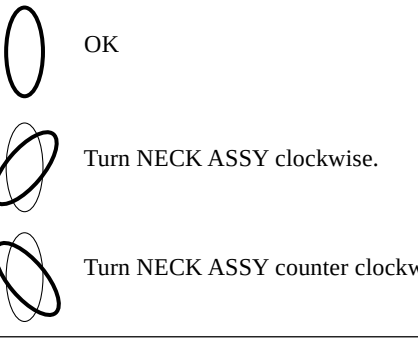
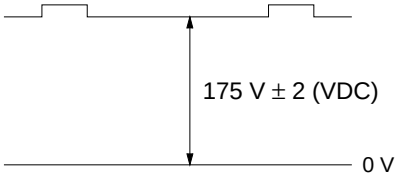


Fig. 3-4

3-5. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

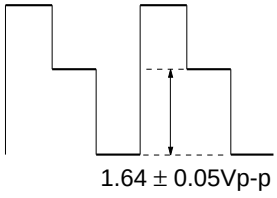
1. G2 (SCREEN) ADJUSTMENT

1) Set the PICTURE and BRIGHTNESS to normal.
2) Put to VIDEO input mode without signals.
3) Connect R, G and B of the C board cathode to the oscilloscope.
4) Adjust G2 (Screen) volume to the value below.



2. DRIVE LEVEL ADJUSTMENT

1) Set to Service Mode (Refer Section 4-1: ADJUSTMENTS WITH COMMANDER).
2) Input PAL Colorbar Signal.
3) Set to VP7 (Service Mode) "DYC" = 0.
4) Set VP22 GON to "0",VP23 BON to "0".
5) Set to A/V mode to "PERSONAL".
6) Connect an osilloscope to pin ② of CN705 on the C board.
7) Set the picture to maximum and Brightness to minimum. Enter into the Service Mode.
8) Using the [1] and [4] buttons select SAJ0 "PMX".
9) Using the [3] and [6] buttons on the Remote Commander adjust until the oscilloscope waveform has an amplitude of 1.64 ± 0.05Vp-p.



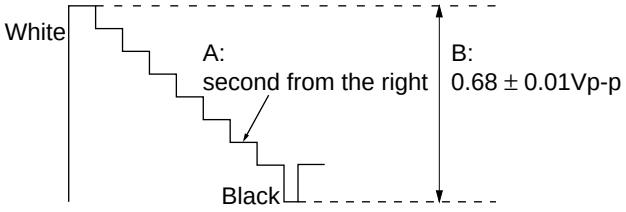
10) Reset to VP7 "DYC" = 1 and VP22 "GON" to 1, VP23 BON to "1".

3. WHITE BALANCE ADJUSTMENT

1) Set to Service Mode (Refer Section 4-1: ADJUSTMENTS WITH COMMANDER).
2) Input white raster signal.
3) Set the following condition.
   PICTURE minimum, BRIGHTNESS 50%
4) Select GCT (WHB 4) and BCT (WHB 5) with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
5) Set the PICTURE to maximum.
6) Select GDR (WHB 1) and BDR (WHB 2) with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
7) Write into the memory by pressing [MUTING] then [0].

4. SUB PICTURE BRIGHTNESS ADJUSTMENT

1) Set to service mode (Refer Section 4-1: ADJUSTMENTS WITH COMMANDER).
2) Input a PAL RF colorbar signal through Sub TUNER (TU3301).
3) BRIGHTNESS .... RESET.
   PICTURE ..... MINIMUM
4) A:Select SBR (WHB7) with [1] and [4], and adjust SBR (WHB7) level with [3] and [6] so that the second stripe from the right is dimly lit.
   B:Adjust RV5301 on B board so that the level of CN1310 ⑩ pin is within spec.



SECTION 4
CIRCUIT ADJUSTMENTS

4-1. ADJUSTMENTS WITH COMMANDER

Service adjustments are made with the RM-951 that comes with this unit.

a. ENTERING SERVICE MODE

With the unit on standby
↓
[DISPLAY]
↓
[5]
↓
[VOL (+)]
↓
[POWER]

This operation sequence puts the unit into service mode.

b. METHOD OF CANCELLATION FROM SERVICE MODE

Set the standby condition (Press [POWER] button on the commander), then press [POWER] button again, hereupon it becomes TV mode.

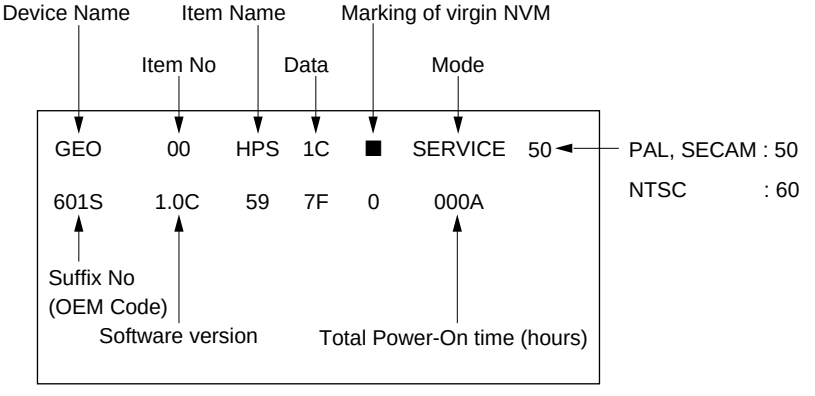
c. METHOD OF WRITE INTO MEMORY

1) Set to Service Mode.
2) Press [1] (UP) and [4] (DOWN), select an item of adjustment.
3) Press [MUTING] button and it will indicate WRITE on the screen.
4) Press [0] button to write into memory.

d. MEMORY WRITE CONFIRMATION METHOD

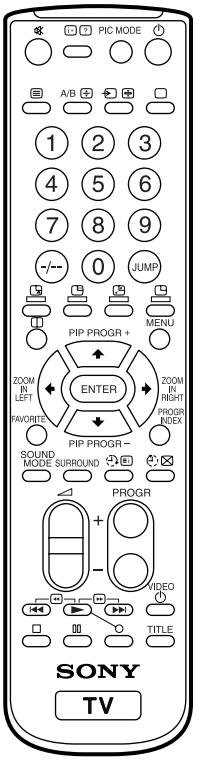
1) After adjustment, pull out the plug from AC outlet, and then plug into AC outlet again.
2) Turn the power switch ON and set to Service Mode.
3) Call the adjusted items again to confirm adjustments were made.

The screen display is :



[1], [4]	Select the adjustment item.
↓	
[3], [6]	Raise/lower the data value.
↓	
[MUTING]	Writes.
↓	
[0]	Executes the writing.

[7], [0]	All the data becomes the values in memory.
[8], [0]	All user control goes to the standard state.
[5], [0]	Service data initialization (Be sure not to use usually.)
[2], [0]	Write 50Hz adjustment data to 60Hz, or vice versa.



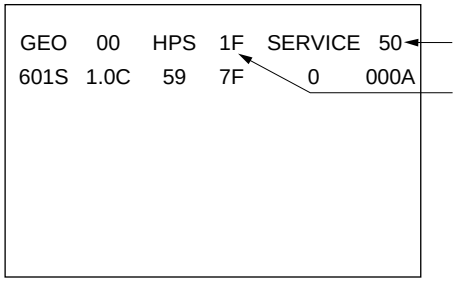
RM-951

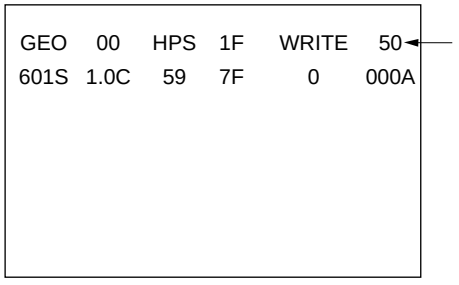
4-2. ADJUSTMENT METHOD

Item Number 00 of device GEO

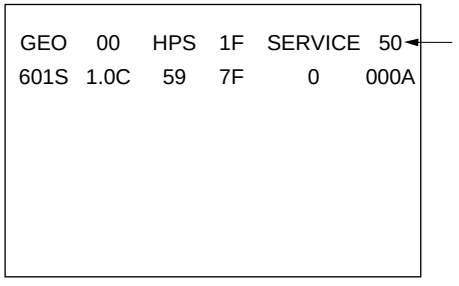
This explanation uses H-Position as an example.

1. Select “GEO 00 HPS” with the [1] and [4] buttons.
2. Raise/lower the data with the [3] and [6] buttons.
3. Select the optimum state. (The standard is 1F for PAL reception.)
4. Write with the [MUTING] button. (The display changes to WRITE.)
5. Execute the writing with the [0] button. (The WRITE display will be changed to red color while excuting, and back to SERVICE.)





Written with [MUTING]



Write executed with [0]

Use the same method for all Items. Use [1] and [4] to select the adjustment item, use [3] and [6] to adjust, write with [MUTING], then execute the write with [0].

Note : 1. In [WRITE], the data for all items are written into memory together.

2. For adjustment items that have different standard data between 50Hz or 60Hz, be sure to use the respective input signal after adjustment.

Adjustment Item Table

Device Name	Functionality No	Functionality Name	Note	Data Range	Function	Note for Different Data	Slava Address
GEO	0	HPS	13	3F	H Position	50/60/MID50/MID60	CXA2130S(88H)
	1	HSZ	26	3F	H Size	50/60/MID50/MID60	
	2	PAP	22	3F	Pin Amp	50/60Hz	
	3	TLT	6	0F	Trapezium	50/60/MID50/MID60	
	4	VPS	25	3F	V Position	50/60/MID50/MID60	
	5	VSZ	16	3F	V Size	50/60/MID50/MID60	
	6	SCO	8	0F	S Correction	50/60Hz	
	7	VLN	7	0F	V Linearity	50/60Hz	
	8	BOW	8	0F	AFC Bow	50/60Hz	
	9	AGL	8	0F	AFC Angle	50/60Hz	
	0A	UPN	25	3F	Upper Pin	50/60Hz	
	0B	LPN	25	3F	Lower Pin	50/60Hz	
	0C	HBL	0	1	H Blanking on/off		
	0D	LBL	7	0F	Left H Blanking	50/60Hz	
	0E	RBL	7	0F	Right H Blanking	50/60Hz	
WHB	0	RDR	25	3F	R Drive	DYNAMIC/others	CXA2130S(88H)
	1	GDR	25	3F	G Drive	DYNAMIC/others	
	2	BDR	25	3F	B Drive	DYNAMIC/others	
	3	RCT	7	0F	R Cutoff	SECAM/others	
	4	GCT	7	0F	G Cutoff	SECAM/others	
	5	BCT	7	0F	B Cutoff	SECAM/others	
	6	BMN	18	1F	Brightness Minimum Data		
	7	SBR	2E	3F	Sub Brightness Control		
SAJ	0	PMX	2B	3F	Picture Maximum Data		CXA2130S(88H)
	1	SHU	0	0F	Sub Hue Control	TV/Video	
	2	SSH	4	0F	Sub Sharpness Control	TV/Video	
	3	SCL	20	3F	Sub Color Control	NTSC/others	
VP	0	EHT	5	0F	EHT Comp	50/60Hz	CXA2130S(88H)
	1	GMA	2	O3	Gamma Correction (also separated for STANDARD)	NTSC/others	
	2	YDL	0D	0F	Y Delay	PAL/SECAM/NTSC/DVD	
	3	SST	2	O3	SECAM ID Start Position		
	4	SSP	1	O3	SECAM ID Stop Position		
	5	SLV	1	O3	SECAM ID Level		
	6	SBF	22	3F	SECAM BELL fO		
	7	DYC	1	1	Dynamic Color on/off		
	8	ABL	0	1	ABL Mode Switching (except STANDARD)	except STANDARD	
	9	VTH	1	1	ABL Detection Vth Switching		
	0A	SF0	1	1	FO Switching for Sharpness	NTSC/others	
	0B	DCX	1	1	DC Trans. Ratio Switching		
	0C	SHT	1	1	Pre-/Overshoot ratio Switch	NTSC/others	

Adjustment Item Table

Device Name	Functionality No	Functionality Name	Note	Data Range	Function	Note for Different Data	Slava Address
VP	0D	HDW	0	1	H Drive Pulse Width Switch		CXA2130S(88H)
	0E	AFC	0	O3	AFC Gain Control	TV/Video/Text	
	0F	HOS	7	0F	H Oscillation		
	10	HSS	0	1	Slice Level of H Sync Sep.		
	11	VSS	0	1	Slice Level of V Sync Sep.		
	12	HMS	1	1	Macro Vision C/m off/on	50/60Hz	
	13	YUV	0	1	YUV Switch Control		
	14	CDV	1	3	CD mode for Video	Video only	
	15	RON	1	1	R ON	not memorized	
	16	GON	1	1	G ON	not memorized	
	17	BON	1	1	B ON	not memorized	
	18	PON	1	1	P ON	not memorized	
	19	BLK	0	1	BLK Off		
	1A	VMC	1	1	VM Off		
AP	0	BCS	1	3	Bass Center Shift		TDA7315(80H)
	1	TCS	1	3	Treble Center Shift		
MSP	0	WST	15	FF	W/G Stereo Threshold		MSP3415D(84H)
	1	WBT	EA	FF	W/G Bilingual Threshold		
	2	WLL	5	FF	W/G Monaural Threshold		
	3	WAC	1	0F	W/G Agreement Count		
	4	WDL	30	FF	W/G Search Delay		
	5	NDL	20	FF	NICAM Search Delay		
	6	SDL	10	FF	Stereo status Read Delay		
	7	AGC	1	1	AGC Switch Auto/Constant		
	8	REL	28	3F	AGC Gain at Constant Mode		
	9	CRM	0	1	Carrier muting on/off		
	0A	ACO	1	1	Audio Clock out on/off		
	0B	FP	1B	7F	FM Prescale for non-M system		
	0C	FPM	32	7F	FM Prescale for M system		
	0D	FH	2D	7F	FM Prescale for HDEV		
	0E	FHM	65	7F	FM Prescale for HDEV and M		
	0F	WGP	2A	7F	W/G Prescale		
	10	NIP	6D	7F	NICAM Prescale		
	11	ERR	50	FF	Auto FM switch Threshold		
	12	VOL	FF	FF	Loud Speaker gain 0700h to 07FFh		

Adjustment Item Table

Device Name	Functionality No	Functionality Name	Note	Data Range	Function	Note for Different Data	Slava Address
LTI	0	LDH	1	1	Histogram Segment Selection		TDA9178 (40H)
	1	CFS	1	1	Contour Filter Selection		
	2	WLB	0	1	Letterbox Window Switch		
	3	VDC	1	1	Video Dependent Coring		
	4	DEM	0	1	Demonstration Mode		
	5	CDP	0	O7	Luminance Delay		
	6	OSP	1	1	Overrule Smart Peaking		
	7	WPO	0	1	White Point Stretch Off		
	8	DSK	0	1	Skin Tone Switch		
	9	ASK	0	1	Skin Tone Angle Selection		
	0A	WSK	0	1	Skin Tone Width Selection		
	0B	SSK	0	1	Skin Tone Size Selection		
	0C	DGR	1	1	Green Enhancement Switch		
	0D	DGT	7	7	Threshold of Green Enhancement Switch		
	0E	GGR	0	1	Green Enhancement Gain		
	0F	WGR	0	1	Green Enhancement Width		
	10	SGR	0	1	Green Enhancement Size		
	11	DBL	0	1	Blue Stretch Switch		
	12	GBL	0	1	Blue Stretch Gain Selection		
	13	SBL	0	1	Blue Stretch Size Selection		
	14	CDS	1	1	Color Dependent Sharpness		
	15	CST	7	7	Threshold of Color Dependent Sharpness		
	16	CTI	0	1	Color Transient Improvement		
	17	BON	0	1	Black offset Compensation		
	18	BTD	0	3F	Adaptive Black Strecth		
	19	NLD	15	3F	Non-Linearity Amplifier		
	1A	NLW	4	7	Step Width of Non-Linearity Amplifier		
	1B	VGD	20	3F	Variable Gamma		
	1C	VGW	0	7	Step Width of Variable Gamma		
	1D	PKD	1A	3F	Peaking Amplitude		
	1E	PKW	8	0F	Step Width of Peaking Amplitude		
	1F	SPD	1F	3F	Steepness Correction		
	20	CRD	13	3F	Coring Level		
	21	CRW	9	0F	Step Width of Coring Level		
	22	LWD	1F	3F	Line Width Correction		
	23	SNM	1	7	S/N Mode under unreliable S/N Condition		
	24	SNC	3	0F	S/N Ratio Average Counter	TV/Video	
	25	FMC	2	0F	Feature Mode Matching Counter		

Adjustment Item Table

Device Name	Functionality No	Functionality Name	Note	Data Range	Function	Note for Different Data	Slava Address
MID	0	HAT	1C	FF	H Phase for A-ch in Twin mode		CXP86332 (6EH)
	1	HAX	21	FF	H Phase for A-ch in Index mode		
	2	VPA	0C	FF	V Phase for A-ch (common)		
	3	DLA	3	O7	Chroma Delay for A-ch		
	4	VJA	0	O3	V-Jitter Reduction for A-ch		
	5	CYA	10	FF	Y-Clamp Level for A-ch		
	6	CUA	80	FF	U-Clamp Level for A-ch		
	7	CVA	80	FF	V-Clamp Level for A-ch		
	8	DPA	0	7F	Clamp Delay Position for A-ch		
	9	HBT	22	FF	H Phase for B-ch in Twin mode		
	0A	HBI	20	FF	H Phase for B-ch in PinP mode		
	0B	HBX	21	FF	H Phase for B-ch in Index mode		
	0C	VPB	0C	FF	V Phase for B-ch except in Index		
	0D	VBX	9	FF	V Phase for B-ch in Index mode		
	0E	DLB	3	O7	Chroma Delay for B-ch		
	0F	VJB	0	O3	V-Jitter Reduction for B-ch		
	10	CYB	10	FF	Y-Clamp Level for B-ch		
	11	CUB	80	FF	U-Clamp Level for B-ch		
	12	CVB	80	FF	V-Clamp Level for B-ch		
	13	DPB	0	7F	Clamp Delay Position for B-ch		
	14	VJC	3	3	V-Jitter Reduction for C-ch		
	15	DLC	4	7	Chroma Delay for C-ch		
	16	YSD	1	7	YS Delay		
	17	ADA	0	1	AD Switch for A-ch		
	18	ADB	0	1	AD Switch for B-ch		
	19	DCA	0	3	Digital Input Color Signal Phase for A-ch		
	1A	DCB	0	3	Digital Input Color Signal Phase for B-ch		
	1B	ACA	0	1	ADC on/off for A-ch		
	1C	ACB	0	1	ADC on/off for B-ch		
	1D	WIA	0	3	Write Interlace Correction for A-ch		
	1E	RIA	0	3	Read Interlace Correction for A-ch		
	1F	WIB	0	3	Write Interlace Correction for B-ch		
	20	RIB	0	3	Read Interlace Correction for B-ch		
	21	OEA	0	1	Odd/Even Selection for A-ch		
	22	EIA	0	3	Reverse Interlace Correction for A-ch		
	23	OEB	0	1	Odd/Even Selection for B-ch		
	24	EIB	0	3	Reverse Interlace Correction for B-ch		
	25	OEC	0	1	Odd/Even Selection for C-ch		
	26	OES	0	1	Option 1 for Euro model		
	27	OID	1	1	Option 2 for Field ID		
	28	OVF	0	1	Option 3 for V LPF		

Adjustment Item Table

Device Name	Functionality No	Functionality Name	Note	Data Range	Function	Note for Different Data	Slava Address
MID	29	OSH	1A	3F	OSD H Position		CXP86332 (6EH)
	2A	OSV	2C	3F	OSD V Position		
	2B	PHP	3	0F	PinP H Position		
	2C	PVP	4	0F	PinP V Position		
SVP	0	SBF	22	3F	SECAM BELL f0		CXA2130S(8AH)
	1	HOS	7	0F	H Oscillation		
	2	SHU	6	0F	Sub Hue Control	TV/Video	
	3	SCL	1F	3F	Sub Color Control	NTSC/others	
DSP	0	TS1	A5	FF	TruSurround Effect 1	Virtual/TruSurr.	TC9447F(32H)
	1	TS2	5A	FF	TruSurround Effect 2	Virtual/TruSurr.	
	2	SR1	FF	FF	SRS Effect 1	TruSurr./Simulate	
	3	SR2	FF	FF	SRS Effect 2	TruSurr./Simulate	
	4	BH1	40	FF	BBE Effect 1 for BBE High	Off/Vir./Tru./Sim.	
	5	BH2	48	FF	BBE Effect 2 for BBE High	Off/Vir./Tru./Sim.	
	6	BL1	33	FF	BBE Effect 1 for BBE Low	Off/Vir./Tru./Sim.	
	7	BL2	33	FF	BBE Effect 2 for BBE Low	Off/Vir./Tru./Sim.	
TXT	0	TXH	1	3	Teletext Horizontal Position		SAA5261(58H)
	1	TXV	1	7	Teletext Vertical Position		
OPM	0	OSH	0C	3F	OSD H Position	Option-Misc.	CXP750097(60H)
	1	COM	2	O3	Comb Selection		
	2	APC	0	1	APC Switch		
	3	TSY	0	O3	TV Sys at Auto TV Sys		
	4	MUT	0	1	No Signal Mute		
	5	AFM	1	1	Auto FM switch		
	6	RFB	0	O3	C-BPF Control		
	7	TVO	3	7	Tilt to V-Angle offset		
	8	DBL	0	1	Disable Blueback Function		
OPB	0	OP1	FF	FF	Optional Bits 1 (see below)	Option-Bits.	CXP750097(60H)
	1	OP2	E7	FF	Optional Bits 2 (see below)		
	2	OP3	32	FF	Optional Bits 3 (see below)		

NOTE

- Standard data listed on the Adjustment Item Table are reference values, therefore it may be different for each model and for each mode.
- Note for Different Data Those are the standard data values written on the microprocessor. Therefore, the data values of the modes and stored respectively in the memory.
  In case of a device replacement, adjustment by rewriting the data value is necessary for some items.

ITEM INFORMATION.
No. OPB0 OP1

Item	XTAL 4.43	XTAL 3.58	SECAM	2nd. Lang	B/G	I	D/K	M
Initial Data	1	1	1	1	1	1	1	1

No. OPB1 OP2

Item	DEST	TOP	NICAM	HDEV	Thai Bil.	---	DVD Input	AV Input	
Initial Data	Other	0	1	1	0	0	1	1	1
	OCE	1	1	1	0	0	1	1	1

AV Input 00 = no AV Input 01 = 1 AV Input
10 = 2 AV Input 11 = 3 AV Input

DVD Input Effective only when "AV Input" is set to 3 AV input

No. OPB2 OP3

Item	---	---	Auto PIC	A-Tvsys	US ST	2199	11 Key	Color SW
Initial Data	0	0	1	1	0	0	1	0

Auto PIC Auto Picture Improvement 0 = inactive, 1 = active

A-TVsys Auto TV System in Auto Program 0 = disabled, 1 = enabled

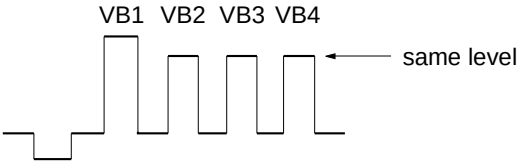
US ST USA Stereo 0 = disabled, 1 = enabled

11 Key Front Key Selection 0 = 7 key model, 1 = 11 key model

4-3. PICTURE QUALITY ADJUSTMENTS

SUB COLOR ADJUSTMENT (SCL)

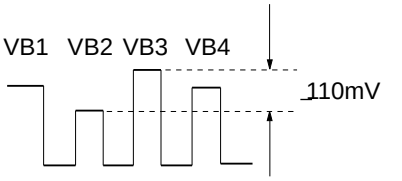
1. Set to service mode.
2. Input RF PAL colorbar signal.
   Set A/V control to PERSONAL.
3. Set to VP7 (Service mode) "DYC" = 0
4. Set the following condition.
   Picture to 100%, Color to 0% and Bright to 0%.
5. Connect an oscilloscope to the pin ③ (BLUE) of CN705, C board.
6. Using the [1] and [4] buttons select SAJ 3 (Service mode) "SCL".
7. Using the [3] and [6] buttons on the Remote Commander to adjust to VB2 = VB3 = VB4 with [3] and [6].
8. Write into the memory by pressing "MUTING" then "0".
9. Input NTSC colorbar signal to VIDEO1 and select VIDEO1 input.
10. Adjust as step 4. and 8. by receving NTSC colorbar.
11. Reset to VP 7 (Service mode) "DYC" = 1.



PAL :
VB2 = VB3 = VB4
(Difference is within 70mV)
NTSC :
VB1 = VB4
(Difference is within 70mV)

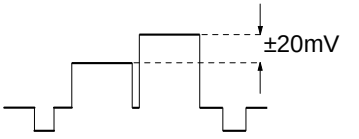
SUB HUE ADJUSTMENT (SHU)

12. Set to service mode.
13. Input NTSC colorbar signal to VIDEO1 and select VIDEO1 input.
14. Set to VP 7 (Service mode) "DYC" = 0
15. Connect an oscilloscope to the pin ③ (BLUE) of CN705, C board.
16. Using the [1] and [4] buttons select SAJ 1 (Service mode) "SHU (VIDEO)".
17. Using the [3] and [6] buttons on the Remote Commander to adjust to VB2 = VB3 = VB4 with [3] and [6].
18. Write into the memory by pressing [MUTING] then [0].
19. Reset to VP 7 (Service mode) "DYC" = 1.

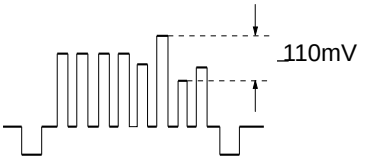


The highest level of VB1,VB2,VB4
will be aligned at the same line.
The ideal different level between VB2 and
VB3 is within ±110mV.

20. Select "TWIN PICTURE" mode. (MID)
21. Receive different RF PAL white signals in MAIN and SUB picture.
22. Adjust RV5301 on B board so that the level at pin ② (BLUE) of CN705 on C board becomes within spec.



23. Receive RF NTSC colorbar signal in MAIN picture and VIDEO1 NTSC colorbar signal in SUB picture.
24. Adjust SVP2 (Service mode) "SHU (VIDEO)" so that the level at pin ③ (BLUE) of CN705 on C board becomes within spec.
25. Write into the memory by pressing [MUTING] then "0".



26. Write SJA 3 (Service mode) "SCL (PAL)" +4 steps to SJA 3 (Service mode) "SCL (PAL)".
    Write SJA 3 (Service mode) "SCL (NTSC)" +3 steps to SJA 3 (Service mode) "SCL (NTSC)".
    Write SJA 1 (Service mode) "SHU (VIDEO)" +3 steps to SJA 1 (Service mode) "SHU (VIDEO)".
    Write SJA 1 (Service mode) "SHU (VIDEO)" -5 steps to SJA 1 (Service mode) "SHU (TV)".
    Write SVP 2 (Service mode) "SHU (VIDEO)" +3 steps to SVP 2 (Service mode) "SHU (VIDEO)".
    Write SVP2 (Service mode) "SHU (VIDEO)" -2 steps to SVP 2 (Service mode) "SHU (TV)".
27. Reset to VP 7 (Service mode) "DYC" = 1

Y LEVEL (SUB PICTURE) ADJUSTMENT

1. Input a PAL colorbar signal.
2. Set to TWIN PICTURE mode.
3. Connect an oscilloscope to pin ② (R-out) of CN705 on the C board.
4. Adjust VR5301 on B board so that white level of main picture and sub picture becomes same level.

HUE LEVEL (SUB PICTURE) ADJUSTMENT

1. Input a NTSC colorbar VIDEO signal.
2. Set to TWIN PICTURE mode.
3. Connect an oscilloscope to pin ② (R-out) of CN705 on the C board.
4. Select SVP (02) SHU with [1] and [4] of the commander so that waveform of main picture and sub picture become same level.
5. Press [MUTING] → [0] on the commander to write the data with SVP (02) "SHU" Video mode and TV mode.

H-TRAPIZIUM ADJUSTMENT

1. Input a cross hatch/dot signal.
2. Adjust RV1801 on C board to make H-Trapizoid distortion best.

FREQUENCY (FREE RUN) ADJUSTMENT

1. Select Video 1 (no signal).
2. Connect a frequency counter across pin ⑲ (FH) IC301 of A Board.
3. Select VP (OF) HOS with [1] and [4] of the commander then adjust to 15.690kHz ± 25Hz using [3] and [6].

4-4. A BOARD ADJUSTMENT AFTER IC003 (MEMORY) REPLACEMENT

When replacing IC003 (MEMORY), be sure to change IC001 (μ-COM) to the following new IC at the same time.

MODEL	IC001 (μ-CON)
KV-EF34M31(OCE) KV-EF34M61(GE) KV-EF34M90(HK) KV-EF34M90(JE)	CXP750097-001S
KV-EF34M80(ME) KV-EF34M91(ME)	CXP750097-002S

1. Enter to Service Mode.

2. Press commander buttons [5] and [0] (Data Initialize), and [2] and [0] (Data Copy) to initialize the data.

3. Call each item number and check if the respective screen shows the normal picture.
   In cases where items are not well adjusted, rectify the items with fine adjustment.
   Write the data per each item number ([MUTING] +[0]).

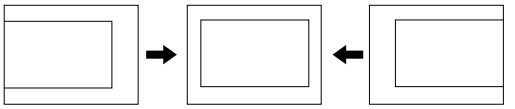
4. Select item numbers “OPB0” (OP1), “OPB1” (OP2) and “OPB2” (OP3) and respectively set the bit per model with command buttons [3] and [6].

5. Press commander buttons [8] and [0] (Test Normal) to return to the data that was set on the shipment from the factory.
   (This will also cancel Service Mode.)

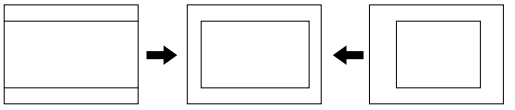
4-5. PICTURE DISTORTION ADJUSTMENT (1)

Item Number 00 – 11

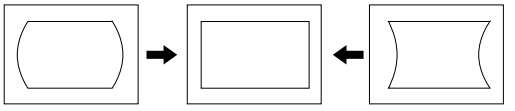
GEO 0 HPS (H POSITION)



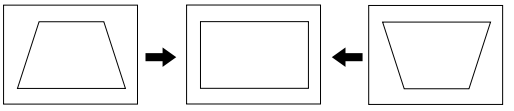
GEO 1 HSZ (H SIZE)



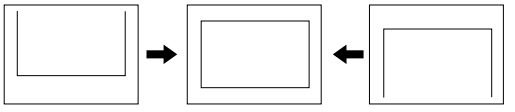
GEO 2 PAP (PIN AMP)



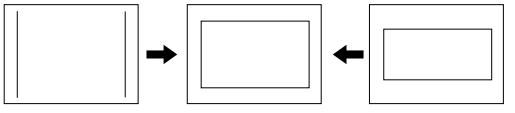
GEO 3 TLT (TRAPEZIUM)



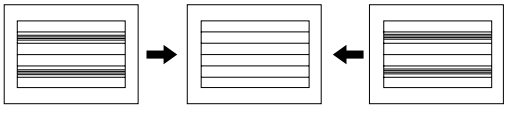
GEO 4 VPS (V POSITION)



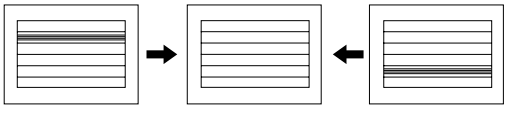
GEO 5 VSZ (V SIZE)



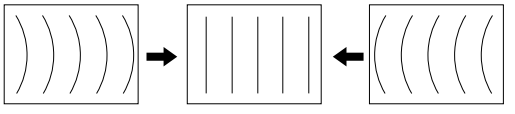
GEO 6 SCO (VERTICAL S-Correction)



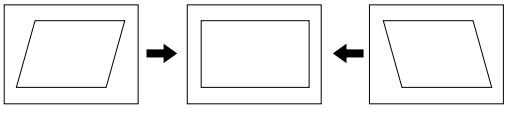
GEO 7 VLN (V LINEARITY)



GEO 8 BOW (AFC.BOW)

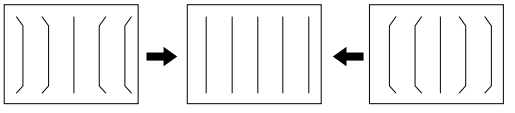


GEO 9 AGL (AFC.ANGLE)



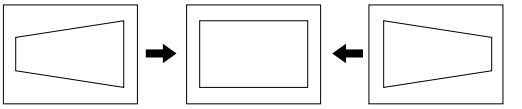
GEO 10 UPN (UPPER PIN)

GEO 11 LPN (LOWER PIN)



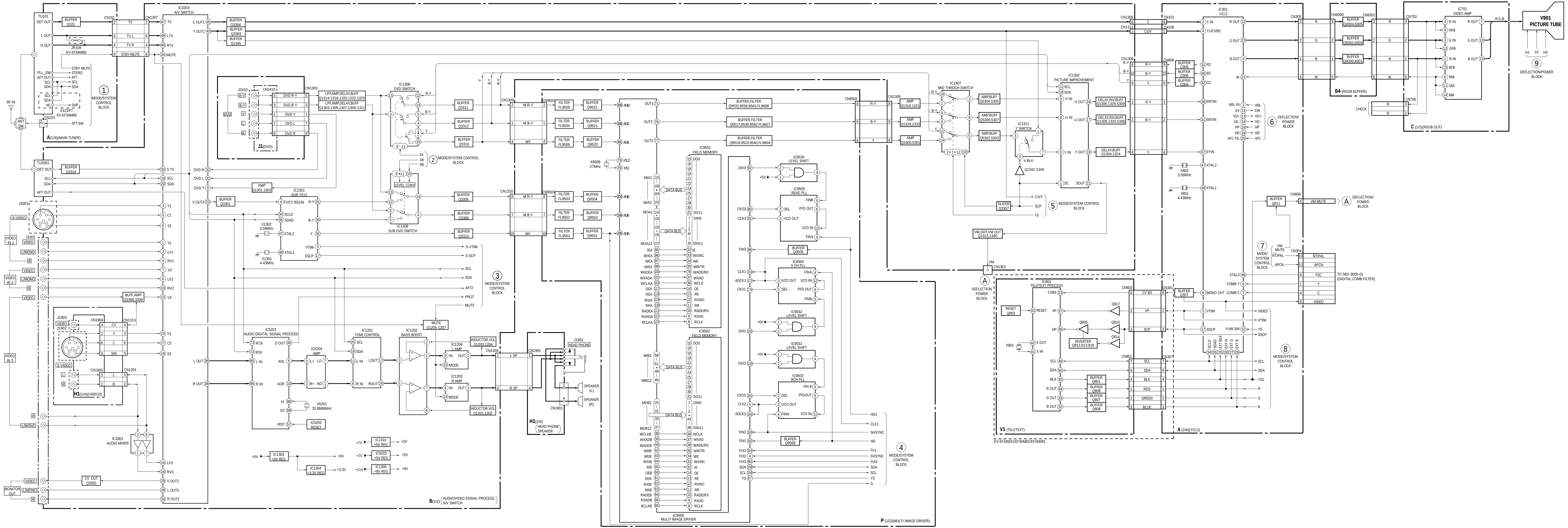
PICTURE DISTORTION ADJUSTMENT (2)

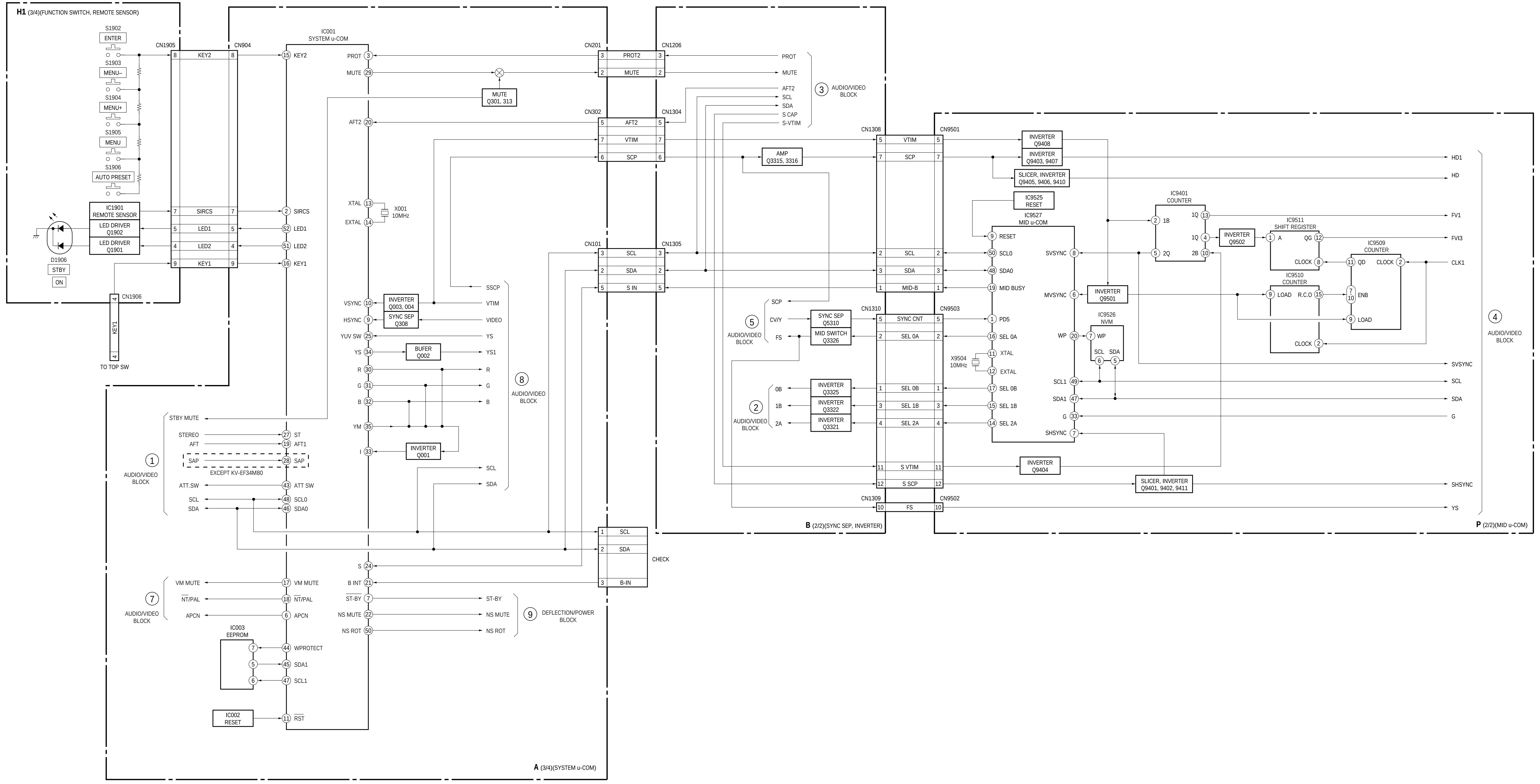
H-TRAPEZOID (Rotate RV1801, C board)

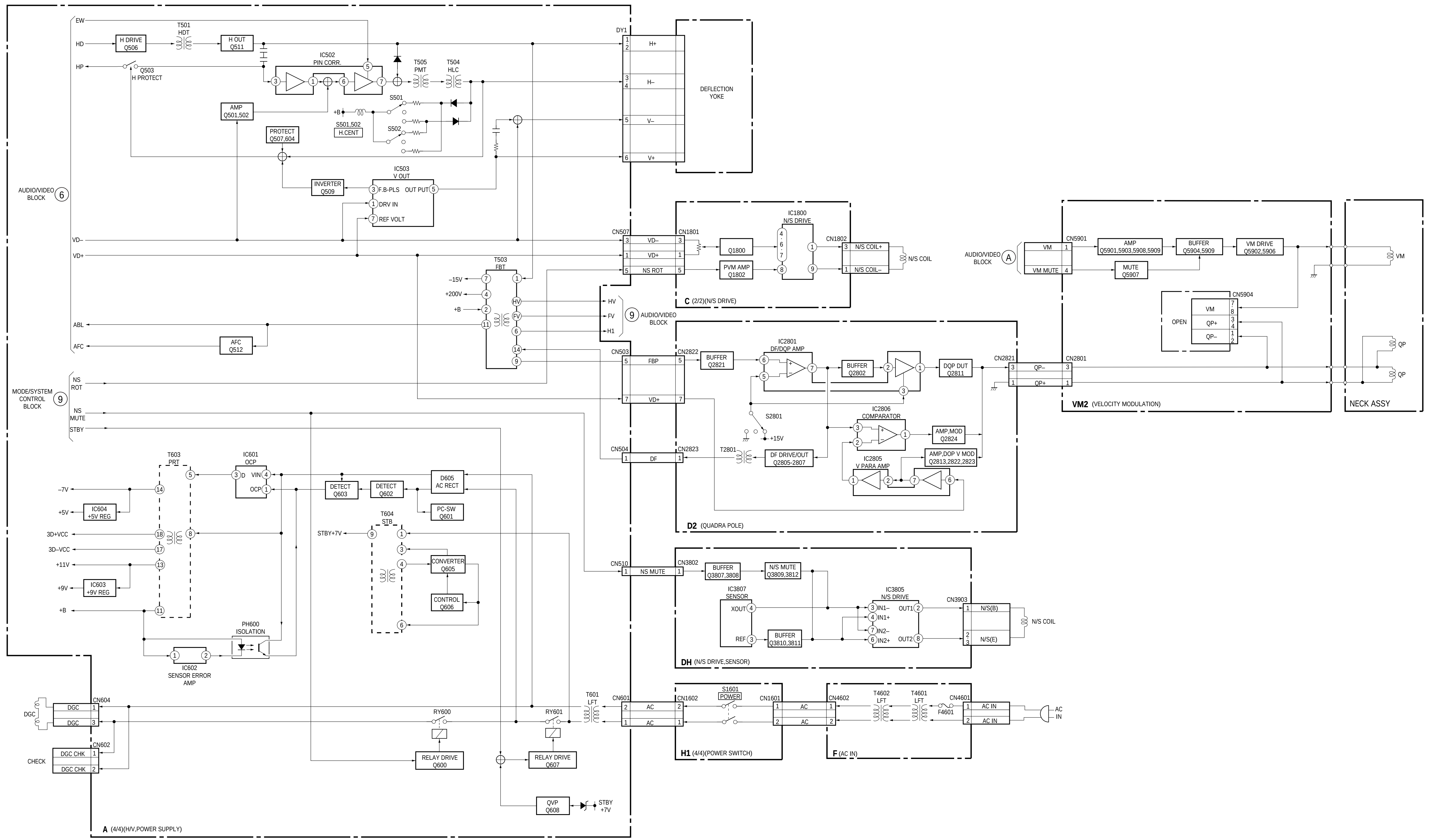


SECTION 5
DIAGRAMS

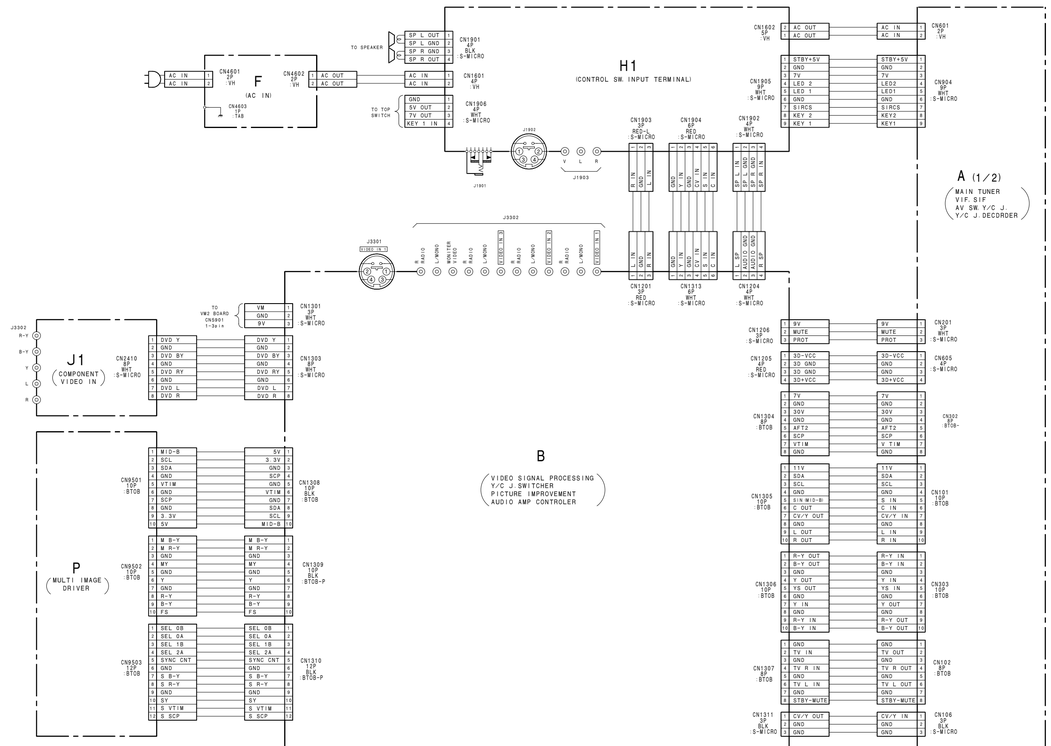
5-1. BLOCK DIAGRAM

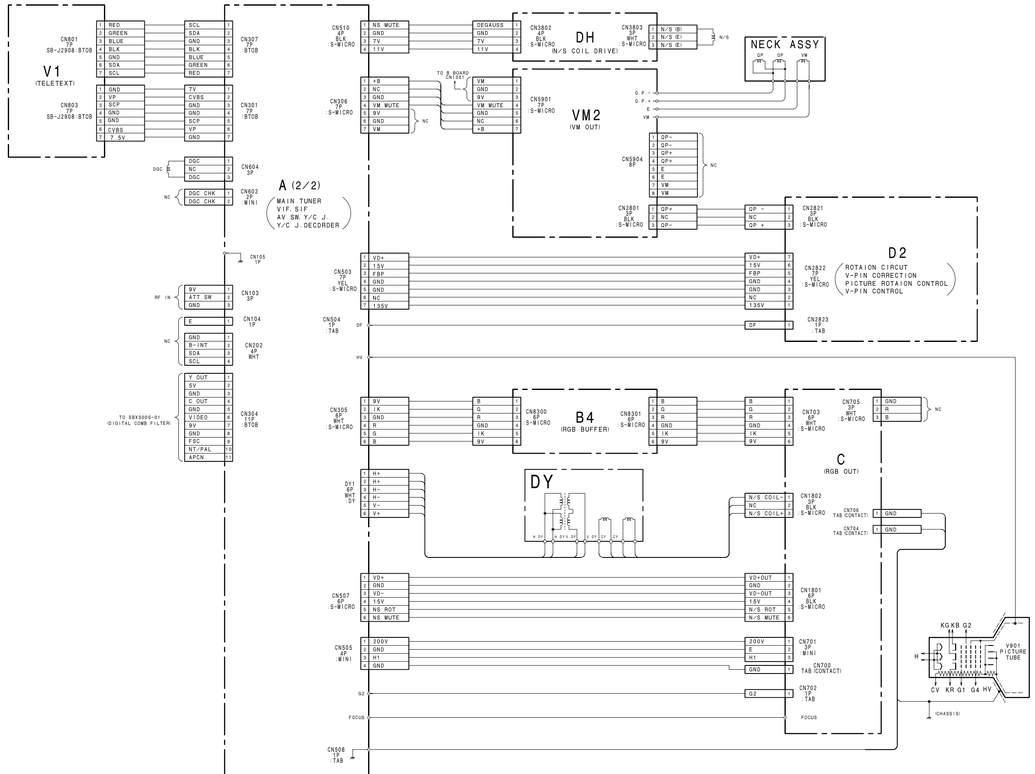



H1 (3/4)(FUNCTION SWITCH, REMOTE SENSOR)
IC001
SYSTEM u-COM
AUDIO/VIDEO BLOCK
DEFLECTION/POWER BLOCK
IC003
EEPROM
IC002
RESET
CHECK
A (3/4)(SYSTEM u-COM)
B (2/2)(SYNC SEP, INVERTER)
IC9527
MID u-COM
P (2/2)(MID u-COM)

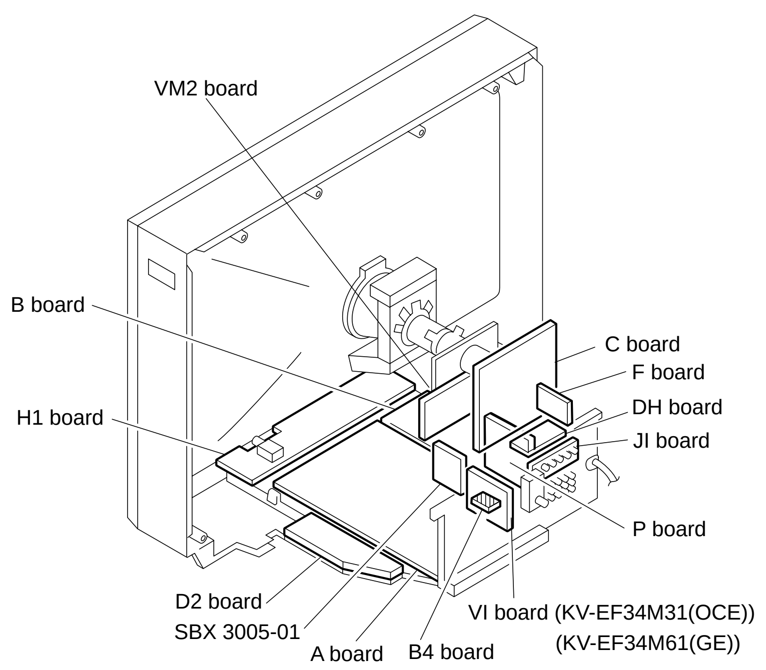

DEFLECTION YOKE
C (2/2)(N/S DRIVE)
D2 (QUADRA POLE)
DH (N/S DRIVE,SENSOR)
H1 (4/4)(POWER SWITCH)
F (AC IN)
VM2 (VELOCITY MODULATION)
NECK ASSY
A (4/4)(HV,POWER SUPPLY)

5-2. FRAME SCHEMATIC DIAGRAM





5-3. CIRCUIT BOARDS LOCATION



5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

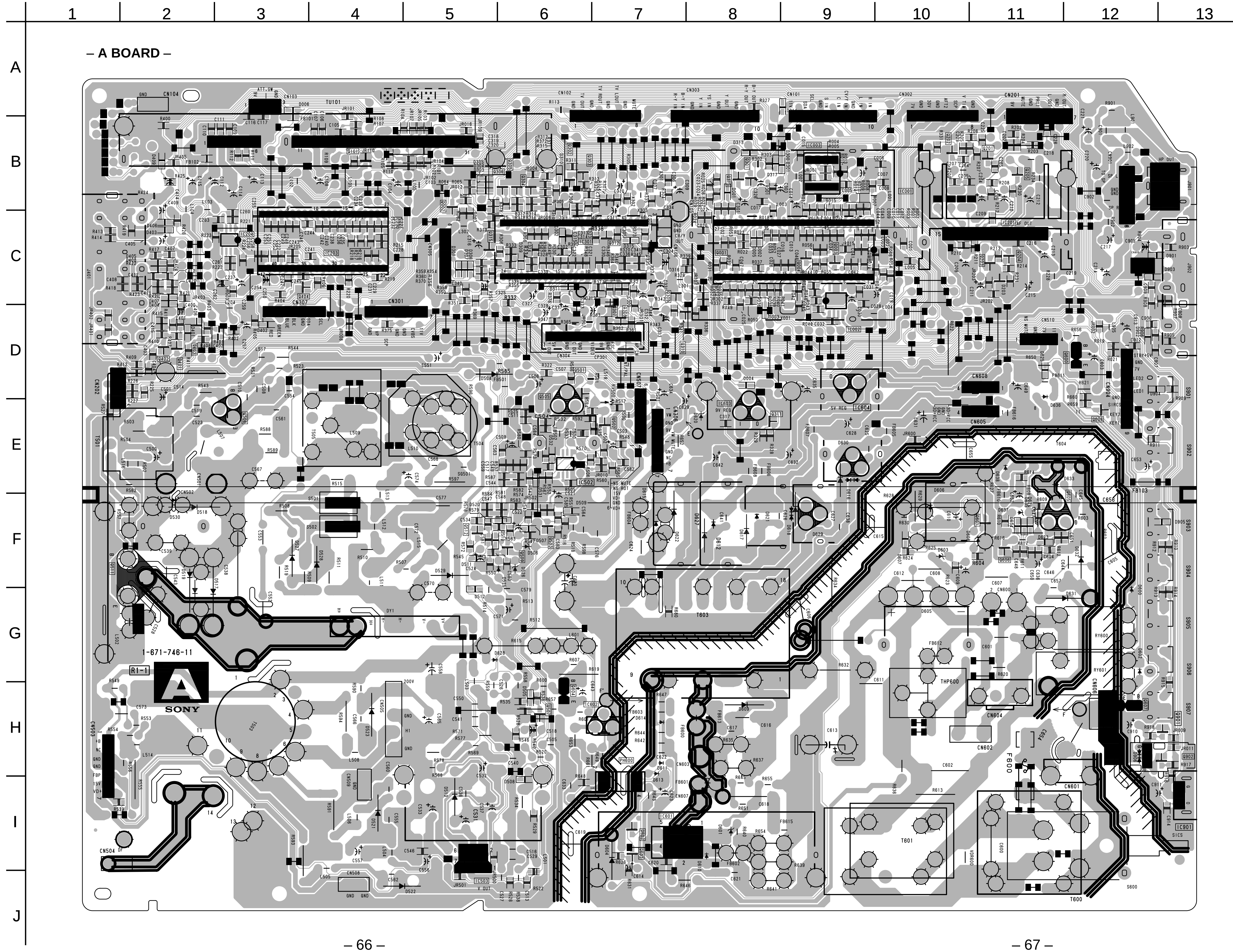
- All capacitors are in μF unless otherwise noted.
- All electrolytic capacitors are rated at 50V unless otherwise noted.
- All resistors are in ohms.
  kΩ = 100Ω, MΩ = 1000kΩ
- Indication of resistance, which does not have one for rating electrical power, is as follows.
  Pitch: 5 mm
  Rating electrical power 1/4W (CHIP: 1/10W)
- : nonflammable resistor.
- △ : internal component.
- ▭ : panel designation, or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Readings are taken with a color-bar signal input.
  no mark : PAL
  ( ) : SECAM
  [ ] : NTSC
- Readings are taken with a 10 MΩ digital multimeter.
- Voltage are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- * : Can not be measured.
- Circled numbers are waveform reference.
- ▬▬ : B + bus.
- ▪ ▪ ▪ ▪ : B – bus.
- ⇨ : signal path.

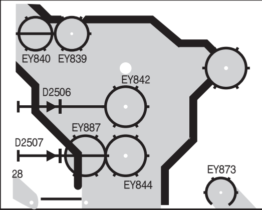
Reference information

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

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

A [MAIN TUNER, VIF, SIF, AW SW, Y/C J, Y/C J. DECODER]





NOTE :
The circuit indicated as left contains high voltage of over 600Vp-p. Please pay attention while inspecting or reparing it to prevent an electric shock.

A BOARD

IC

IC001	B-10
IC002	C-9
IC003	B-9
IC301	C-6
IC502	E-6
IC503	I-5
IC601	I-7
IC602	H-7
IC603	E-8
IC604	D-9

TRANSISTOR

Q001	C-8	②
Q002	B-5	①
Q003	C-9	①
Q004	C-9	①
Q101	B-4	②
Q301	B-8	①
Q304	B-6	①
Q305	B-6	①
Q306	B-6	②
Q307	D-7	①
Q308	D-7	①
Q311	E-8	①
Q313	B-8	①
Q315	C-5	①
Q501	D-6	②
Q502	E-7	①
Q503	F-6	①
Q505	D-6	-
Q506	E-3	-
Q507	H-6	①
Q509	F-6	①
Q511	F-2	-
Q600	D-12	-
Q601	F-11	②
Q602	I-7	①
Q603	I-7	①
Q604	H-6	-
Q605	F-11	-
Q606	F-11	①
Q607	H-12	-
Q608	E-12	①

DIODE

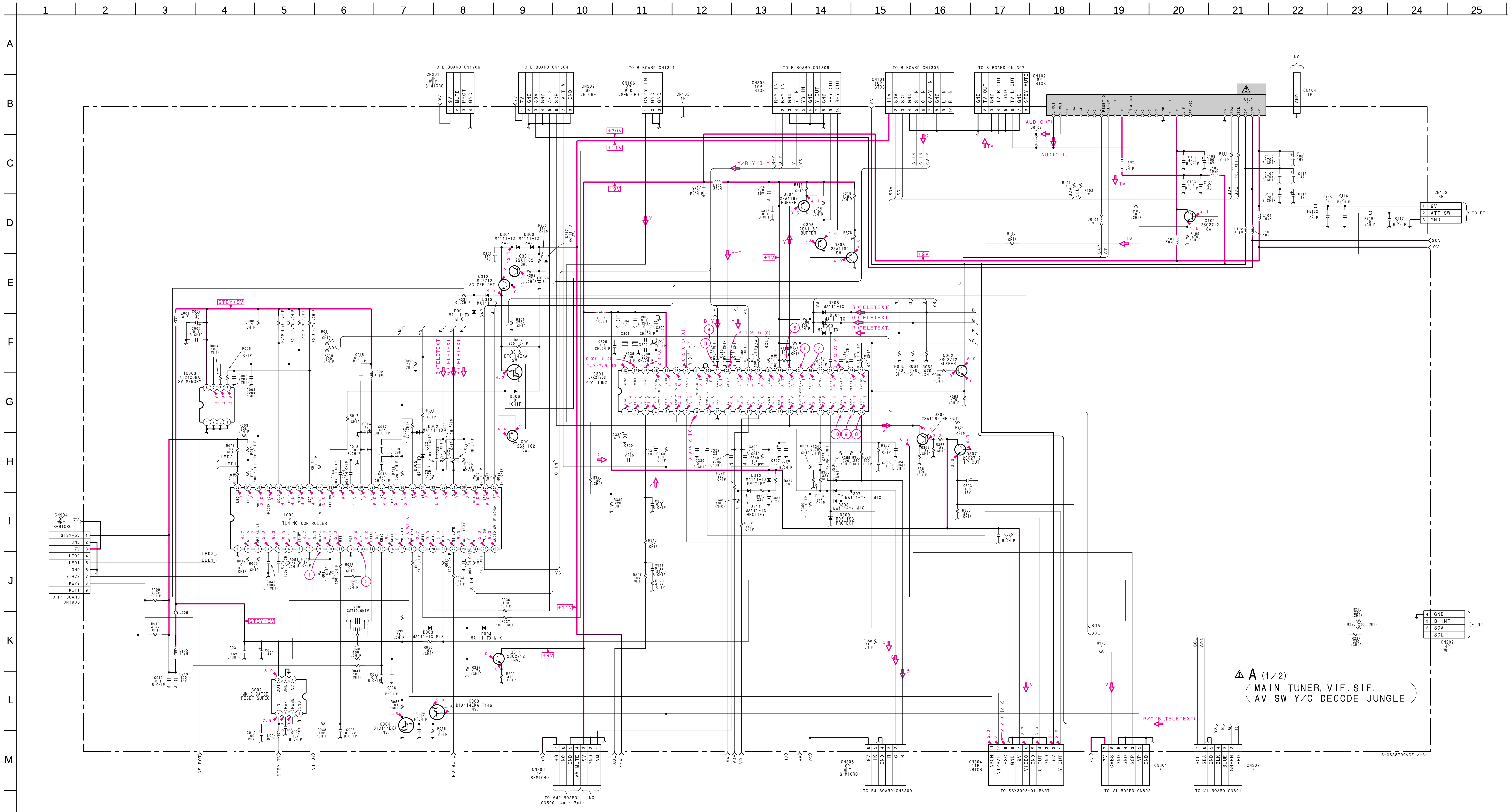
D001	B-8	③
D002	C-8	③
D003	D-8	③
D004	D-8	③
D005	C-8	③
D006	A-3	③
D300	B-8	③
D301	B-8	③
D303	B-5	③
D304	B-5	③
D305	B-5	③
D306	C-5	③
D307	C-5	③
D308	C-5	③
D309	C-6	③
D311	C-6	③
D312	C-7	③
D313	B-8	③
D317	B-8	③
D504	D-5	-
D505	H-6	③
D506	F-6	-
D507	F-6	③
D508	I-6	③
D509	F-6	③
D510	F-6	③
D511	F-5	③
D512	F-5	③
D513	I-5	-
D517	F-2	-
D520	F-5	③
D521	I-4	-
D522	J-4	-
D523	H-4	-
D525	F-5	-
D526	F-6	-
D527	F-3	-
D528	F-4	-
D529	F-5	-
D530	F-2	-
D531	E-6	③
D532	E-6	③
D600	F-12	-
D602	G-12	-
D603	F-10	-
D604	I-7	-
D605	G-10	③
D606	E-10	-
D607	F-10	③
D608	F-10	-
D609	H-8	-
D610	I-8	-
D611	H-7	-
D612	F-8	-
D613	H-7	-
D614	H-7	-
D620	E-8	-
D621	F-8	-
D622	F-7	-
D623	F-11	③
D624	F-11	③
D625	D-11	③
D628	G-5	-
D630	E-9	⑧
D631	G-11	-
D632	F-12	-
D633	E-11	-
D634	F-11	③
D635	F-11	③
D636	D-11	-
D637	F-11	-
D638	E-11	-

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

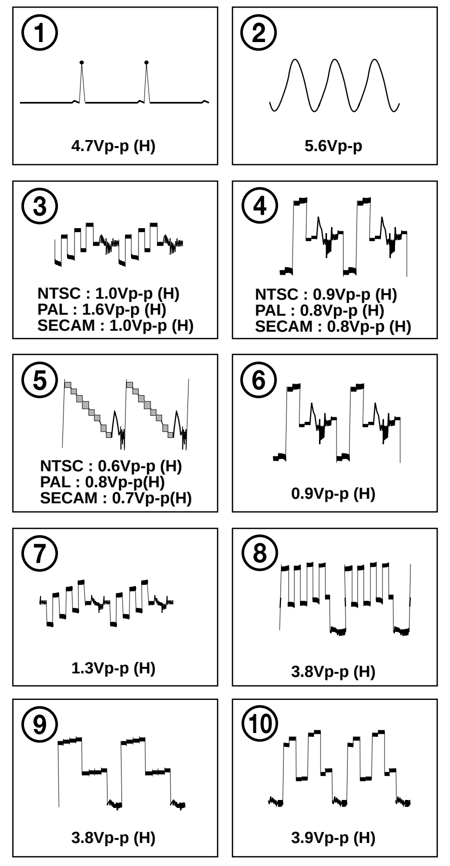
	Device	Printed symbol	Terminal name	Circuit
①	Transistor		Collector / Base / Emitter	
②	Transistor		Collector / Base / Emitter	
③	Diode		Cathode / Anode	
④	Diode		Cathode / Anode / (NC)	
⑤	Diode		Cathode / Anode / (NC)	
⑥	Diode		Common / Anode / Cathode	
⑦	Diode		Common / Anode / Cathode	
⑧	Diode		Common / Anode / Anode	
⑨	Diode		Common / Anode / Anode	
⑩	Diode		Common / Cathode / Cathode	
⑪	Diode		Common / Cathode / Cathode	
⑫	Diode		Anode / Anode / Cathode / Cathode / Anode / Anode	
⑬	Transistor (FET)		Drain / Source / Gate	D, G, S
⑭	Transistor (FET)		Drain / Source / Gate	D, G, S
⑮	Transistor (FET)		Source / Drain / Gate	D, G, S
⑯	Transistor		Emitter / Collector / Base	
⑰	Transistor		C2 B1 E1 / E2 B2 C1	C1, C2, B1, B2, E1, E2
⑱	Transistor		C1 B2 E2 / E1 B1 C2	C1, C2, B1, B2, E1, E2
⑲	Transistor		C1 B2 E2 / E1 B1 C2	C1, C2, B1, B2, E1, E2
⑳	Transistor		C1 B2 E2 / E1 B1 C2	E1, E2, B1, B2, C1, C2
㉑	Transistor		E2 B1 E1 / C2 C1(B2)	C1(B2), C2, B1, E2, E2
㉒	Transistor		(B2) B1 E1 E2 / C1 C2	E1(B2), E2, B1, C1, C2
㉓	Transistor		(B2) E2 E1 B1 / C2 C1	E1(B2), C2, B1, C1, C2
–	Discrete semiconductot			

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

Ver.1.5



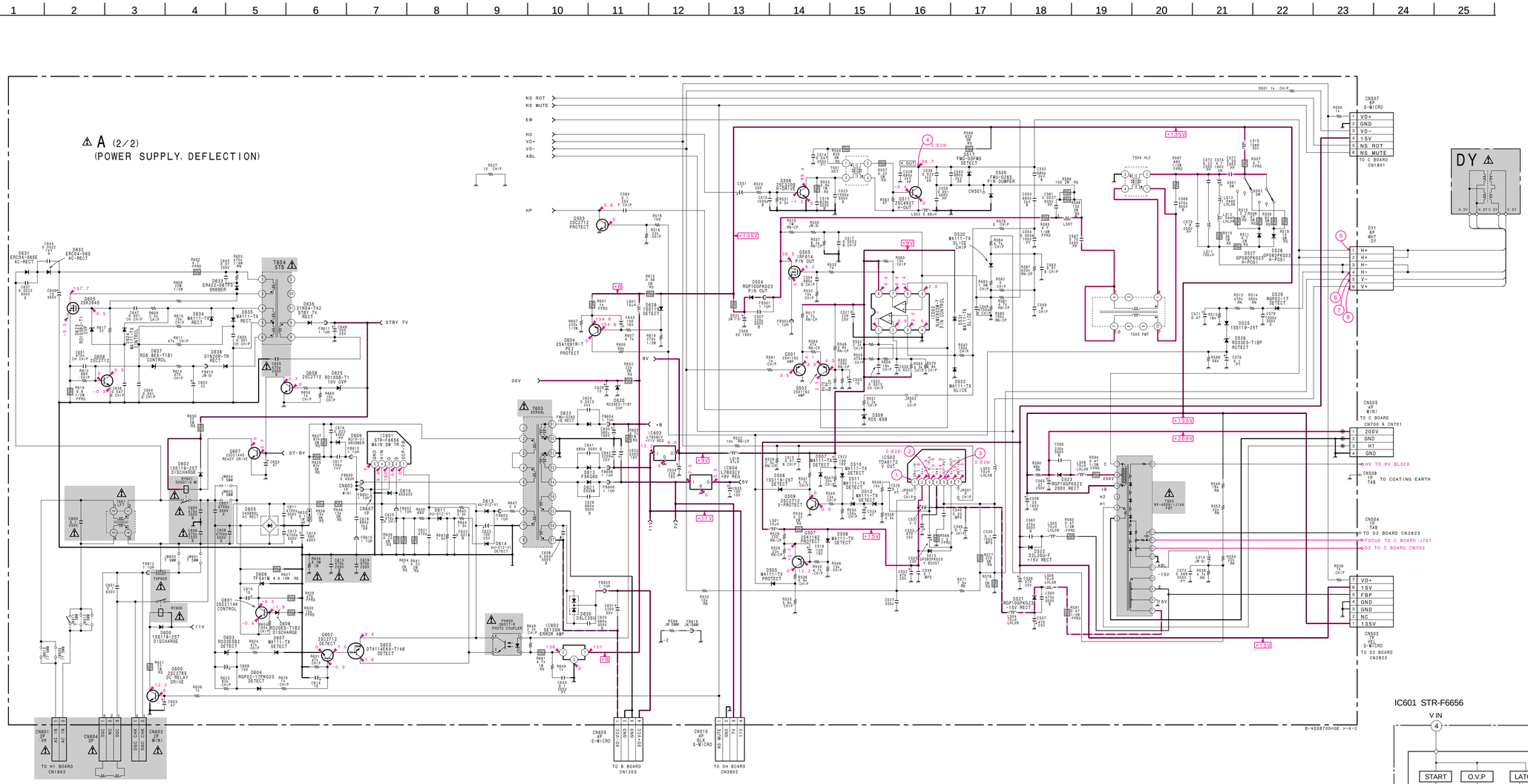
A (1/2) BOARD WAVEFORMS



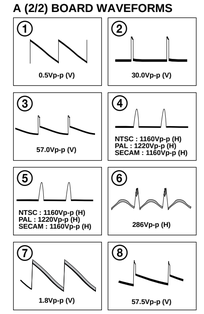
A BOARD * MARK LIST

Ref. No.	KV-EF34M61(GE) KV-EF34M31(OCE)	KV-EF34M80(ME)	KV-EF34M91(ME)	KV-EF34M90(HK) KV-EF34M90(JE)
CN301	7P	#	7P	#
CN307	7P	#	7P	#
CN510	4P	#	4P	4P
IC001	CXP750097-001S	CXP750097-002S	CXP750097-002S	CXP750097-001S
JR107	0 : CHIP	#	0 : CHIP	0 : CHIP
JR109	#	0 : CHIP	#	#
R028	1k : CHIP	#	1k : CHIP	1k : CHIP
R101	100 : CHIP	#	100 : CHIP	100 : CHIP
R102	100 : CHIP	#	100 : CHIP	100 : CHIP
R375	100 : CHIP	#	100 : CHIP	#
TU101	BTF-WG442	BTF-LG434	BTF-WG442	BTF-WG442

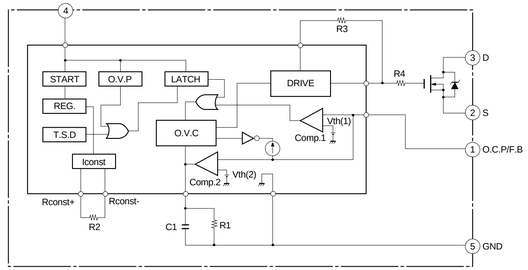
: Not Used

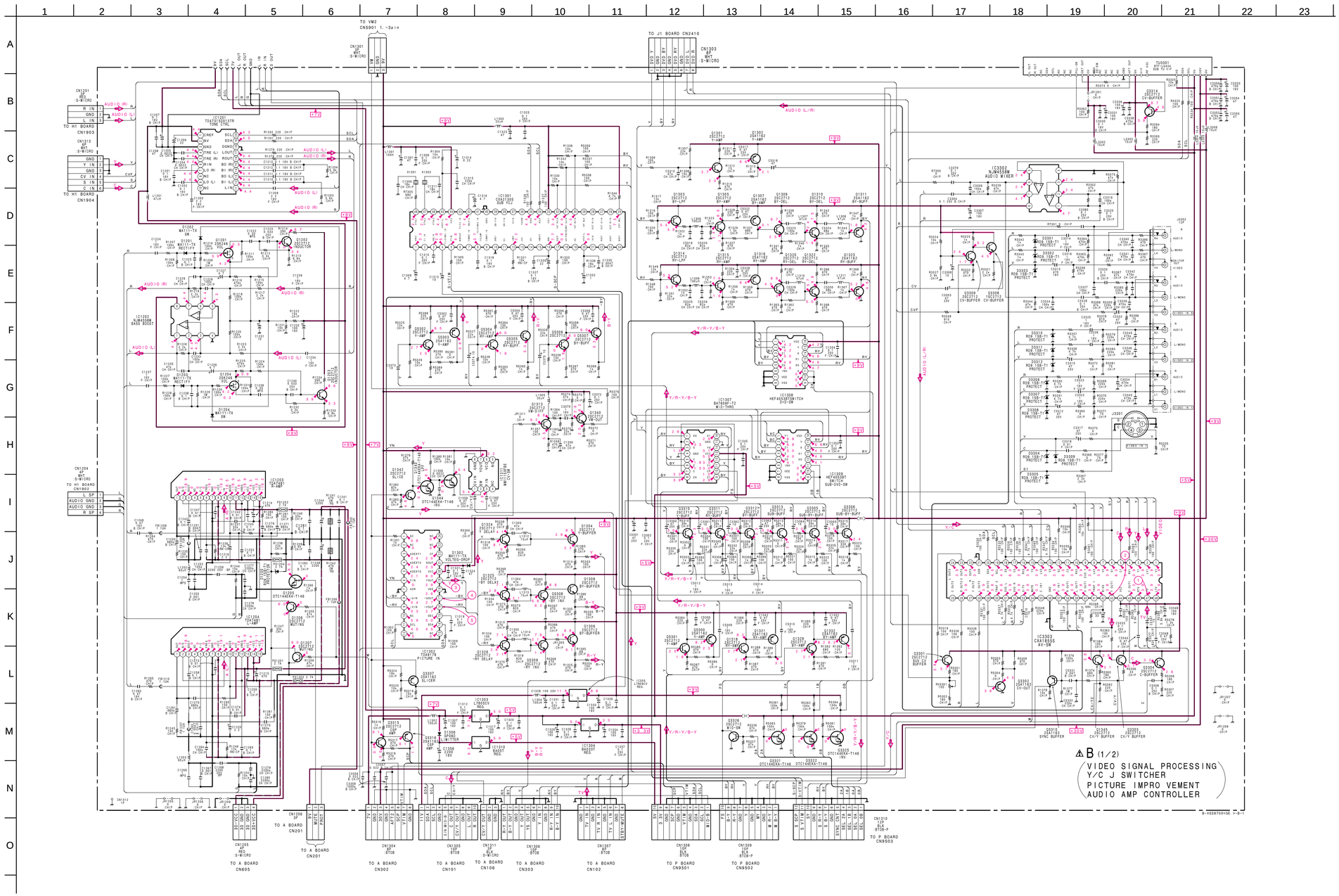


A (2/2) BOARD WAVEFORMS



IC601 STR-F6656

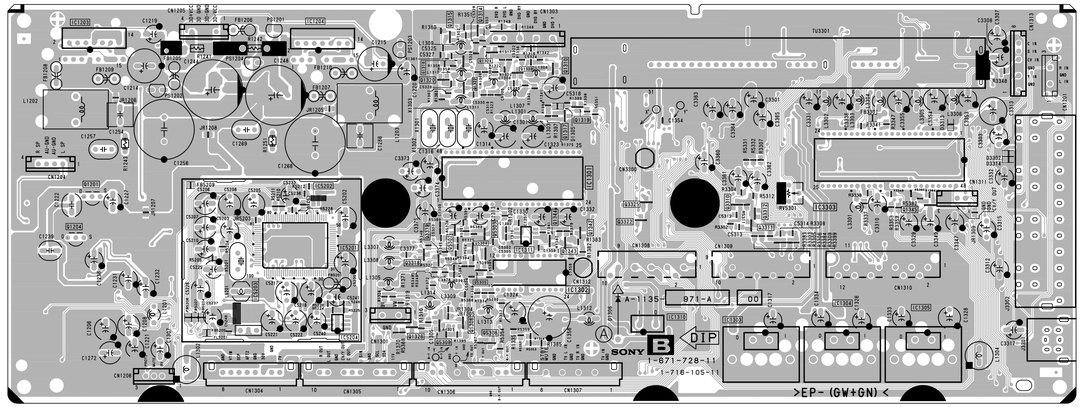



TO VM2 CN5901 1 -3pin
TO J1 BOARD CN2410
AUDIO (L/R)
Y/R-Y/B-Y
IC1308 HEF4053BT
VDD
VSS
VEE
LOGIC LEVEL CONVERSION
DECODER
SA
SB
SC
E
ZA
Y1A
Y0A
ZB
Y1B
Y0B
ZC
Y1C
Y0C
B (1/2)
VIDEO SIGNAL PROCESSING
Y/C J SWITCHER
PICTURE IMPRO VEMENT
AUDIO AMP CONTROLLER
B (1/2) BOARD WAVEFORMS
0.8Vp-p (H)
1.8Vp-p (H)
1.0Vp-p (H)
1.7Vp-p (H)
1.3Vp-p
TO A BOARD CN605
TO A BOARD CN201
TO A BOARD CN302
TO A BOARD CN101
TO A BOARD CN106
TO A BOARD CN303
TO A BOARD CN102
TO P BOARD CN9501
TO P BOARD CN9502
TO P BOARD CN9503

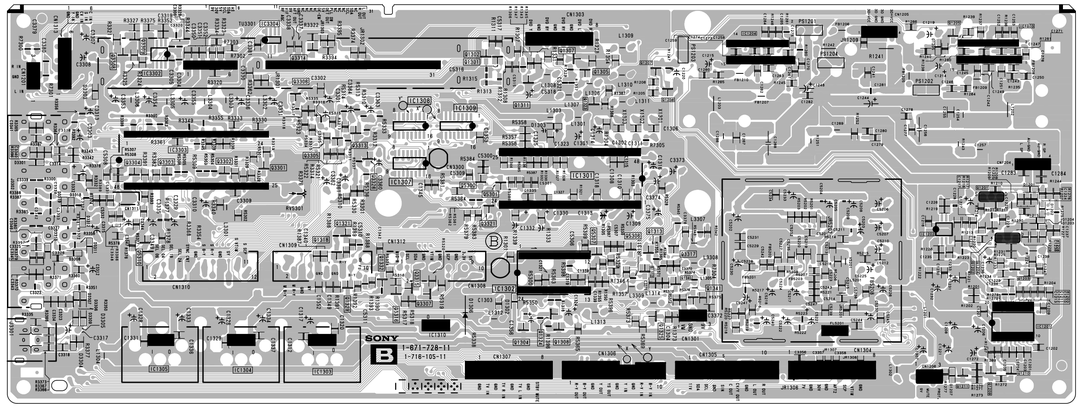
B VIDEO SIGNAL PROCESSING
Y/C J/ SWICTCHER, PICTURE IMPROVEMENT
AUDIO AMP CONTROLER

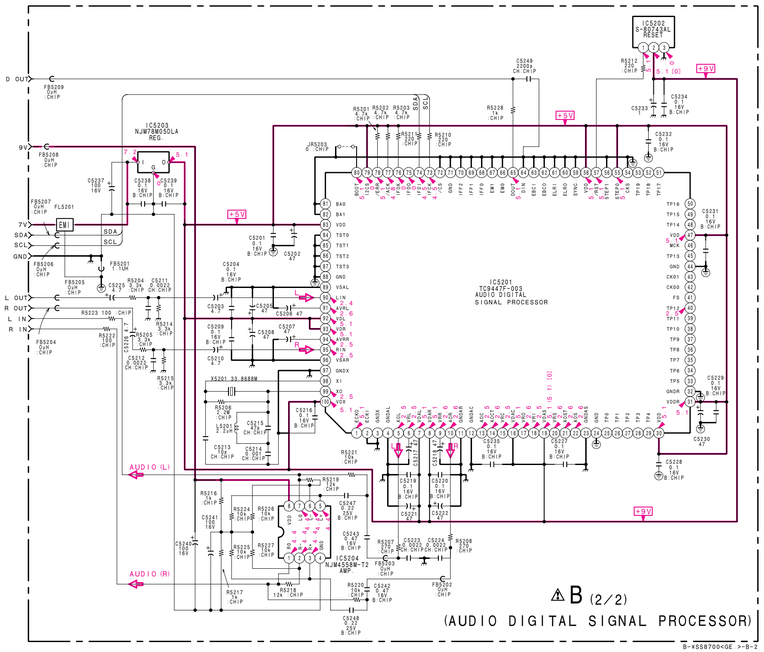
– **B BOARD** –

<Component Side>



<Conductor Side>





Schematic diagram
◀ B (1/2) board

Schematic diagram
B (2/2) board ▶

– 81 –

B BOARD (COMPONENT SIDE)

IC	
IC1201	-
IC1202	-
IC1203	B-2
IC1204	B-5
IC1301	D-8
IC1302	E-8
IC1303	F-10
IC1304	F-11
IC1305	F-12
IC1307	-
IC1308	-
IC1309	-
IC1310	F-9
IC1311	E-8
IC3302	-
IC3303	D-12
IC520	E-5
IC5202	D-5
IC5203	E-4
IC5204	F-5

TRANSISTOR	
Q1201	D-2 -
Q1202	-
Q1203	-
Q1204	E-2 -
Q1205	-
Q1206	-
Q1207	-
Q1301	-
Q1302	-
Q1303	C-7 ②
Q1304	-
Q1305	-
Q1306	F-7 ②
Q1307	-
Q1308	-
Q1309	C-8 ②
Q1310	C-8 ②
Q1311	-
Q1312	-
Q1313	-
Q1314	B-7 ②
Q1315	B-7 ②
Q1316	C-7 ②
Q1318	E-6 ②
Q1320	C-7 ②
Q1321	-
Q1322	C-7 ②
Q1323	-
Q1324	-
Q1325	-
Q1326	F-6 ②
Q1329	-
Q1332	-
Q1340	-
Q1341	-
Q1342	E-8 ②
Q1343	E-8 ②
Q1344	E-8 ②
Q1345	D-12 ②
Q3301	-
Q3302	-
Q3303	-
Q3304	-
Q3305	-
Q3306	-
Q3307	-
Q3308	-
Q3309	-
Q3310	D-10 ②
Q3311	E-10 ②
Q3312	D-10 ②
Q3313	-
Q3314	-
Q3315	-
Q3316	-
Q3317	-
Q3318	E-6 ②
Q3319	E-6 ②
Q3321	-
Q3322	E-9 ②
Q3325	D-9 ②
Q3326	-
Q5300	-
Q5301	-
Q5302	E-7 ②
Q5303	E-7 ②
Q5304	E-7 ②
Q5305	E-7 ②
Q5306	-
Q5307	-
Q5308	F-7 ②
Q5309	F-7 ②
Q5310	-

DIODE	
D1201	-
D1202	-
D1203	-
D1204	-
D1205	-
D1302	-
D1306	F-9 -
D3301	-
D3302	D-13 ③
D3303	-
D3304	-
D3305	-
D3306	-
D3307	-
D3308	-
D3309	-
D3310	-
D3311	-
D3312	-

– 82 –

B BOARD (CONDUCTOR SIDE)

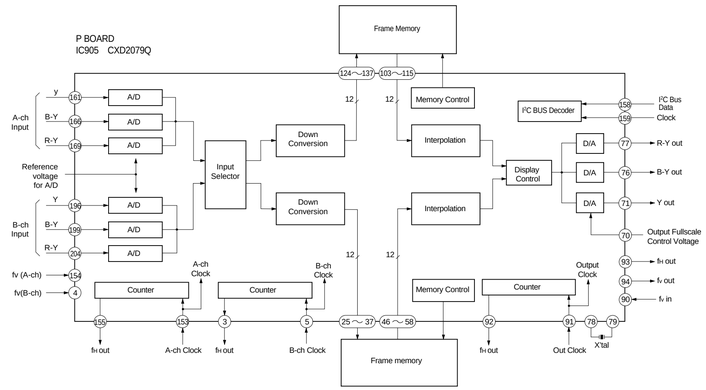
IC	
IC1201	F-27
IC1202	E-26
IC1203	B-27
IC1204	B-24
IC1301	D-22
IC1302	E-21
IC1303	F-19
IC1304	F-18
IC1305	F-17
IC1307	D-20
IC1308	C-20
IC1309	C-20
IC1310	F-20
IC1311	-
IC3302	C-17
IC3303	D-17
IC520	-
IC5202	-
IC5203	-
IC5204	-

TRANSISTOR	
Q1201	D-27 -
Q1202	E-27 ①
Q1203	E-27 ①
Q1204	E-27 -
Q1205	B-26 ①
Q1206	C-23 ①
Q1207	C-23 ①
Q1301	C-21 ①
Q1302	C-21 ①
Q1303	-
Q1304	F-21 ①
Q1305	C-22 ①
Q1306	-
Q1307	B-22 ①
Q1308	F-22 ①
Q1309	-
Q1310	-
Q1311	C-21 -
Q1312	E-23 ①
Q1313	E-23 ①
Q1314	B-18 ①
Q1315	-
Q1316	-
Q1318	E-19 ①
Q1320	-
Q1321	E-19 ①
Q1322	-
Q1323	C-22 ①
Q1324	F-21 ①
Q1325	F-23 ①
Q1326	-
Q1329	E-19 ①
Q1332	E-19 ①
Q1340	E-23 ②
Q1341	E-23 ①
Q1342	-
Q1343	-
Q1344	-
Q1345	-
Q3301	D-18 ①
Q3302	D-18 ①
Q3303	D-17 ①
Q3304	D-16 ①
Q3305	D-19 ①
Q3306	C-18 ①
Q3307	E-20 ①
Q3308	B-16 ①
Q3309	B-16 ①
Q3310	-
Q3311	-
Q3312	-
Q3313	D-19 ①
Q3314	B-18 ①
Q3315	E-20 ①
Q3316	F-20 ①
Q3317	E-23 ①
Q3318	-
Q3319	-
Q3321	D-21 ①
Q3322	-
Q3325	-
Q3326	D-19 ①
Q5300	D-21 ①
Q5301	D-21 ①
Q5302	-
Q5303	-
Q5304	-
Q5305	-
Q5306	E-22 ①
Q5307	E-22 ①
Q5308	-
Q5309	-
Q5310	E-17 ①

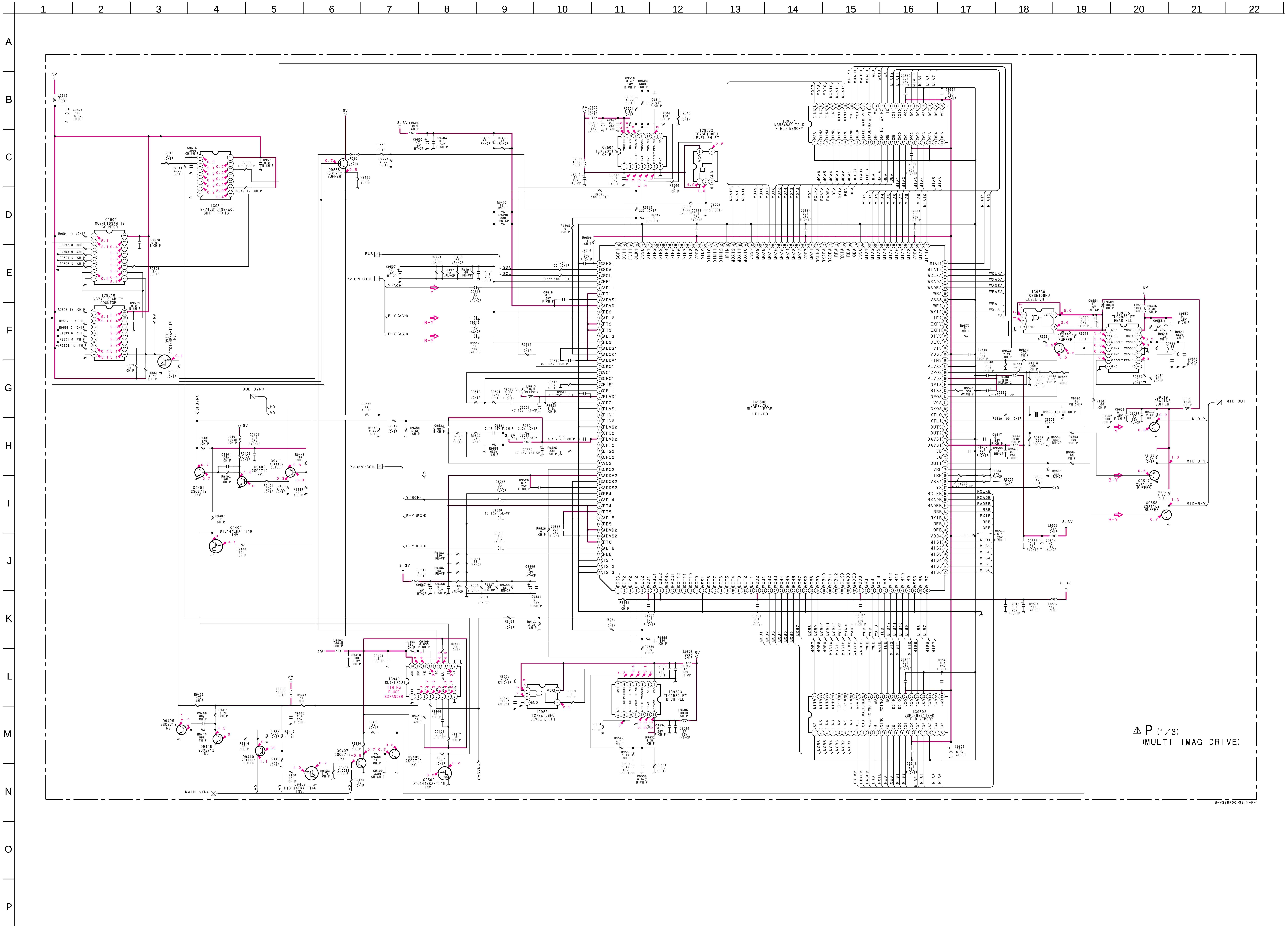
DIODE	
D1201	D-27 ③
D1202	D-28 ③
D1203	E-27 ③
D1204	E-27 ③
D1205	B-26 ③
D1302	F-21 ③
D1306	F-20 -
D3301	D-15 ③
D3302	-
D3303	C-16 ③
D3304	F-16 ③
D3305	F-16 ③
D3306	F-16 ③
D3307	F-16 ③
D3308	E-16 ③
D3309	F-16 ③
D3310	E-15 ③
D3311	E-16 ③
D3312	E-16 ③

– 83 –

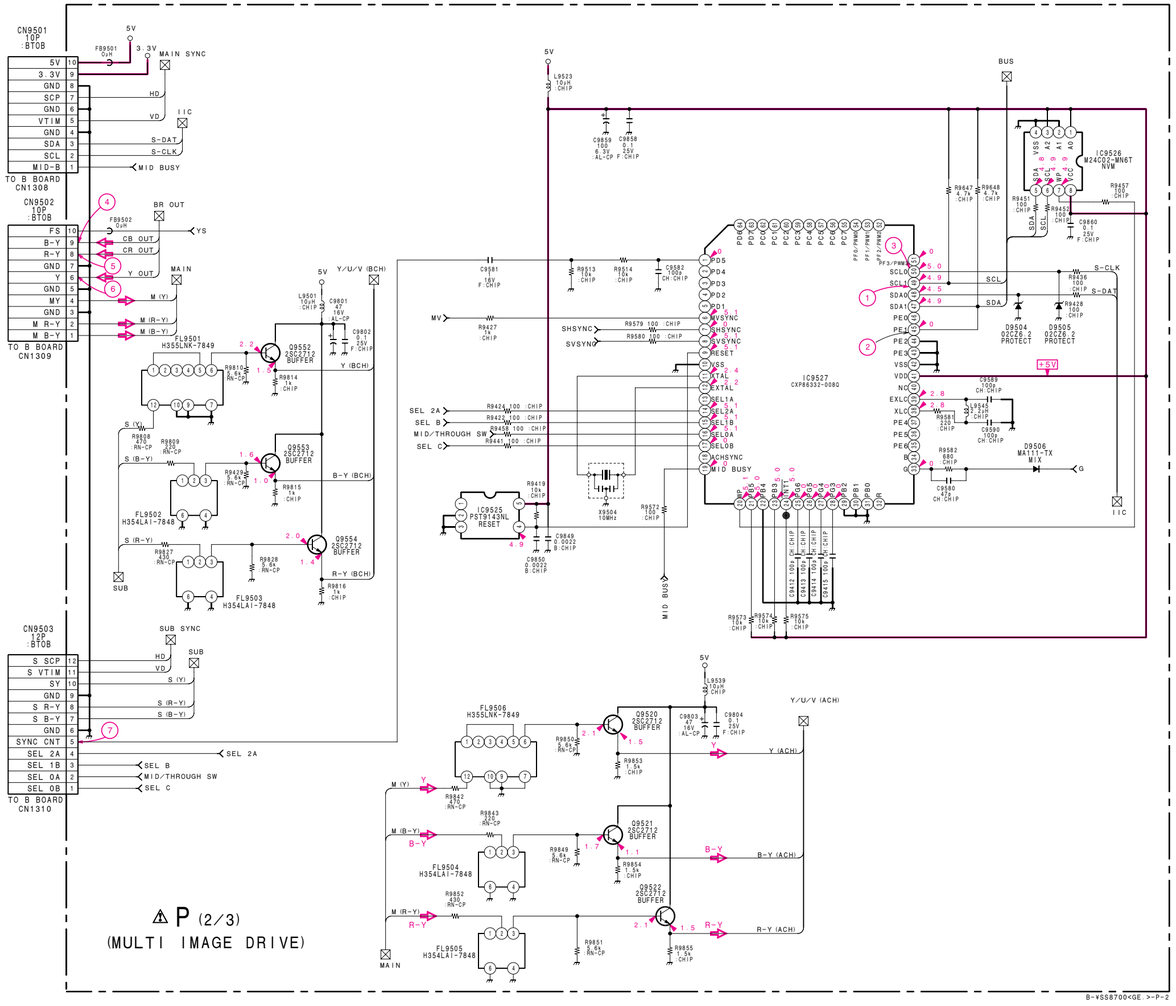
P BOARD
IC905 CXD2079Q

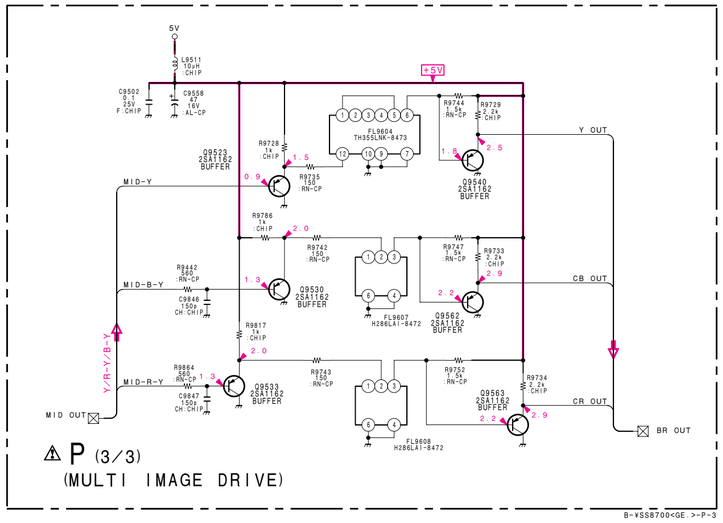


– 84 –

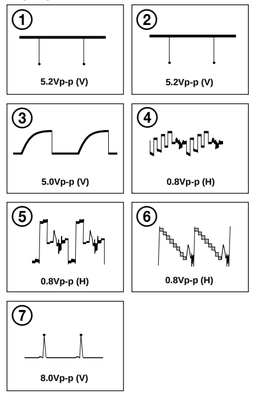


IC9506
CXD2073Q
MULTI IMAGE
DRIVER
IC9501
MSM548331TS-K
FIELD MEMORY
IC9502
MSM548331TS-K
FIELD MEMORY
IC9509
MC74F163AM-T2
COUNTOR
IC9510
MC74F163AM-T2
COUNTOR
IC9511
SN74LS164NS-E05
SHIFT REGIST
IC9401
SN74LS221
TIMING
PLUSE
EXPANDER
IC9504
TLC2933IPW
A CH PLL
IC9503
TLC2933IPW
B CH PLL
IC9505
TLC2933IPW
READ PLL
IC9530
TC7SET08FU
LEVEL SHIFT
IC9531
TC7SET08FU
LEVEL SHIFT
IC9532
TC7SET08FU
LEVEL SHIFT
SUB SYNC
MAIN SYNC
MID OUT
MID-Y
MID-B-Y
MID-R-Y
Y/U/V (ACH)
Y/U/V (BCH)
BUS
P (1/3)
(MULTI IMAG DRIVE)





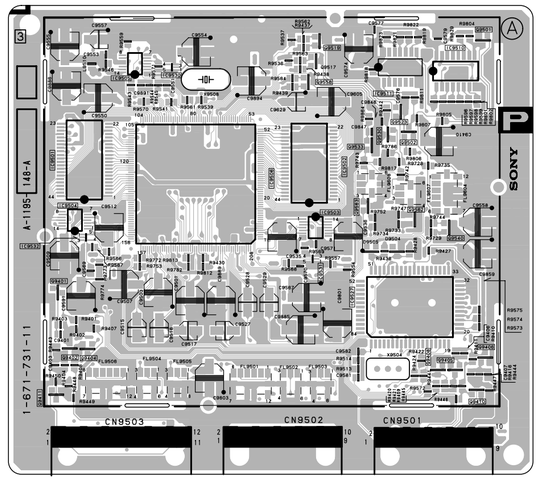
P (2/3) BOARD WAVEFORMS



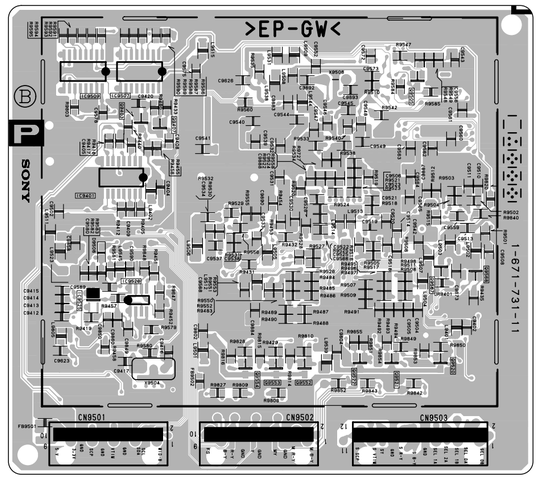
P [MULTI IMAGE DRIVER]

– P BOARD –

<Component Side>

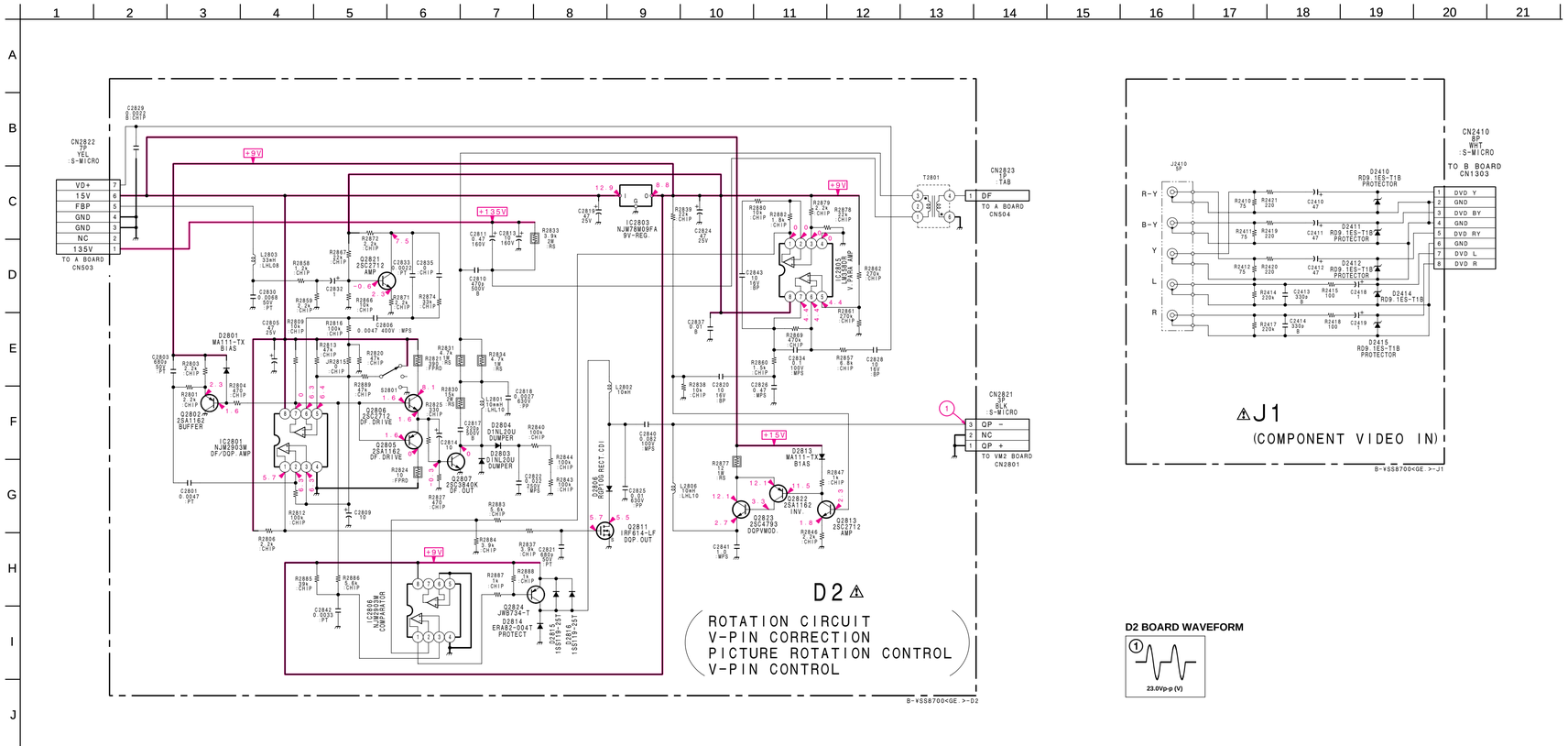


<Conductor Side>



Schematic diagram
← P (1/3) board

Schematic diagram
P (2/3), P (3/3) boards →

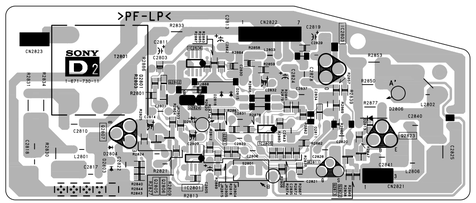


D2 BOARD WAVEFORM

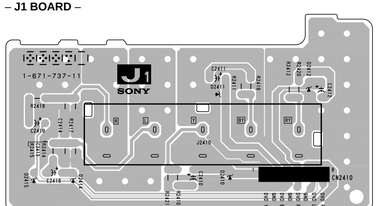
D2 POTATION CIRCUIT, V-PIN CORRECTION
PICTURE ROTATION CONTROL, V-PIN CONTROL

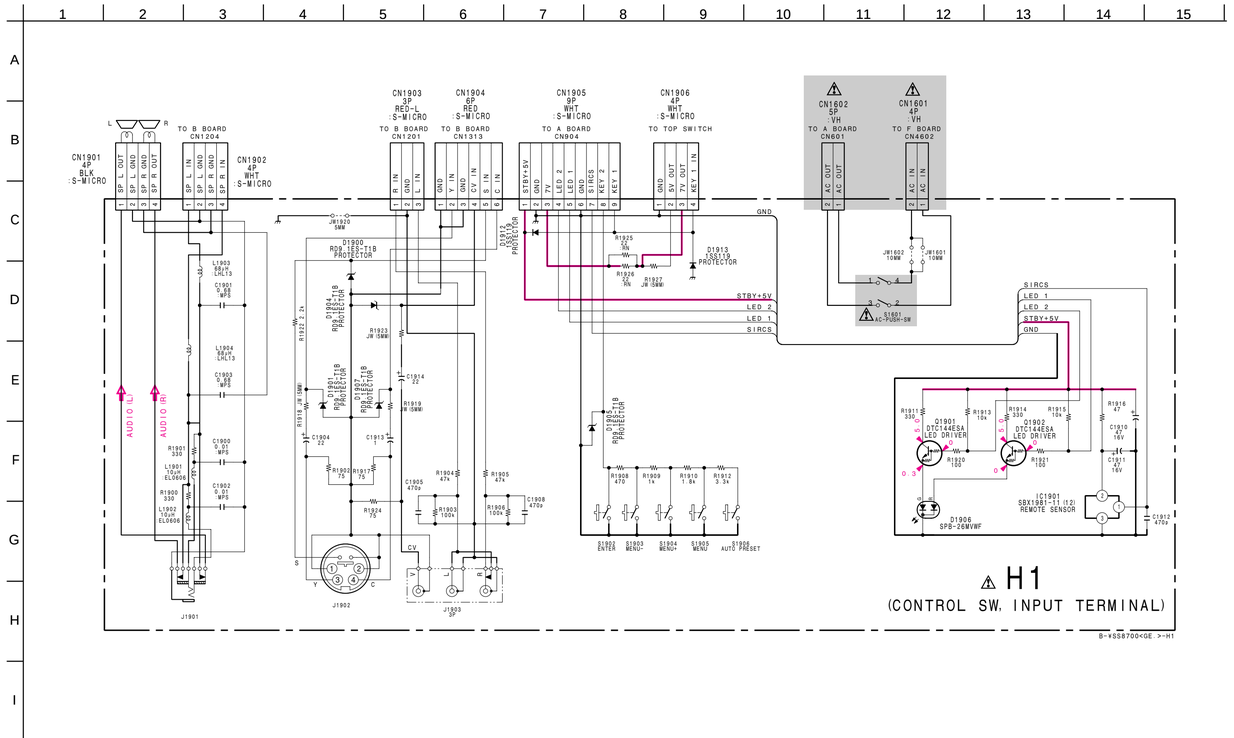
J1 COMPONENT,
VIDEO IN

– D2 BOARD –



– J1 BOARD –

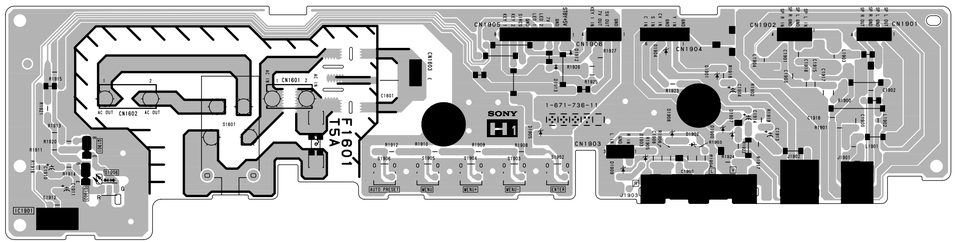




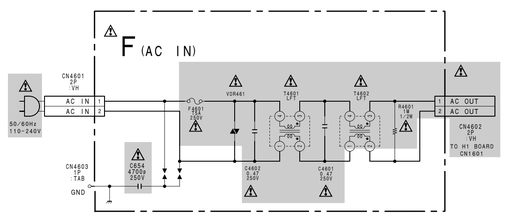
H1 [CONTROL SW, INPUT TERMINAL]

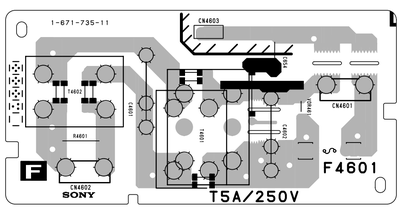
F [AC IN]

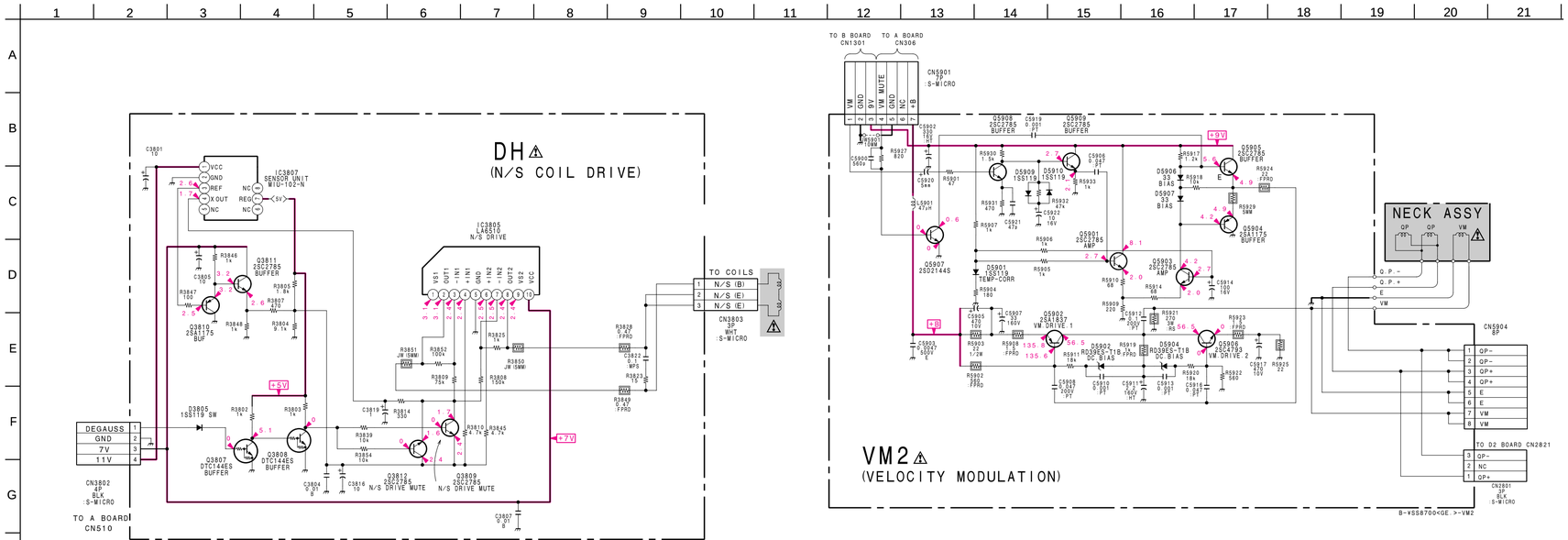
– H1 BOARD –



– F BOARD –







DH BOARD * MARK LIST

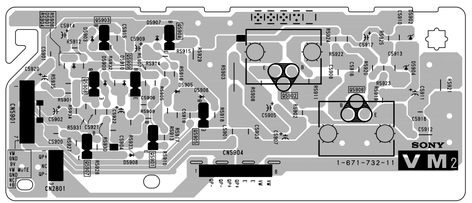
Ref. No.	KV-EF34M80(ME) KV-EF34M90(HK)	KV-EF34M90(JE) KV-EF34M91(ME)	KV-EF34M31(OCE) KV-EF34M61(GE)
R3805	1.8k 1/4W		2.7k 1/4W

: Not Used

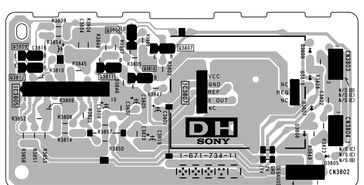
DH [N/S COIL DRIVE]

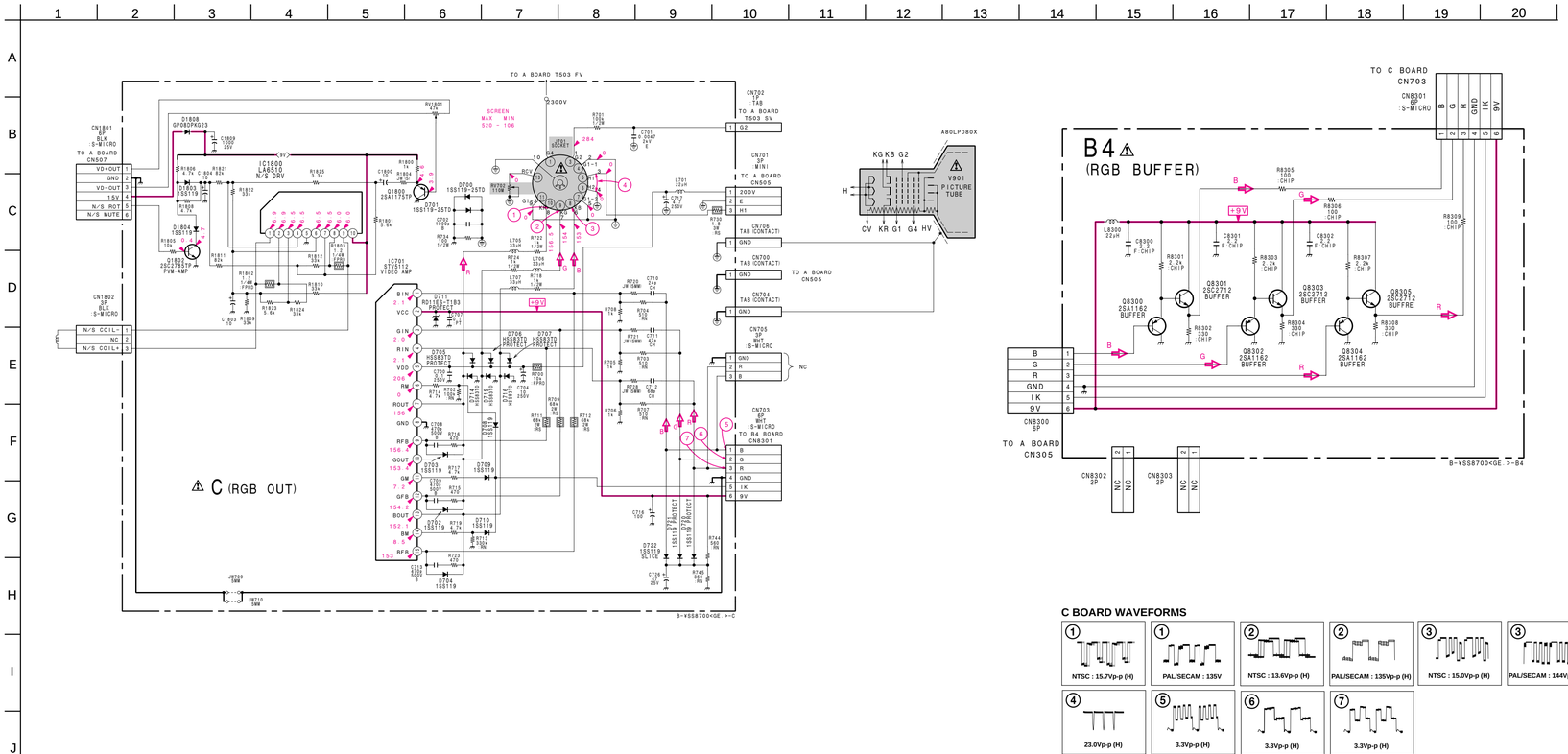
VM2 [VM OUT]

– VM2 BOARD –



– DH BOARD –



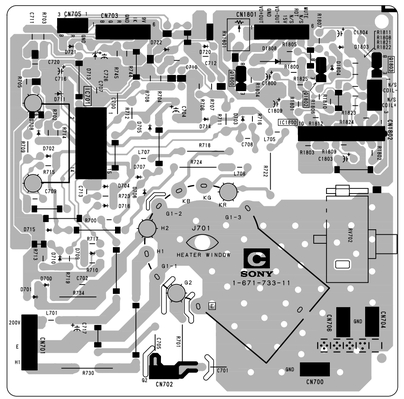


C BOARD WAVEFORMS

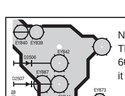
C [RGB OUT]

B4 [RGB BUFFER]

– C BOARD –



– B4 BOARD –

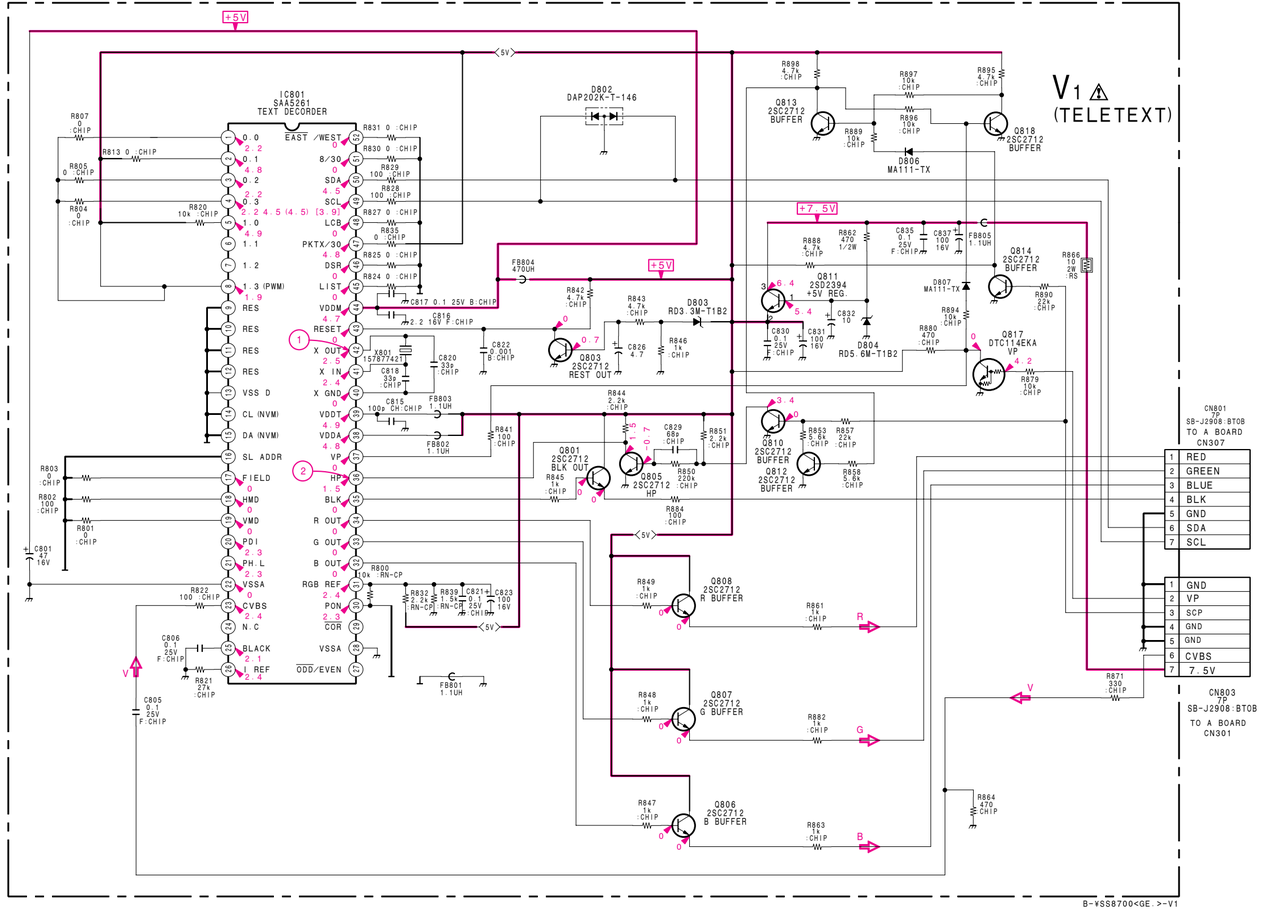


NOTE :
The circuit indicated as left contains high voltage of over 600Vp-p. Please pay attention while inspecting or reparing it to prevent an electric shock.

Schematic diagram
◀ DH, VM2 boards

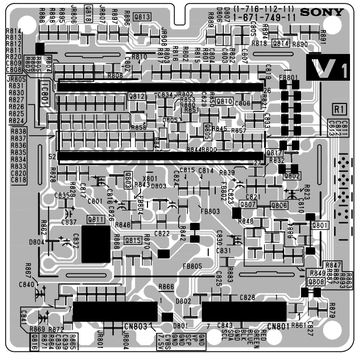
Schematic diagram
C, B4 boards ▶

KV-EF34M31 (OCE) /EF34M61 (GE) /EF34M91 (ME) ONLY

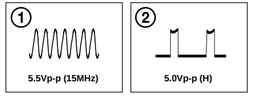


V1 [TELETEXT]

– V1 BOARD –



V1 BOARD WAVEFORMS

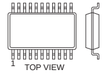


5-5. SEMICONDUCTORS

IC

BA033T
BA05T

BA7606F
LM358D
MC74F163AM
MM1115XFBF
NJM2903M
SN74LS164NS
SN74LS221NS
TDA7315D013TR
TLC29321PW



Small Outline L-leaded Package
Pin 8-98

CXA1855S
ST24C08FB6

Dual In-line Package
Pin 6-98

HFE4053BT

Small Outline L-leaded Package
Pin 8-98

LA6510

MM1319AFBE

MSM548331TS-K

Quad Flat L-leaded Package
Pin 20-996

NJM78M05DLA(TE1)

NJM78M09MA

PST9143NL

Chip Type
Pin 4-6

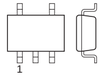
SE135N

STRF6656

STV5112
TDA7481

S80743AL-A7-S

TC7SET08FU



Chip Type
Pin 4-6

TDA8172

TDA9178

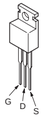
Dual In-line Package
Pin 6-98

TRANSISTOR

DTA114EK-T146
DTC114EK
DTC114EKA
2SA1162-G
2SC2712-YG
2SC4973
2SD2114K

DTC144ESA
2SA1175-HFE
2SC2785-HFE

IRF614



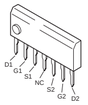
2SAS1091-0

2SA1837
2SD2394-EF

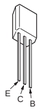
2SB734-34
2SD774-34

2SC3840

2SC4927-01



2SD2144S-UWM



2SK2845-LB102

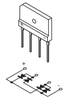
DIODE

AK04V1
AU01ZV1
EGP20G
EL1Z
ERA2208
GP08S
HSS83TD
RD33EB3T
RGP02-17EL-6433

DAP202K

D1N20R
D1US4
1SS119-25
RD11ES-B3
RD20ES-B2
RD30ES-B2
RD39ES-B2
RD6.8ES-B1
11SQS04

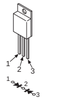
D4SB60L



D5LC20U

ERC04-06SE
S2LA20F

FMUG26S



MA111
RD10S-B
RD5.1SB-T2
RD5.6S-B
RD9.1S-B

ON3171-R

RD155B2

RD3.3M-B2
RD5.6M-B2
02CZ6.2-TE85L

RD9.1ES-L2

RU-1P

SPB-26MVWF

SECTION 6
EXPLODED VIEWS

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

Les composants identifiés par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

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.

6-1. PICTURE TUBE

● 7-685-648-79 +BVTP 3X12
■ 7-685-663-71 +BVTP 4X16

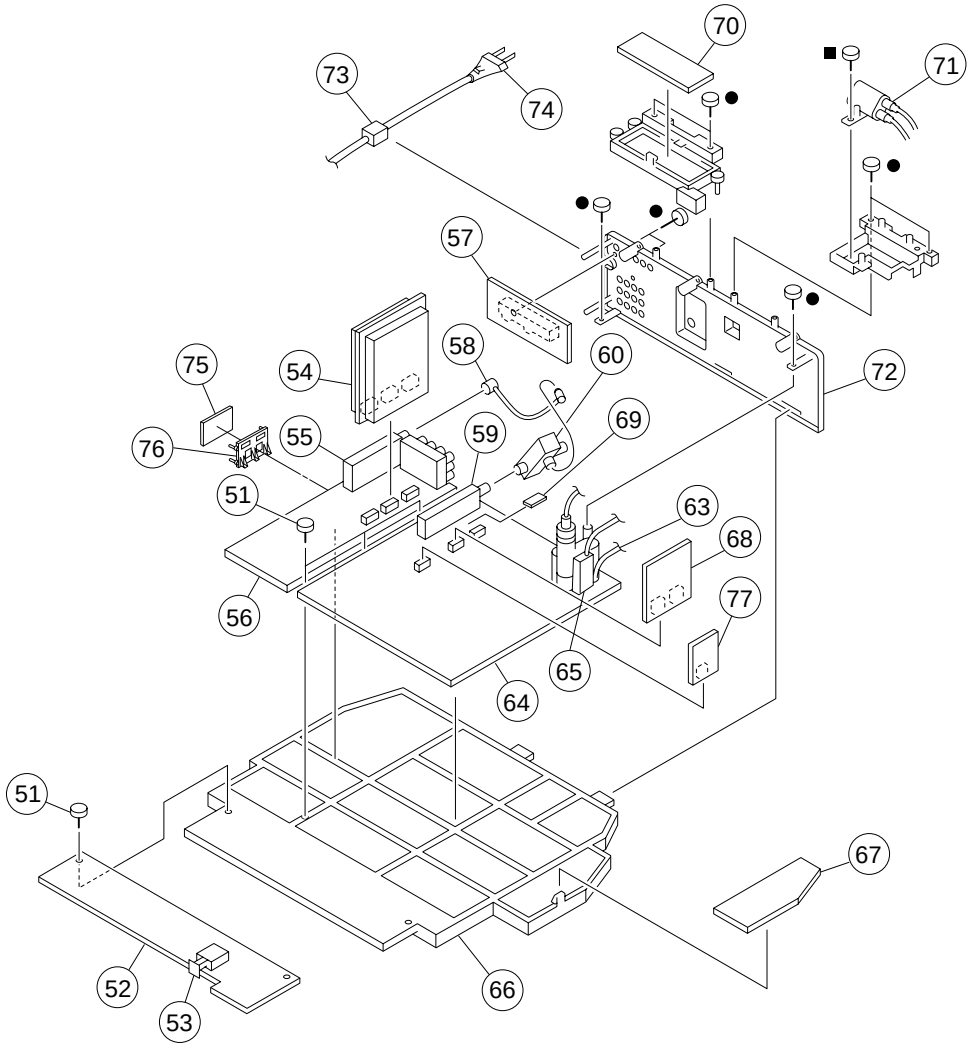
REF. NO.	PART NO.	DESCRIPTION	REMARK
1	X-4036-044-4	DOOR ASSY, CONTROL (EF34M61/EF34M91)	
	X-4036-266-1	DOOR ASSY, CONTROL (EF34M31)	
	X-4036-265-4	DOOR ASSY, CONTROL (EF34M80)	
	X-4036-265-1	DOOR ASSY, CONTROL (EF34M90)	
2	4-047-464-01	CATCHER, PUSH	
3	4-045-250-21	DUMPER	
4	4-062-942-01	BUTTON, POWER	
5	4-036-405-01	SPRING, COMPRESSION	
6	X-4036-045-1	BEZNET ASSY (EF34M61/EF34M91)	3-6
	X-4036-270-1	BEZNET ASSY (EF34M31)	
	X-4036-268-1	BEZNET ASSY (EF34M80)	
	X-4036-269-1	BEZNET ASSY (EF34M90)	
7	1-505-474-11	SPEAKER (5CM)	
8	X-4035-873-4	HANDLE ASSY (LEFT)	
9	X-4035-874-4	HANDLE ASSY (RIGHT)	
10	* 4-062-943-01	HOLDER, TOP SWITCH	
11	1-771-360-11	SWITCH, TOP	
12	⚠ 8-735-050-05	PICTURE TUBE (A80LPD80X) (EF34M61)	
	⚠ 8-735-049-05	PICTURE TUBE (A80LPD80X) (except EF34M61/EF34M90(JE))	
	⚠ 8-735-055-05	PICTURE TUBE (A80LPD80X) (EF34M90(JE))	
13	4-387-204-01	NUT, SPECIAL, CRT	
14	1-526-981-71	CAP ASSY, HIGH-VOLTAGE	
15	4-046-600-01	SPACER, DY	
16	⚠ 8-451-499-11	DEFLECTION YOKE (Y34RSN)	
17	1-452-896-61	COIL, NA ROTATION (RT-200)	
18	⚠ 8-453-007-31	NECK ASSEMBLY NA324-M3	
19	* A-1342-440-A	VM2 BOARD, COMPLETE	
20	4-065-852-01	SPRING, EXTENSION	
21	4-067-087-01	HOLDER (C), DGC	
22	* A-1331-868-A	C BOARD, COMPLETE	
23	⚠ 1-416-757-11	COIL, DEMAGNETIC	
24	4-067-221-01	CLIP, DGC	
25	* 4-062-938-02	SUPPORTER, CRT	
26	4-067-455-01	BAND, DEGAUSSING COIL	
27	4-066-040-01	COVER, REAR	
28	* 4-062-939-02	GUIDE, LIGHT	
29	4-067-447-01	SHEET, BLOTTING	
30	4-374-745-12	CUSHION (A)	
31	4-066-041-01	DUCT, SPEAKER	
32	4-064-929-02	SCREW, TP+TWH 4X25	
33	1-505-473-11	SPEAKER (12CM)	
34	4-051-734-12	PIECE B (120), CONV. CORRECT	
	4-051-734-22	PIECE B (120), CONV. CORRECT	
35	1-452-094-00	CIRCULAR DISC MAGNET B	
36	1-452-032-00	MAGNET, DISC ; 10mmø	
37	2-163-920-11	PLATE, CORRECTION, TLV	
38	1-416-871-03	COIL, LANDING CORRECTION	

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

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

6-2. CHASSIS

● 7-685-648-79 +BVTP 3X12
■ 7-685-663-71 +BVTP 4X16



REF. NO.	PART NO.	DESCRIPTION	REMARK
51	4-046-797-01	SCREW (3X12), +BVTAP	
52	* A-1372-556-A	H1 BOARD, COMPLETE	
53	⚠ 1-571-433-21	SWITCH, PUSH (AC POWER)	
54	* A-1195-148-A	P BOARD, COMPLETE	
55	8-598-450-00	TUNER, FSS BTF-LG434	
56	* A-1135-971-A	B BOARD, COMPLETE	
57	* A-1388-226-A	J1 BOARD, COMPLETE	
58	* 1-555-110-00	CABLE, P-P	
59	8-598-452-00	TUNER, FSS BTF-WG442 (except EF34M80)	
	8-598-450-00	S TUNER, FSS BTF-LG434 (EF34M80)	
60	1-251-658-21	SPLITTER RF	
63	1-900-241-30	LEAD ASSY, G2 (except EF34M31)	
	1-900-243-56	LEAD ASSY, G2 (EF34M31)	
64	* A-1298-745-A	A BOARD, COMPLETE (EF34M61)	
	* A-1298-757-A	A BOARD, COMPLETE (EF34M80)	
	* A-1298-756-A	A BOARD, COMPLETE (EF34M91)	
	* A-1298-765-A	A BOARD, COMPLETE (EF34M90 (JE))	
	* A-1298-764-A	A BOARD, COMPLETE (EF34M90 (HK))	
	* A-1298-766-A	A BOARD, COMPLETE (EF34M31)	
65	⚠ X-4036-321-1	TRANSFORMER ASSY, FLYBACK (NX-4009//J1A4)	
66	* 4-066-681-02	BRACKET, MAIN	
67	* A-1343-584-A	D2 BOARD, COMPLETE	
68	* A-1342-452-A	V1 BOARD, COMPLETE (EF34M31/EF34M61/EF34M91)	
69	* A-1131-391-A	B4 BOARD, COMPLETE	
70	* A-1343-609-A	DH BOARD, COMPLETE (EF34M61)	
	* A-1343-585-A	DH BOARD, COMPLETE (except EF34M31/EF34M61)	
	* A-1343-610-A	DH BOARD, COMPLETE (EF34M31)	
71	⚠ 1-467-525-22	CAP. BLOCK, HIGH-VOLTAGE	
72	4-066-684-04	BRACKET, TERMINAL	
73	4-022-115-00	HOLDER, AC CORD (EF34M91)	
74	⚠ 1-574-062-12	CORD, POWER (WITH CONNECTOR) 2.5A/250V (except EF34M90(HK))	
	⚠ 1-769-609-21	CORD, POWER (WITH CONNECTOR) (EF34M90(HK)	
75	* A-1241-340-A	F BOARD, COMPLETE	
76	* 4-066-683-02	HOLDER, PWB	
77	8-742-166-00	IC, SBX3005-01	

SECTION 7

ELECTRICAL PARTS LIST

B

NOTE:

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

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.
- 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

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

- 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-1135-971-A	B BOARD, COMPLETE **********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C1201	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1202	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1203	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C1204	1-115-419-11	CERAMIC CHIP	3300PF	5%	25V
C1205	1-115-419-11	CERAMIC CHIP	3300PF	5%	25V
C1206	1-126-965-11	ELECT	22MF	20%	50V
C1207	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1208	1-126-023-11	ELECT	100MF	20%	16V
C1209	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C1210	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1211	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V
C1212	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1213	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V
C1214	1-126-055-11	ELECT	470MF	20%	50V
C1215	1-126-055-11	ELECT	470MF	20%	50V
C1219	1-126-961-11	ELECT	2.2MF	20%	50V
C1220	1-126-961-11	ELECT	2.2MF	20%	50V
C1221	1-126-933-11	ELECT	100MF	20%	16V
C1222	1-136-171-00	FILM	0.33MF	5%	50V
C1223	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C1224	1-164-346-11	CERAMIC CHIP	1MF		16V
C1225	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1226	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1227	1-126-963-11	ELECT	4.7MF	20%	50V
C1228	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1229	1-164-346-11	CERAMIC CHIP	1MF		16V
C1231	1-126-964-11	ELECT	10MF	20%	50V
C1232	1-126-022-11	ELECT	47MF	20%	16V
C1233	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1234	1-164-346-11	CERAMIC CHIP	1MF		16V
C1235	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1236	1-126-963-11	ELECT	4.7MF	20%	50V
C1237	1-164-346-11	CERAMIC CHIP	1MF		16V
C1238	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1239	1-136-171-00	FILM	0.33MF	5%	50V
C1240	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C1241	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C1242	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C1243	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C1244	1-110-617-51	ELECT	2200MF	20%	50V
C1245	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C1246	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1247	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C1248	1-110-617-51	ELECT	2200MF	20%	50V
C1251	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C1252	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1253	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C1254	1-136-177-00	FILM	1MF	5%	50V
C1255	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1256	1-127-682-51	ELECT MELF	2200MF	20%	25V
C1258	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C1259	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C1260	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C1263	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C1264	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1265	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C1266	1-136-177-00	FILM	1MF	5%	50V
C1267	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1268	1-127-682-51	ELECT MELF	2200MF	20%	25V
C1270	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C1271	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C1273	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C1274	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C1275	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C1276	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C1277	1-164-690-91	CERAMIC CHIP	0.0022MF	5%	50V
C1279	1-164-690-91	CERAMIC CHIP	0.0022MF	5%	50V
C1281	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C1282	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C1283	1-164-690-91	CERAMIC CHIP	0.0022MF	5%	50V
C1284	1-164-690-91	CERAMIC CHIP	0.0022MF	5%	50V
C1301	1-126-967-11	ELECT	47MF	20%	50V
C1303	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1304	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1305	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1306	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C1307	1-126-933-11	ELECT	100MF	20%	16V
C1308	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1309	1-126-963-11	ELECT	4.7MF	20%	50V
C1310	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1311	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C1312	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1313	1-126-964-11	ELECT	10MF	20%	50V
C1314	1-126-957-11	ELECT	0.22MF	20%	50V
C1315	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C1316	1-126-963-11	ELECT	4.7MF	20%	50V
C1317	1-126-933-11	ELECT	100MF	20%	16V
C1318	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1319	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1320	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1321	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1323	1-126-967-11	ELECT	47MF	20%	50V
C1324	1-126-967-11	ELECT	47MF	20%	50V
C1325	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1326	1-126-933-11	ELECT	100MF	20%	16V
C1327	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1328	1-104-665-11	ELECT	100MF	20%	25V
C1329	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1330	1-126-965-11	ELECT	22MF	20%	50V
C1331	1-163-038-91	CERAMIC CHIP	0.1MF		25V

B

REF. NO.	PART NO.	DESCRIPTION			REMARK
C1332	1-126-960-11	ELECT	1MF	20%	50V
C1333	1-126-933-11	ELECT	100MF	20%	16V
C1334	1-126-933-11	ELECT	100MF	20%	16V
C1335	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C1336	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1337	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1342	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1345	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1350	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1352	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1353	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1354	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1356	1-126-768-11	ELECT	2200MF	20%	16V
C1358	1-164-690-91	CERAMIC CHIP	0.0022MF	5%	50V
C1359	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1360	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C3301	1-104-664-11	ELECT	47MF	20%	25V
C3302	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3303	1-104-664-11	ELECT	47MF	20%	25V
C3304	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3306	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3307	1-126-933-11	ELECT	100MF	20%	16V
C3308	1-126-964-11	ELECT	10MF	20%	50V
C3310	1-126-964-11	ELECT	10MF	20%	50V
C3312	1-104-664-11	ELECT	47MF	20%	25V
C3313	1-126-935-11	ELECT	470MF	20%	16V
C3314	1-164-346-11	CERAMIC CHIP	1MF		16V
C3315	1-104-664-11	ELECT	47MF	20%	25V
C3316	1-164-346-11	CERAMIC CHIP	1MF		16V
C3317	1-104-664-11	ELECT	47MF	20%	25V
C3318	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C3319	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3320	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3322	1-164-346-11	CERAMIC CHIP	1MF		16V
C3323	1-164-346-11	CERAMIC CHIP	1MF		16V
C3324	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3325	1-164-346-11	CERAMIC CHIP	1MF		16V
C3326	1-164-346-11	CERAMIC CHIP	1MF		16V
C3327	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3328	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3329	1-126-966-11	ELECT	33MF	20%	50V
C3330	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C3331	1-126-933-11	ELECT	100MF	20%	16V
C3332	1-104-664-11	ELECT	47MF	20%	25V
C3333	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3334	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3335	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3336	1-126-933-11	ELECT	100MF	20%	16V
C3338	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C3339	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3340	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3341	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3342	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3343	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3344	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C3345	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3346	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3347	1-126-964-11	ELECT	10MF	20%	50V
C3348	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C3349	1-126-933-11	ELECT	100MF	20%	16V
C3350	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C3351	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C3352	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C3353	1-126-933-11	ELECT	100MF	20%	16V
C3354	1-126-967-11	ELECT	47MF	20%	50V
C3355	1-126-967-11	ELECT	47MF	20%	50V
C3356	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C3357	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C3358	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C3360	1-104-664-11	ELECT	47MF	20%	25V
C3361	1-126-964-11	ELECT	10MF	20%	50V
C3362	1-126-964-11	ELECT	10MF	20%	50V
C3363	1-104-664-11	ELECT	47MF	20%	25V
C3364	1-126-964-11	ELECT	10MF	20%	50V
C3365	1-126-964-11	ELECT	10MF	20%	50V
C3370	1-164-346-11	CERAMIC CHIP	1MF		16V
C3372	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3373	1-126-964-11	ELECT	10MF	20%	50V
C3374	1-126-964-11	ELECT	10MF	20%	50V
C3375	1-126-964-11	ELECT	10MF	20%	50V
C3379	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3380	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5201	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C5202	1-126-967-11	ELECT	47MF	20%	50V
C5203	1-126-963-11	ELECT	4.7MF	20%	50V
C5204	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C5205	1-127-532-11	ELECT	47MF	20%	6.3V
C5206	1-126-967-11	ELECT	47MF	20%	50V
C5207	1-127-532-11	ELECT	47MF	20%	6.3V
C5208	1-126-967-11	ELECT	47MF	20%	50V
C5209	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C5210	1-126-963-11	ELECT	4.7MF	20%	50V
C5211	1-164-690-91	CERAMIC CHIP	0.0022MF	5%	50V
C5212	1-164-690-91	CERAMIC CHIP	0.0022MF	5%	50V
C5213	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C5214	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C5215	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C5216	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C5217	1-126-967-11	ELECT	47MF	20%	50V
C5218	1-126-967-11	ELECT	47MF	20%	50V
C5219	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C5220	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C5221	1-127-532-11	ELECT	47MF	20%	6.3V
C5223	1-164-690-91	CERAMIC CHIP	0.0022MF	5%	50V
C5224	1-164-690-91	CERAMIC CHIP	0.0022MF	5%	50V
C5225	1-126-963-11	ELECT	4.7MF	20%	50V
C5226	1-126-963-11	ELECT	4.7MF	20%	50V
C5227	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C5228	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C5229	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C5230	1-126-967-11	ELECT	47MF	20%	50V
C5231	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C5232	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C5233	1-126-960-11	ELECT	1MF	20%	50V
C5234	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C5235	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C5237	1-126-933-11	ELECT	100MF	20%	16V
C5238	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C5239	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C5240	1-126-933-11	ELECT	100MF	20%	16V
C5241	1-126-933-11	ELECT	100MF	20%	16V
C5242	1-164-346-11	CERAMIC CHIP	1MF		16V
C5243	1-164-346-11	CERAMIC CHIP	1MF		16V
C5247	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C5248	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C5249	1-164-690-91	CERAMIC CHIP	0.0022MF	5%	50V
C5300	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C5302	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C5304	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C5306	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C5308	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5309	1-164-346-11	CERAMIC CHIP	1MF		16V
C5310	1-164-346-11	CERAMIC CHIP	1MF		16V
C5311	1-164-346-11	CERAMIC CHIP	1MF		16V
C5312	1-164-346-11	CERAMIC CHIP	1MF		16V
C5313	1-164-346-11	CERAMIC CHIP	1MF		16V
C5314	1-164-346-11	CERAMIC CHIP	1MF		16V

B

REF. NO.	PART NO.	DESCRIPTION			REMARK
C5315	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C5317	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C5318	1-126-967-11	ELECT	47MF	20%	50V
C5319	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C5320	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C5322	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C5323	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C5324	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C5325	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C5326	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C5328	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C5329	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C5330	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C5331	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C5332	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
		<CONNECTOR>			
CN1201	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN1204	* 1-564-507-11	PLUG, CONNECTOR 4P			
CN1205	* 1-564-507-11	PLUG, CONNECTOR 4P			
CN1301	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN1303	* 1-564-511-11	PLUG, CONNECTOR 8P			
CN1304	* 1-779-891-11	CONNECTOR, BOARD TO BOARD 8P			
CN1305	* 1-779-892-11	CONNECTOR, BOARD TO BOARD 10P			
CN1306	* 1-779-892-11	CONNECTOR, BOARD TO BOARD 10P			
CN1307	* 1-779-891-11	CONNECTOR, BOARD TO BOARD 8P			
CN1308	* 1-573-296-21	CONNECTOR, BOARD TO BOARD 10P			
CN1309	1-764-818-11	CONNECTOR, BOARD TO BOARD 10P			
CN1310	1-764-820-11	CONNECTOR, BOARD TO BOARD 12P			
CN1311	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN1312	* 1-508-784-21	PIN, CONNECTOR (5mm PITCH) 1P			
CN1313	* 1-564-509-11	PLUG, CONNECTOR 6P			
		<DIODE>			
D1201	8-719-404-49	DIODE MA111			
D1202	8-719-404-49	DIODE MA111			
D1203	8-719-404-49	DIODE MA111			
D1204	8-719-404-49	DIODE MA111			
D1205	8-719-158-35	DIODE RD9.1SB			
D1302	8-719-404-49	DIODE MA111			
D1306	8-719-908-03	DIODE GP08D			
D3301	8-719-158-35	DIODE RD9.1SB			
D3302	8-719-158-35	DIODE RD9.1SB			
D3303	8-719-158-35	DIODE RD9.1SB			
D3304	8-719-158-35	DIODE RD9.1SB			
D3305	8-719-158-35	DIODE RD9.1SB			
D3306	8-719-158-35	DIODE RD9.1SB			
D3307	8-719-158-35	DIODE RD9.1SB			
D3308	8-719-158-35	DIODE RD9.1SB			
D3309	8-719-158-35	DIODE RD9.1SB			
D3310	8-719-158-35	DIODE RD9.1SB			
D3311	8-719-158-35	DIODE RD9.1SB			
D3312	8-719-158-35	DIODE RD9.1SB			
		<FERRITE BEAD>			
FB1205	1-410-397-21	FERRITE	1.1UH		
FB1206	1-410-397-21	FERRITE	1.1UH		
FB1207	1-410-397-21	FERRITE	1.1UH		
FB1208	1-410-397-21	FERRITE	1.1UH		
FB5201	1-410-397-21	FERRITE	1.1UH		
FB5202	1-414-598-11	INDUCTOR CHIP 0UH			
FB5203	1-414-598-11	INDUCTOR CHIP 0UH			
FB5204	1-414-598-11	INDUCTOR CHIP 0UH			
FB5205	1-414-598-11	INDUCTOR CHIP 0UH			
FB5206	1-414-598-11	INDUCTOR CHIP 0UH			
FB5207	1-414-598-11	INDUCTOR CHIP 0UH			
FB5208	1-414-598-11	INDUCTOR CHIP 0UH			
FB5209	1-414-598-11	INDUCTOR CHIP 0UH			
		<FILTER>			
FL5201	1-239-803-11	ENCAPSULATED COMPONENT			
		<IC>			
IC1201	8-759-273-12	IC TDA7315D013TR			
IC1202	8-759-100-96	IC uPC4558G2			
IC1203	8-759-553-45	IC TDA7481			
IC1204	8-759-553-45	IC TDA7481			
IC1301	8-752-088-39	IC CXA2130S			
IC1302	8-759-542-15	IC TDA9178			
IC1303	8-759-231-53	IC TA7805S			
IC1304	8-759-445-59	IC BA033T			
IC1305	8-759-701-59	IC NJM78M09FA			
IC1307	8-759-278-95	IC BA7606F			
IC1308	8-759-439-64	IC HEF4053BT			
IC1309	8-759-439-64	IC HEF4053BT			
IC1310	8-759-450-47	IC BA05T			
IC1311	8-759-337-26	IC MM1115XFBE			
IC3302	8-759-100-96	IC uPC4558G2			
IC3303	8-752-068-46	IC CXA1855S			
IC5201	8-759-549-74	IC TC9447F-003			
IC5202	8-759-042-02	IC S-80743AL-A7-S			
IC5203	8-759-358-38	IC NJM78M05DLA(TE1)			
IC5204	8-759-100-96	IC uPC4558G2			
		<JACK>			
J3301	1-784-646-11	TERMINAL, S			
J3302	1-778-387-11	JACK BLOCK, PIN 12P			
		<CHIP CONDUCTOR>			
JR1205	1-216-295-91	SHORT	0		
JR1206	1-216-295-91	SHORT	0		
JR1207	1-216-295-91	SHORT	0		
JR1208	1-216-295-91	SHORT	0		
JR1209	1-216-295-91	SHORT	0		
JR1301	1-216-295-91	SHORT	0		
JR1305	1-216-295-91	SHORT	0		
JR1311	1-216-295-91	SHORT	0		
JR5203	1-216-295-91	SHORT	0		
		<COIL>			
L1201	1-414-187-11	INDUCTOR 47UH			
L1202	1-416-857-11	INDUCTOR 65UH			
L1203	1-416-857-11	INDUCTOR 65UH			
L1301	1-414-189-31	INDUCTOR 100UH			
L1302	1-412-537-31	INDUCTOR 100UH			
L1303	1-414-185-41	INDUCTOR 22UH			
L1304	1-412-537-31	INDUCTOR 100UH			
L1305	1-414-186-31	INDUCTOR 33UH			
L1306	1-414-857-11	INDUCTOR 100UH			
L1307	1-414-187-11	INDUCTOR 47UH			
L1308	1-414-187-11	INDUCTOR 47UH			
L1309	1-414-857-11	INDUCTOR 100UH			
L1310	1-414-187-11	INDUCTOR 47UH			
L1311	1-414-187-11	INDUCTOR 47UH			
L1312	1-414-856-11	INDUCTOR 10UH			
L1313	1-414-856-11	INDUCTOR 10UH			
L1314	1-414-856-11	INDUCTOR 10UH			
L3302	1-414-856-11	INDUCTOR 10UH			
L3303	1-414-856-11	INDUCTOR 10UH			
L3304	1-414-856-11	INDUCTOR 10UH			

REF. NO.	PART NO.	DESCRIPTION	REMARK
L3305	1-414-856-11	INDUCTOR 10UH	
L3306	1-414-856-11	INDUCTOR 10UH	
L5201	1-408-595-31	INDUCTOR 2.2UH	
		<IC LINK>	
PS1201	1-532-686-21	LINK, IC 2.7A/150V	
PS1202	1-532-686-21	LINK, IC 2.7A/150V	
PS1203	1-532-686-21	LINK, IC 2.7A/150V	
PS1204	1-532-686-21	LINK, IC 2.7A/150V	
		<TRANSISTOR>	
Q1201	8-729-224-62	TRANSISTOR 2SK246-GR	
Q1202	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1203	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1204	8-729-224-62	TRANSISTOR 2SK246-GR	
Q1205	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1206	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1207	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1301	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1302	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1303	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1304	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1305	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1306	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1307	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1308	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1309	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1310	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1311	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1313	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1314	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1315	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1316	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1318	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1320	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1321	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1322	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1323	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1324	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1325	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1326	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1329	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1332	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1340	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1342	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1343	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1344	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1345	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3301	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3302	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3303	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3304	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3305	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3306	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3307	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3308	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3309	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3310	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3311	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3312	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3313	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3314	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3315	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3316	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3321	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q3322	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q3325	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q3326	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5300	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5301	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5302	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5303	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5304	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5305	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5306	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5307	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5308	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5309	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5310	8-729-216-22	TRANSISTOR 2SA1162-G	
		<RESISTOR>	
R1201	1-216-033-00	RES,CHIP 220 5% 1/10W	
R1202	1-216-033-00	RES,CHIP 220 5% 1/10W	
R1203	1-216-067-00	RES,CHIP 5.6K 5% 1/10W	
R1204	1-216-067-00	RES,CHIP 5.6K 5% 1/10W	
R1205	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R1206	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R1207	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R1208	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R1209	1-216-121-91	RES,CHIP 1M 5% 1/10W	
R1210	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R1211	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R1212	1-216-061-00	RES,CHIP 3.3K 5% 1/10W	
R1213	1-216-069-00	RES,CHIP 6.8K 5% 1/10W	
R1214	1-216-039-00	RES,CHIP 390 5% 1/10W	
R1215	1-216-101-00	RES,CHIP 150K 5% 1/10W	
R1216	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R1217	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R1218	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R1219	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R1220	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R1221	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1222	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1223	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R1224	1-216-101-00	RES,CHIP 150K 5% 1/10W	
R1225	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R1226	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R1227	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R1228	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R1229	1-216-121-91	RES,CHIP 1M 5% 1/10W	
R1230	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R1231	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R1232	1-216-061-00	RES,CHIP 3.3K 5% 1/10W	
R1233	1-216-069-00	RES,CHIP 6.8K 5% 1/10W	
R1234	1-216-039-00	RES,CHIP 390 5% 1/10W	
R1236	1-208-808-11	RES,CHIP 12K 0.50% 1/10W	
R1237	1-216-085-00	RES,CHIP 33K 5% 1/10W	
R1238	1-216-081-00	RES,CHIP 22K 5% 1/10W	
R1239	1-216-067-00	RES,CHIP 5.6K 5% 1/10W	
R1240	1-216-085-00	RES,CHIP 33K 5% 1/10W	
R1241	1-215-890-11	METAL OXIDE 470 5% 2W F	
R1242	1-215-890-11	METAL OXIDE 470 5% 2W F	
R1244	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1246	1-208-808-11	RES,CHIP 12K 0.50% 1/10W	
R1247	1-216-085-00	RES,CHIP 33K 5% 1/10W	
R1252	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1260	1-216-029-00	RES,CHIP 150 5% 1/10W	
R1261	1-216-029-00	RES,CHIP 150 5% 1/10W	
R1264	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1265	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1266	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R1278	1-216-033-00	RES,CHIP 220 5% 1/10W	
R1279	1-216-033-00	RES,CHIP 220 5% 1/10W	
R1280	1-216-029-00	RES,CHIP 150 5% 1/10W	
R1281	1-216-029-00	RES,CHIP 150 5% 1/10W	

B

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1301	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1302	1-216-025-91	RES,CHIP	100	5%	1/10W
R1304	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1305	1-216-025-91	RES,CHIP	100	5%	1/10W
R1306	1-216-025-91	RES,CHIP	100	5%	1/10W
R1307	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1308	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1309	1-216-025-91	RES,CHIP	100	5%	1/10W
R1310	1-216-041-00	RES,CHIP	470	5%	1/10W
R1311	1-216-033-00	RES,CHIP	220	5%	1/10W
R1312	1-216-005-00	RES,CHIP	15	5%	1/10W
R1313	1-216-295-91	SHORT	0		
R1314	1-216-041-00	RES,CHIP	470	5%	1/10W
R1315	1-216-041-00	RES,CHIP	470	5%	1/10W
R1316	1-216-025-91	RES,CHIP	100	5%	1/10W
R1317	1-216-075-00	RES,CHIP	12K	5%	1/10W
R1318	1-216-025-91	RES,CHIP	100	5%	1/10W
R1319	1-216-045-00	RES,CHIP	680	5%	1/10W
R1320	1-216-079-00	RES,CHIP	18K	5%	1/10W
R1321	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R1322	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1323	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1324	1-216-025-91	RES,CHIP	100	5%	1/10W
R1325	1-216-041-00	RES,CHIP	470	5%	1/10W
R1326	1-216-025-91	RES,CHIP	100	5%	1/10W
R1327	1-216-025-91	RES,CHIP	100	5%	1/10W
R1328	1-216-033-00	RES,CHIP	220	5%	1/10W
R1329	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1330	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1331	1-216-045-00	RES,CHIP	680	5%	1/10W
R1332	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1333	1-216-025-91	RES,CHIP	100	5%	1/10W
R1334	1-216-025-91	RES,CHIP	100	5%	1/10W
R1335	1-216-041-00	RES,CHIP	470	5%	1/10W
R1336	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1337	1-216-041-00	RES,CHIP	470	5%	1/10W
R1338	1-216-041-00	RES,CHIP	470	5%	1/10W
R1339	1-216-079-00	RES,CHIP	18K	5%	1/10W
R1340	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1341	1-216-041-00	RES,CHIP	470	5%	1/10W
R1342	1-216-041-00	RES,CHIP	470	5%	1/10W
R1343	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1344	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1345	1-216-041-00	RES,CHIP	470	5%	1/10W
R1347	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1348	1-216-025-91	RES,CHIP	100	5%	1/10W
R1349	1-216-075-00	RES,CHIP	12K	5%	1/10W
R1351	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1352	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1353	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1354	1-216-033-00	RES,CHIP	220	5%	1/10W
R1356	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1357	1-216-025-91	RES,CHIP	100	5%	1/10W
R1358	1-216-041-00	RES,CHIP	470	5%	1/10W
R1359	1-216-041-00	RES,CHIP	470	5%	1/10W
R1360	1-216-041-00	RES,CHIP	470	5%	1/10W
R1361	1-216-041-00	RES,CHIP	470	5%	1/10W
R1362	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1363	1-216-041-00	RES,CHIP	470	5%	1/10W
R1364	1-216-025-91	RES,CHIP	100	5%	1/10W
R1365	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1366	1-216-041-00	RES,CHIP	470	5%	1/10W
R1367	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1368	1-216-041-00	RES,CHIP	470	5%	1/10W
R1369	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1370	1-216-041-00	RES,CHIP	470	5%	1/10W
R1373	1-216-041-00	RES,CHIP	470	5%	1/10W
R1374	1-216-045-00	RES,CHIP	680	5%	1/10W
R1376	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1377	1-216-121-91	RES,CHIP	1M	5%	1/10W
R1378	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1379	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1380	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1381	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1382	1-216-095-00	RES,CHIP	82K	5%	1/10W
R1383	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1384	1-216-025-91	RES,CHIP	100	5%	1/10W
R1385	1-216-035-00	RES,CHIP	270	5%	1/10W
R1386	1-216-033-00	RES,CHIP	220	5%	1/10W
R1387	1-216-041-00	RES,CHIP	470	5%	1/10W
R1388	1-216-041-00	RES,CHIP	470	5%	1/10W
R1389	1-216-017-91	RES,CHIP	47	5%	1/10W
R1390	1-216-033-00	RES,CHIP	220	5%	1/10W
R1391	1-216-041-00	RES,CHIP	470	5%	1/10W
R1392	1-216-045-00	RES,CHIP	680	5%	1/10W
R1393	1-216-027-00	RES,CHIP	120	5%	1/10W
R1395	1-216-021-00	RES,CHIP	68	5%	1/10W
R1396	1-216-021-00	RES,CHIP	68	5%	1/10W
R3300	1-216-105-91	RES,CHIP	220K	5%	1/10W
R3301	1-216-025-91	RES,CHIP	100	5%	1/10W
R3302	1-216-295-91	SHORT	0		
R3303	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3304	1-216-025-91	RES,CHIP	100	5%	1/10W
R3305	1-216-017-91	RES,CHIP	47	5%	1/10W
R3306	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3307	1-216-025-91	RES,CHIP	100	5%	1/10W
R3308	1-216-037-00	RES,CHIP	330	5%	1/10W
R3309	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3310	1-216-025-91	RES,CHIP	100	5%	1/10W
R3311	1-216-295-91	SHORT	0		
R3312	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3313	1-216-025-91	RES,CHIP	100	5%	1/10W
R3314	1-216-017-91	RES,CHIP	47	5%	1/10W
R3315	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3316	1-216-025-91	RES,CHIP	100	5%	1/10W
R3317	1-216-037-00	RES,CHIP	330	5%	1/10W
R3318	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3319	1-216-025-91	RES,CHIP	100	5%	1/10W
R3320	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3321	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3323	1-216-025-91	RES,CHIP	100	5%	1/10W
R3324	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3325	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3326	1-216-025-91	RES,CHIP	100	5%	1/10W
R3327	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R3328	1-216-025-91	RES,CHIP	100	5%	1/10W
R3329	1-216-089-91	RES,CHIP	47K	5%	1/10W
R3330	1-216-025-91	RES,CHIP	100	5%	1/10W
R3331	1-216-025-91	RES,CHIP	100	5%	1/10W
R3332	1-216-041-00	RES,CHIP	470	5%	1/10W
R3333	1-216-025-91	RES,CHIP	100	5%	1/10W
R3334	1-216-025-91	RES,CHIP	100	5%	1/10W
R3335	1-216-022-00	RES,CHIP	75	5%	1/10W
R3336	1-216-025-91	RES,CHIP	100	5%	1/10W
R3337	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3338	1-216-025-91	RES,CHIP	100	5%	1/10W
R3339	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3341	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3342	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3343	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3344	1-216-089-91	RES,CHIP	47K	5%	1/10W
R3345	1-216-025-91	RES,CHIP	100	5%	1/10W
R3346	1-216-105-91	RES,CHIP	220K	5%	1/10W
R3347	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3348	1-216-048-00	RES,CHIP	910	5%	1/10W
R3349	1-216-073-00	RES,CHIP	10K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R3350	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3351	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3352	1-216-089-91	RES,CHIP	47K	5%	1/10W
R3353	1-216-025-91	RES,CHIP	100	5%	1/10W
R3354	1-216-025-91	RES,CHIP	100	5%	1/10W
R3355	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3356	1-216-113-00	RES,CHIP	470K	5%	1/10W
R3357	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3358	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3359	1-216-025-91	RES,CHIP	100	5%	1/10W
R3360	1-216-295-91	SHORT	0		
R3361	1-216-025-91	RES,CHIP	100	5%	1/10W
R3362	1-216-025-91	RES,CHIP	100	5%	1/10W
R3363	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3364	1-216-113-00	RES,CHIP	470K	5%	1/10W
R3365	1-216-113-00	RES,CHIP	470K	5%	1/10W
R3366	1-216-295-91	SHORT	0		
R3367	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3368	1-216-093-00	RES,CHIP	68K	5%	1/10W
R3369	1-216-105-91	RES,CHIP	220K	5%	1/10W
R3370	1-216-105-91	RES,CHIP	220K	5%	1/10W
R3371	1-216-022-00	RES,CHIP	75	5%	1/10W
R3372	1-216-295-91	SHORT	0		
R3373	1-216-295-91	SHORT	0		
R3374	1-216-295-91	SHORT	0		
R3375	1-216-089-91	RES,CHIP	47K	5%	1/10W
R3377	1-216-022-00	RES,CHIP	75	5%	1/10W
R3378	1-216-048-00	RES,CHIP	910	5%	1/10W
R3379	1-216-105-91	RES,CHIP	220K	5%	1/10W
R3380	1-216-105-91	RES,CHIP	220K	5%	1/10W
R3381	1-216-022-00	RES,CHIP	75	5%	1/10W
R3382	1-216-025-91	RES,CHIP	100	5%	1/10W
R3383	1-216-025-91	RES,CHIP	100	5%	1/10W
R3384	1-216-025-91	RES,CHIP	100	5%	1/10W
R3385	1-216-105-91	RES,CHIP	220K	5%	1/10W
R3386	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R3387	1-216-089-91	RES,CHIP	47K	5%	1/10W
R3388	1-216-089-91	RES,CHIP	47K	5%	1/10W
R3389	1-216-022-00	RES,CHIP	75	5%	1/10W
R3390	1-216-025-91	RES,CHIP	100	5%	1/10W
R3391	1-216-025-91	RES,CHIP	100	5%	1/10W
R3392	1-216-021-00	RES,CHIP	68	5%	1/10W
R3393	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R3394	1-216-031-00	RES,CHIP	180	5%	1/10W
R3395	1-216-033-00	RES,CHIP	220	5%	1/10W
R3396	1-216-041-00	RES,CHIP	470	5%	1/10W
R3397	1-216-041-00	RES,CHIP	470	5%	1/10W
R3398	1-216-025-91	RES,CHIP	100	5%	1/10W
R3399	1-216-025-91	RES,CHIP	100	5%	1/10W
R5201	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R5202	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R5203	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R5204	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5205	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5206	1-216-129-00	RES,CHIP	2.2M	5%	1/10W
R5207	1-216-035-00	RES,CHIP	270	5%	1/10W
R5208	1-216-035-00	RES,CHIP	270	5%	1/10W
R5210	1-216-033-00	RES,CHIP	220	5%	1/10W
R5211	1-216-033-00	RES,CHIP	220	5%	1/10W
R5212	1-216-033-00	RES,CHIP	220	5%	1/10W
R5214	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5215	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R5216	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5217	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5218	1-216-075-00	RES,CHIP	12K	5%	1/10W
R5219	1-216-075-00	RES,CHIP	12K	5%	1/10W
R5220	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5221	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5222	1-216-025-91	RES,CHIP	100	5%	1/10W
R5223	1-216-025-91	RES,CHIP	100	5%	1/10W
R5224	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5225	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5226	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5227	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5228	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5300	1-216-295-91	SHORT	0		
R5301	1-216-031-00	RES,CHIP	180	5%	1/10W
R5302	1-216-031-00	RES,CHIP	180	5%	1/10W
R5303	1-216-041-00	RES,CHIP	470	5%	1/10W
R5304	1-216-295-91	SHORT	0		
R5306	1-216-013-00	RES,CHIP	33	5%	1/10W
R5307	1-216-033-00	RES,CHIP	220	5%	1/10W
R5308	1-216-031-00	RES,CHIP	180	5%	1/10W
R5309	1-216-041-00	RES,CHIP	470	5%	1/10W
R5310	1-216-689-11	RES,CHIP	39K	5%	1/10W
R5311	1-216-689-11	RES,CHIP	39K	5%	1/10W
R5312	1-216-689-11	RES,CHIP	39K	5%	1/10W
R5313	1-216-689-11	RES,CHIP	39K	5%	1/10W
R5314	1-216-689-11	RES,CHIP	39K	5%	1/10W
R5315	1-216-689-11	RES,CHIP	39K	5%	1/10W
R5316	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5317	1-216-041-00	RES,CHIP	470	5%	1/10W
R5318	1-216-041-00	RES,CHIP	470	5%	1/10W
R5319	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5320	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5321	1-216-025-91	RES,CHIP	100	5%	1/10W
R5322	1-216-025-91	RES,CHIP	100	5%	1/10W
R5323	1-216-025-91	RES,CHIP	100	5%	1/10W
R5324	1-216-079-00	RES,CHIP	18K	5%	1/10W
R5325	1-216-075-00	RES,CHIP	12K	5%	1/10W
R5326	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5327	1-216-081-00	RES,CHIP	22K	5%	1/10W
R5328	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5329	1-216-081-00	RES,CHIP	22K	5%	1/10W
R5330	1-216-081-00	RES,CHIP	22K	5%	1/10W
R5331	1-216-081-00	RES,CHIP	22K	5%	1/10W
R5332	1-216-081-00	RES,CHIP	22K	5%	1/10W
R5333	1-216-081-00	RES,CHIP	22K	5%	1/10W
R5334	1-216-081-00	RES,CHIP	22K	5%	1/10W
R5335	1-216-081-00	RES,CHIP	22K	5%	1/10W
R5336	1-216-089-91	RES,CHIP	47K	5%	1/10W
R5337	1-216-089-91	RES,CHIP	47K	5%	1/10W
R5338	1-216-041-00	RES,CHIP	470	5%	1/10W
R5339	1-216-073-00	RES,CHIP	10K	5%	1/10W
R5350	1-216-045-00	RES,CHIP	680	5%	1/10W
R5353	1-216-025-91	RES,CHIP	100	5%	1/10W
R5354	1-216-025-91	RES,CHIP	100	5%	1/10W
R5355	1-216-025-91	RES,CHIP	100	5%	1/10W
R5356	1-216-025-91	RES,CHIP	100	5%	1/10W
R5357	1-216-025-91	RES,CHIP	100	5%	1/10W
R5358	1-216-025-91	RES,CHIP	100	5%	1/10W
R5359	1-216-041-00	RES,CHIP	470	5%	1/10W
R5360	1-216-031-00	RES,CHIP	180	5%	1/10W
R5361	1-216-097-91	RES,CHIP	100K	5%	1/10W
R5362	1-216-097-91	RES,CHIP	100K	5%	1/10W
R5364	1-216-097-91	RES,CHIP	100K	5%	1/10W
R5365	1-216-041-00	RES,CHIP	470	5%	1/10W
R5366	1-216-041-00	RES,CHIP	470	5%	1/10W
R5367	1-216-041-00	RES,CHIP	470	5%	1/10W
R5368	1-216-041-00	RES,CHIP	470	5%	1/10W
R5369	1-216-041-00	RES,CHIP	470	5%	1/10W
R5370	1-216-081-00	RES,CHIP	22K	5%	1/10W
R5371	1-216-041-00	RES,CHIP	470	5%	1/10W
R5372	1-216-295-91	SHORT	0		
R5373	1-216-045-00	RES,CHIP	680	5%	1/10W
R5374	1-216-089-91	RES,CHIP	47K	5%	1/10W
R5375	1-216-295-91	SHORT	0		

B P

REF. NO.	PART NO.	DESCRIPTION			REMARK
R5376	1-216-025-91	RES,CHIP	100	5%	1/10W
R5377	1-216-047-91	RES,CHIP	820	5%	1/10W
R5378	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R5379	1-216-097-91	RES,CHIP	100K	5%	1/10W
R5381	1-216-097-91	RES,CHIP	100K	5%	1/10W
R5382	1-216-033-00	RES,CHIP	220	5%	1/10W
R5383	1-216-097-91	RES,CHIP	100K	5%	1/10W
R5384	1-216-033-00	RES,CHIP	220	5%	1/10W
R5385	1-216-041-00	RES,CHIP	470	5%	1/10W
R5386	1-216-295-91	SHORT	0		
R5387	1-216-041-00	RES,CHIP	470	5%	1/10W
R5388	1-216-033-00	RES,CHIP	220	5%	1/10W
R5389	1-216-041-00	RES,CHIP	470	5%	1/10W
R5390	1-216-035-00	RES,CHIP	270	5%	1/10W
R5391	1-216-295-91	SHORT	0		
R5392	1-216-041-00	RES,CHIP	470	5%	1/10W
R5393	1-216-041-00	RES,CHIP	470	5%	1/10W
R5394	1-216-029-00	RES,CHIP	150	5%	1/10W
R5395	1-216-049-91	RES,CHIP	1K	5%	1/10W
R5396	1-216-041-00	RES,CHIP	470	5%	1/10W
R5397	1-216-041-00	RES,CHIP	470	5%	1/10W
R5398	1-216-029-00	RES,CHIP	150	5%	1/10W
R5399	1-216-049-91	RES,CHIP	1K	5%	1/10W
R7300	1-216-295-91	SHORT	0		
R7301	1-216-295-91	SHORT	0		
R7305	1-216-045-00	RES,CHIP	680	5%	1/10W
		<VARIABLE RESISTOR>			
RV5301	1-241-758-11	RES, ADJ, CARBON 100			
		<TUNER>			
TU3301	8-598-450-00	TUNER, FSS BTF-LG434			
		<CRYSTAL>			
X1301	1-781-134-21	VIBRATOR, CRYSTAL			
X1302	1-781-132-21	VIBRATOR, CRYSTAL			
X5201	1-579-834-11	VIBRATOR, CRYSTAL			

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* A-1195-148-A P BOARD, COMPLETE
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<CAPACITOR>

C9401	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C9402	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9404	1-164-346-11	CERAMIC CHIP	1MF		16V
C9405	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C9406	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C9408	1-115-419-11	CERAMIC CHIP	3300PF	5%	25V
C9409	1-115-185-11	CERAMIC CHIP	0.033MF	10%	50V
C9410	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C9412	1-162-569-11	CERAMIC CHIP	100PF	2%	50V
C9413	1-162-569-11	CERAMIC CHIP	100PF	2%	50V
C9414	1-162-569-11	CERAMIC CHIP	100PF	2%	50V
C9415	1-162-569-11	CERAMIC CHIP	100PF	2%	50V
C9420	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C9501	1-126-396-11	ELECT CHIP	47MF	20%	16V
C9502	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9503	1-126-396-11	ELECT CHIP	47MF	20%	16V
C9504	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9505	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9507	1-126-396-11	ELECT CHIP	47MF	20%	16V
C9508	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9509	1-126-204-11	ELECT CHIP	47MF	20%	16V
C9510	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9511	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C9512	1-126-204-11	ELECT CHIP	47MF	20%	16V
C9513	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9514	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9515	1-104-601-11	ELECT CHIP	10MF	20%	10V
C9516	1-104-601-11	ELECT CHIP	10MF	20%	10V
C9517	1-104-601-11	ELECT CHIP	10MF	20%	10V
C9518	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9519	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9520	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9522	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C9523	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C9524	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C9525	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9526	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9527	1-104-601-11	ELECT CHIP	10MF	20%	10V
C9528	1-104-601-11	ELECT CHIP	10MF	20%	10V
C9529	1-104-601-11	ELECT CHIP	10MF	20%	10V
C9530	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9531	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9532	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9533	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9534	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9535	1-126-396-11	ELECT CHIP	47MF	20%	16V
C9536	1-126-396-11	ELECT CHIP	47MF	20%	16V
C9537	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C9538	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C9539	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9540	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9541	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9542	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9543	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C9544	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9545	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9546	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9547	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9548	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9549	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9550	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C9552	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9553	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9554	1-126-204-11	ELECT CHIP	47MF	20%	16V
C9555	1-126-204-11	ELECT CHIP	47MF	20%	16V
C9556	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C9558	1-126-204-11	ELECT CHIP	47MF	20%	16V
C9560	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9561	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9562	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9563	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9564	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9565	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9566	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9567	1-126-204-11	ELECT CHIP	47MF	20%	16V
C9568	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9569	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C9570	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C9574	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C9576	1-163-143-00	CERAMIC CHIP	0.0012MF	5%	50V
C9577	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C9578	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C9579	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C9580	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C9581	1-164-346-11	CERAMIC CHIP	1MF		16V
C9582	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C9589	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C9590	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C9591	1-126-206-11	ELECT CHIP	100MF	20%	6.3V

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C9605	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C9623	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C9626	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9629	1-124-779-00	ELECT CHIP	10MF	20%	16V
C9801	1-126-204-11	ELECT CHIP	47MF	20%	16V
C9802	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9803	1-126-204-11	ELECT CHIP	47MF	20%	16V
C9804	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9846	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C9847	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C9849	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C9850	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C9858	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9859	1-126-206-11	ELECT CHIP	100MF	20%	6.3V
C9860	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9883	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9884	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C9885	1-126-396-11	ELECT CHIP	47MF	20%	16V
C9886	1-126-204-11	ELECT CHIP	47MF	20%	16V
C9889	1-126-396-11	ELECT CHIP	47MF	20%	16V
C9892	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C9893	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C9894	1-126-204-11	ELECT CHIP	47MF	20%	16V
		<CONNECTOR>			
CN9501	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P			
CN9502	1-764-811-11	CONNECTOR, BOARD TO BOARD 10P			
CN9503	1-764-813-11	CONNECTOR, BOARD TO BOARD 12P			
		<DIODE>			
D9504	8-719-025-33	DIODE 02CZ6.2-TE85L			
D9505	8-719-025-33	DIODE 02CZ6.2-TE85L			
D9506	8-719-404-49	DIODE MA111			
		<FERRITE BEAD>			
FB9501	1-414-233-22	INDUCTOR CHIP 0UH			
FB9502	1-414-233-22	INDUCTOR CHIP 0UH			
		<FILTER>			
FL9501	1-233-505-21	FILTER, LOW PASS			
FL9502	1-233-504-21	FILTER, LOW PASS			
FL9503	1-233-504-21	FILTER, LOW PASS			
FL9504	1-233-504-21	FILTER, LOW PASS			
FL9505	1-233-504-21	FILTER, LOW PASS			
FL9506	1-233-505-21	FILTER, LOW PASS			
FL9604	1-233-945-21	FILTER, LOW PASS			
FL9607	1-233-944-21	FILTER, LOW PASS			
FL9608	1-233-944-21	FILTER, LOW PASS			
		<IC>			
IC9401	8-759-907-81	IC SN74LS221NS			
IC9501	8-759-467-22	IC MSM548331TS-K			
IC9502	8-759-467-22	IC MSM548331TS-K			
IC9503	8-759-295-09	IC TLC2932IPW			
IC9504	8-759-295-09	IC TLC2932IPW			
IC9505	8-759-295-09	IC TLC2932IPW			
IC9506	8-752-392-55	IC CXD2079Q			
IC9509	8-759-030-52	IC MC74F163AM			
IC9510	8-759-030-52	IC MC74F163AM			
IC9511	8-759-930-57	IC SN74LS164NS			
IC9525	8-759-352-91	IC PST9143NL			
IC9526	8-759-527-74	IC M24C02-MN6T			
IC9527	8-752-897-65	IC CXP86332-008Q			
IC9530	8-759-485-79	IC TC7SET08FU(TE85L)			
IC9531	8-759-485-79	IC TC7SET08FU(TE85L)			
IC9532	8-759-485-79	IC TC7SET08FU(TE85L)			
		<CHIP CONDUCTOR>			
JR9401	1-216-295-91	SHORT	0		
		<COIL>			
L9401	1-414-757-11	INDUCTOR 100UH			
L9402	1-414-757-11	INDUCTOR 100UH			
L9501	1-414-754-11	INDUCTOR 10UH			
L9502	1-414-757-11	INDUCTOR 100UH			
L9503	1-414-757-11	INDUCTOR 100UH			
L9504	1-414-754-11	INDUCTOR 10UH			
L9505	1-414-757-11	INDUCTOR 100UH			
L9506	1-414-757-11	INDUCTOR 100UH			
L9507	1-414-754-11	INDUCTOR 10UH			
L9508	1-412-006-31	INDUCTOR CHIP 10UH			
L9509	1-414-757-11	INDUCTOR 100UH			
L9510	1-414-757-11	INDUCTOR 100UH			
L9511	1-414-754-11	INDUCTOR 10UH			
L9512	1-414-754-11	INDUCTOR 10UH			
L9513	1-412-006-31	INDUCTOR CHIP 10UH			
L9514	1-412-006-31	INDUCTOR CHIP 10UH			
L9515	1-414-754-11	INDUCTOR 10UH			
L9523	1-414-754-11	INDUCTOR 10UH			
L9531	1-414-754-11	INDUCTOR 10UH			
L9538	1-414-754-11	INDUCTOR 10UH			
L9539	1-414-754-11	INDUCTOR 10UH			
L9544	1-414-754-11	INDUCTOR 10UH			
L9545	1-414-752-11	INDUCTOR 2.2UH			
L9605	1-414-757-11	INDUCTOR 100UH			
		<TRANSISTOR>			
Q9401	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q9402	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q9403	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q9404	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q9405	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q9406	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q9407	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q9408	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q9410	8-729-216-22	TRANSISTOR 2SA1162-G			
Q9411	8-729-216-22	TRANSISTOR 2SA1162-G			
Q9501	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q9502	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q9505	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q9517	8-729-216-22	TRANSISTOR 2SA1162-G			
Q9519	8-729-216-22	TRANSISTOR 2SA1162-G			
Q9520	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q9521	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q9522	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q9523	8-729-216-22	TRANSISTOR 2SA1162-G			
Q9530	8-729-216-22	TRANSISTOR 2SA1162-G			
Q9533	8-729-216-22	TRANSISTOR 2SA1162-G			
Q9540	8-729-216-22	TRANSISTOR 2SA1162-G			
Q9552	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q9553	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q9554	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q9558	8-729-216-22	TRANSISTOR 2SA1162-G			
Q9562	8-729-216-22	TRANSISTOR 2SA1162-G			
Q9563	8-729-216-22	TRANSISTOR 2SA1162-G			
Q9568	8-729-230-49	TRANSISTOR 2SC2712-YG			
		<RESISTOR>			
R9401	1-216-041-00	RES,CHIP	470	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R9402	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9403	1-216-091-00	RES,CHIP	56K	5%	1/10W
R9404	1-216-081-00	RES,CHIP	22K	5%	1/10W
R9405	1-216-079-00	RES,CHIP	18K	5%	1/10W
R9407	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9408	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9409	1-216-041-00	RES,CHIP	470	5%	1/10W
R9410	1-216-091-00	RES,CHIP	56K	5%	1/10W
R9411	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9412	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9416	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9417	1-216-079-00	RES,CHIP	18K	5%	1/10W
R9418	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9419	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9420	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9421	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9422	1-216-025-91	RES,CHIP	100	5%	1/10W
R9424	1-216-025-91	RES,CHIP	100	5%	1/10W
R9427	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9428	1-216-025-91	RES,CHIP	100	5%	1/10W
R9429	1-208-800-11	RES,CHIP	5.6K	0.50%	1/10W
R9430	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R9431	1-216-295-91	SHORT	0		
R9432	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9433	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R9435	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9436	1-216-025-91	RES,CHIP	100	5%	1/10W
R9437	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9438	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9439	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9440	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R9441	1-216-025-91	RES,CHIP	100	5%	1/10W
R9442	1-208-776-11	RES,CHIP	560	0.50%	1/10W
R9445	1-216-079-00	RES,CHIP	18K	5%	1/10W
R9446	1-216-083-00	RES,CHIP	27K	5%	1/10W
R9447	1-208-798-11	RES,CHIP	4.7K	0.50%	1/10W
R9448	1-216-079-00	RES,CHIP	18K	5%	1/10W
R9449	1-216-083-00	RES,CHIP	27K	5%	1/10W
R9450	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R9451	1-216-025-91	RES,CHIP	100	5%	1/10W
R9452	1-216-025-91	RES,CHIP	100	5%	1/10W
R9453	1-216-295-91	SHORT	0		
R9455	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9456	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9457	1-216-025-91	RES,CHIP	100	5%	1/10W
R9458	1-216-025-91	RES,CHIP	100	5%	1/10W
R9460	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9483	1-208-770-11	RES,CHIP	330	0.50%	1/10W
R9484	1-208-754-11	RES,CHIP	68	0.50%	1/10W
R9485	1-208-754-11	RES,CHIP	68	0.50%	1/10W
R9486	1-208-754-11	RES,CHIP	68	0.50%	1/10W
R9487	1-208-754-11	RES,CHIP	68	0.50%	1/10W
R9488	1-208-754-11	RES,CHIP	68	0.50%	1/10W
R9491	1-208-754-11	RES,CHIP	68	0.50%	1/10W
R9492	1-208-754-11	RES,CHIP	68	0.50%	1/10W
R9493	1-208-754-11	RES,CHIP	68	0.50%	1/10W
R9494	1-208-754-11	RES,CHIP	68	0.50%	1/10W
R9495	1-208-754-11	RES,CHIP	68	0.50%	1/10W
R9496	1-208-754-11	RES,CHIP	68	0.50%	1/10W
R9497	1-208-754-11	RES,CHIP	68	0.50%	1/10W
R9498	1-208-770-11	RES,CHIP	330	0.50%	1/10W
R9501	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9502	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R9503	1-216-117-00	RES,CHIP	680K	5%	1/10W
R9504	1-216-041-00	RES,CHIP	470	5%	1/10W
R9505	1-216-295-91	SHORT	0		
R9506	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9510	1-216-117-00	RES,CHIP	680K	5%	1/10W
R9512	1-216-037-00	RES,CHIP	330	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R9513	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9514	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9515	1-216-033-00	RES,CHIP	220	5%	1/10W
R9517	1-216-295-91	SHORT	0		
R9518	1-216-085-00	RES,CHIP	33K	5%	1/10W
R9519	1-216-295-91	SHORT	0		
R9520	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9521	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R9522	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R9523	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9524	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9525	1-216-085-00	RES,CHIP	33K	5%	1/10W
R9526	1-216-295-91	SHORT	0		
R9528	1-216-295-91	SHORT	0		
R9529	1-216-041-00	RES,CHIP	470	5%	1/10W
R9530	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R9531	1-216-117-00	RES,CHIP	680K	5%	1/10W
R9532	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9533	1-208-798-11	RES,CHIP	4.7K	0.50%	1/10W
R9534	1-208-774-11	RES,CHIP	470	0.50%	1/10W
R9535	1-208-770-11	RES,CHIP	330	0.50%	1/10W
R9536	1-208-770-11	RES,CHIP	330	0.50%	1/10W
R9537	1-208-770-11	RES,CHIP	330	0.50%	1/10W
R9538	1-208-782-11	RES,CHIP	1K	0.50%	1/10W
R9539	1-216-025-91	RES,CHIP	100	5%	1/10W
R9540	1-216-085-00	RES,CHIP	33K	5%	1/10W
R9541	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9542	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9543	1-216-041-00	RES,CHIP	470	5%	1/10W
R9544	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R9545	1-216-295-91	SHORT	0		
R9546	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R9547	1-216-041-00	RES,CHIP	470	5%	1/10W
R9548	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R9549	1-216-117-00	RES,CHIP	680K	5%	1/10W
R9551	1-208-754-11	RES,CHIP	68	0.50%	1/10W
R9553	1-208-754-11	RES,CHIP	68	0.50%	1/10W
R9554	1-216-295-91	SHORT	0		
R9555	1-216-037-00	RES,CHIP	330	5%	1/10W
R9556	1-216-033-00	RES,CHIP	220	5%	1/10W
R9558	1-216-117-00	RES,CHIP	680K	5%	1/10W
R9559	1-216-295-91	SHORT	0		
R9560	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9561	1-216-025-91	RES,CHIP	100	5%	1/10W
R9562	1-216-025-91	RES,CHIP	100	5%	1/10W
R9563	1-216-025-91	RES,CHIP	100	5%	1/10W
R9564	1-216-025-91	RES,CHIP	100	5%	1/10W
R9566	1-216-295-91	SHORT	0		
R9567	1-208-798-11	RES,CHIP	4.7K	0.50%	1/10W
R9568	1-208-798-11	RES,CHIP	4.7K	0.50%	1/10W
R9569	1-216-295-91	SHORT	0		
R9570	1-216-295-91	SHORT	0		
R9571	1-216-295-91	SHORT	0		
R9572	1-216-025-91	RES,CHIP	100	5%	1/10W
R9573	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9574	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9575	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9579	1-216-025-91	RES,CHIP	100	5%	1/10W
R9580	1-216-025-91	RES,CHIP	100	5%	1/10W
R9581	1-216-033-00	RES,CHIP	220	5%	1/10W
R9582	1-216-045-00	RES,CHIP	680	5%	1/10W
R9584	1-216-295-91	SHORT	0		
R9591	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9592	1-216-295-91	SHORT	0		
R9593	1-216-295-91	SHORT	0		
R9594	1-216-295-91	SHORT	0		
R9595	1-216-295-91	SHORT	0		
R9596	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9597	1-216-295-91	SHORT	0		

The components identified by shading and mark ⚠ are critical for safety.
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Ne les remplacer que par une piece portant le numero specifie.

P F B4

REF. NO.	PART NO.	DESCRIPTION			REMARK
R9598	1-216-295-91	SHORT	0		
R9599	1-216-295-91	SHORT	0		
R9647	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R9648	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R9727	1-208-794-11	RES,CHIP	3.3K	0.50%	1/10W
R9728	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9729	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9733	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9734	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9735	1-208-762-11	RES,CHIP	150	0.50%	1/10W
R9742	1-208-762-11	RES,CHIP	150	0.50%	1/10W
R9743	1-208-762-11	RES,CHIP	150	0.50%	1/10W
R9744	1-216-655-11	RES,CHIP	1.5K	0.50%	1/10W
R9747	1-216-655-11	RES,CHIP	1.5K	0.50%	1/10W
R9752	1-216-655-11	RES,CHIP	1.5K	0.50%	1/10W
R9753	1-216-025-91	RES,CHIP	100	5%	1/10W
R9772	1-216-025-91	RES,CHIP	100	5%	1/10W
R9773	1-216-295-91	SHORT	0		
R9774	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9782	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9786	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9801	1-216-295-91	SHORT	0		
R9802	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9803	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9804	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R9805	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9806	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9807	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9808	1-208-774-11	RES,CHIP	470	0.50%	1/10W
R9809	1-208-766-11	RES,CHIP	220	0.50%	1/10W
R9810	1-208-800-11	RES,CHIP	5.6K	0.50%	1/10W
R9811	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R9812	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9813	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9814	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9815	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9816	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9817	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9818	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9819	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9820	1-216-025-91	RES,CHIP	100	5%	1/10W
R9823	1-216-025-91	RES,CHIP	100	5%	1/10W
R9827	1-208-773-11	RES,CHIP	430	0.50%	1/10W
R9828	1-208-800-11	RES,CHIP	5.6K	0.50%	1/10W
R9829	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9840	1-216-295-91	SHORT	0		
R9842	1-208-774-11	RES,CHIP	470	0.50%	1/10W
R9843	1-208-766-11	RES,CHIP	220	0.50%	1/10W
R9849	1-208-800-11	RES,CHIP	5.6K	0.50%	1/10W
R9850	1-208-800-11	RES,CHIP	5.6K	0.50%	1/10W
R9851	1-208-800-11	RES,CHIP	5.6K	0.50%	1/10W
R9852	1-208-773-11	RES,CHIP	430	0.50%	1/10W
R9853	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R9854	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R9855	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R9864	1-208-776-11	RES,CHIP	560	0.50%	1/10W
		<CRYSTAL>			
X9504	1-781-174-21	VIBRATOR, CERAMIC			
X9508	1-767-262-31	VIBRATOR, CRYSTAL			

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REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1241-340-A	F BOARD, COMPLETE **********			
	* 4-374-846-01	COVER, CAPACITOR, CAP TYPE			
		<CAPACITOR>			
C654	⚠ 1-117-703-11	CERAMIC	0.0047MF		250V
C4601	⚠ 1-136-537-11	FILM	0.47MF	20%	250V
C4602	⚠ 1-136-537-11	FILM	0.47MF	20%	250V
		<CONNECTOR>			
CN4601	* 1-580-843-11	PIN, CONNECTOR (POWER)			
CN4602	* 1-580-843-11	PIN, CONNECTOR (POWER)			
CN4603	1-695-915-11	TAB (CONTACT)			
		<FUSE>			
F4601	⚠ 1-532-299-11	FUSE, TIME-LAG 5A/250V			
	1-533-223-11	HOLDER, FUSE ; F4601			
		<RESISTOR>			
R4601	⚠ 1-202-885-91	SOLID	1M	10%	1/2W
		<TRANSFORMER>			
T4601	⚠ 1-431-536-11	TRANSFORMER, LINE FILTER			
T4602	⚠ 1-431-182-11	TRANSFORMER, LINE FILTER			
		<VARISTOR>			
VDR461	⚠ 1-801-268-51	VARISTOR TNR14V471K660			

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	* A-1131-391-A	B4 BOARD, COMPLETE **********			
		<CAPACITOR>			
C8300	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C8301	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C8302	1-164-505-11	CERAMIC CHIP	2.2MF		16V
		<CONNECTOR>			
CN8300	1-785-714-11	PIN, CONNECTOR (PC BOARD) 6P			
CN8301	* 1-564-521-11	PLUG, CONNECTOR 6P			
CN8302	1-785-715-11	PIN, CONNECTOR (PC BOARD) 2P			
CN8303	1-785-715-11	PIN, CONNECTOR (PC BOARD) 2P			
		<COIL>			
L8300	1-414-185-41	INDUCTOR 22UH			
		<TRANSISTOR>			
Q8300	8-729-216-22	TRANSISTOR 2SA1162-G			
Q8301	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q8302	8-729-216-22	TRANSISTOR 2SA1162-G			
Q8303	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q8304	8-729-216-22	TRANSISTOR 2SA1162-G			
Q8305	8-729-230-49	TRANSISTOR 2SC2712-YG			
		<RESISTOR>			
R8301	1-216-057-00	RES,CHIP	2.2K	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R8302	1-216-037-00	RES,CHIP	330	5%	1/10W
R8303	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8304	1-216-037-00	RES,CHIP	330	5%	1/10W
R8305	1-216-025-91	RES,CHIP	100	5%	1/10W
R8306	1-216-025-91	RES,CHIP	100	5%	1/10W
R8307	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8308	1-216-037-00	RES,CHIP	330	5%	1/10W
R8309	1-216-025-91	RES,CHIP	100	5%	1/10W
**********					
	* A-1298-745-A	A BOARD, COMPLETE (KV-EF34M61)			
		**********			
	* A-1298-756-A	A BOARD, COMPLETE (KV-EF34M91)			
		**********			
	* A-1298-757-A	A BOARD, COMPLETE (KV-EF34M80)			
		**********			
	* A-1298-764-A	A BOARD, COMPLETE (KV-EF34M90(HK))			
		**********			
	* A-1298-765-A	A BOARD, COMPLETE (KV-EF34M90(JE))			
		**********			
	* A-1298-766-A	A BOARD, COMPLETE (KV-EF34M31)			
		**********			
	1-900-243-55	CONNECTOR ASSY (LEAD)			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
	4-382-854-21	SCREW (M3X14), P, SW (+)			
		<CAPACITOR>			
C004	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C005	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C006	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C007	1-126-933-11	ELECT	100MF	20%	16V
C013	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C014	1-126-967-11	ELECT	47MF	20%	50V
C015	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C016	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C017	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C019	1-104-665-11	ELECT	100MF	20%	25V
C022	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C023	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C024	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C026	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C027	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C028	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C030	1-126-965-11	ELECT	22MF	20%	50V
C031	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C032	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C034	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C041	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C042	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C043	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C044	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C047	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C103	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C104	1-126-933-11	ELECT	100MF	20%	16V
C107	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C108	1-126-933-11	ELECT	100MF	20%	16V
C109	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C110	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C111	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C112	1-126-933-11	ELECT	100MF	20%	16V
C113	1-126-967-11	ELECT	47MF	20%	50V
C114	1-126-967-11	ELECT	47MF	20%	50V
C115	1-126-967-11	ELECT	47MF	20%	50V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C116	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C117	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C300	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C301	1-126-935-11	ELECT	470MF	20%	16V
C302	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C304	1-126-967-11	ELECT	47MF	20%	50V
C305	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C306	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C307	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C308	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C309	1-126-957-11	ELECT	0.22MF	20%	50V
C311	1-126-964-11	ELECT	10MF	20%	50V
C312	1-164-346-11	CERAMIC CHIP	1MF		16V
C313	1-164-346-11	CERAMIC CHIP	1MF		16V
C314	1-164-346-11	CERAMIC CHIP	1MF		16V
C315	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C316	1-126-935-11	ELECT	470MF	20%	16V
C317	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C318	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C319	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C320	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C322	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C323	1-126-933-11	ELECT	100MF	20%	16V
C324	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C325	1-126-960-11	ELECT	1MF	20%	50V
C326	1-126-964-11	ELECT	10MF	20%	50V
C327	1-126-965-11	ELECT	22MF	20%	50V
C328	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C329	1-126-965-11	ELECT	22MF	20%	50V
C330	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C331	1-126-964-11	ELECT	10MF	20%	50V
C332	1-126-963-11	ELECT	4.7MF	20%	50V
C335	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C336	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C337	1-126-961-11	ELECT	2.2MF	20%	50V
C338	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C341	1-115-340-11	CERAMIC CHIP	0.22MF	10%	25V
C502	1-163-145-00	CERAMIC CHIP	0.0015MF	5%	50V
C503	1-126-964-11	ELECT	10MF	20%	50V
C504	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C506	1-107-638-11	ELECT	33MF	20%	160V
C507	1-102-244-00	CERAMIC	220PF	10%	500V
C510	1-102-074-00	CERAMIC	0.001MF	10%	50V
C513	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C514	1-106-383-00	MYLAR	0.047MF	10%	200V
C517	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C518	1-126-933-11	ELECT	100MF	20%	16V
C519	1-102-212-00	CERAMIC	820PF	10%	500V
C521	1-104-666-11	ELECT	220MF	20%	25V
C522	1-126-933-11	ELECT	100MF	20%	16V
C523	1-162-318-11	CERAMIC	0.001MF	10%	500V
C524	1-126-967-11	ELECT	47MF	20%	50V
C526	1-130-495-00	MYLAR	0.1MF	5%	50V
C527	1-102-820-00	CERAMIC	330PF	5%	50V
C528	1-162-116-00	CERAMIC	680PF	10%	2KV
C530	1-137-372-11	FILM	0.022MF	5%	50V
C531	1-107-903-11	ELECT	2.2MF	20%	50V
C532	1-128-528-11	ELECT	470MF	20%	25V
C533	1-128-528-11	ELECT	470MF	20%	25V
C536	1-136-165-00	FILM	0.1MF	5%	50V
C537	1-107-911-11	ELECT	220MF	20%	50V
C538	1-136-544-11	FILM	0.023MF	3%	2KV
C539	1-130-118-91	FILM	0.051MF	5%	400V
C540	1-136-171-00	FILM	0.33MF	5%	50V
C543	1-162-116-00	CERAMIC	680PF	10%	2KV
C546	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C549	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C550	1-106-220-00	MYLAR	0.1MF	10%	100V
C551	1-126-960-11	ELECT	1MF	20%	50V

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Ne les remplacer que par une piece portant le numero specifie.

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C552	1-162-116-00	CERAMIC	680PF	10%	2KV
C553	1-162-116-00	CERAMIC	680PF	10%	2KV
C554	1-106-361-00	MYLAR	0.0056MF	10%	100V
C556	1-128-528-11	ELECT	470MF	20%	25V
C557	1-126-941-11	ELECT	470MF	20%	25V
C558	1-123-024-21	ELECT	33MF		160V
C560	1-102-228-00	CERAMIC	470PF	10%	500V
C561	1-129-928-00	FILM	0.0027MF	5%	630V
C562	1-102-228-00	CERAMIC	470PF	10%	500V
C563	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C564	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C565	1-107-655-11	ELECT	47MF	20%	250V
C566	1-102-244-00	CERAMIC	220PF	10%	500V
C567	1-109-961-11	FILM	0.75MF	5%	250V
C568	1-102-228-00	CERAMIC	470PF	10%	500V
C570	1-117-674-71	FILM	1.8MF	5%	250V
C571	1-126-959-11	ELECT	0.47MF	20%	50V
C572	1-115-514-11	FILM	0.22MF	5%	250V
C573	1-106-387-00	MYLAR	0.068MF	10%	200V
C574	1-104-709-11	ELECT	4.7MF	0	160V
C576	1-130-495-00	MYLAR	0.1MF	5%	50V
C577	1-115-516-11	FILM	0.33MF	5%	250V
C579	1-102-038-00	CERAMIC	0.001MF		500V
C600	⚠ 1-104-705-11	FILM	0.1MF	20%	250V
C601	1-136-601-11	FILM	0.01MF	10%	630V
C603	1-126-967-11	ELECT	47MF	20%	50V
C604	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C605	⚠ 1-119-886-51	CERAMIC	470PF	10%	250V
C606	⚠ 1-119-886-51	CERAMIC	470PF	10%	250V
C607	⚠ 1-161-830-51	CERAMIC	0.0047MF		500V
C608	⚠ 1-161-830-51	CERAMIC	0.0047MF		500V
C609	1-126-968-11	ELECT	100MF	20%	50V
C610	1-126-964-11	ELECT	10MF	20%	50V
C611	1-161-830-00	CERAMIC	0.0047MF		500V
C612	1-161-830-00	CERAMIC	0.0047MF		500V
C613	1-125-906-11	ELECT	560MF	20%	450V
C614	1-126-964-11	ELECT	10MF	20%	50V
C615	⚠ 1-119-886-51	CERAMIC	470PF	10%	250V
C616	1-130-202-00	FILM	0.022MF	10%	400V
C617	1-107-792-11	CERAMIC	100PF	5%	1KV
C618	1-125-893-11	FILM	680PF	3%	1.5KV
C619	⚠ 1-119-886-51	CERAMIC	470PF	10%	250V
C620	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C621	1-102-824-00	CERAMIC	470PF	5%	50V
C622	1-102-119-00	CERAMIC	0.0015MF	10%	50V
C623	1-104-665-11	ELECT	100MF	20%	25V
C624	1-125-772-91	CERAMIC	1500PF	10%	2KV
C625	1-102-002-00	CERAMIC	680PF	10%	500V
C626	1-102-002-00	CERAMIC	680PF	10%	500V
C629	1-126-964-11	ELECT	10MF	20%	50V
C630	1-125-494-11	ELECT (BLOCK)	560MF	20%	160V
C631	1-128-550-11	ELECT	2200MF	20%	50V
C632	1-126-936-11	ELECT	3300MF	20%	16V
C633	1-104-999-11	MYLAR	0.1MF	10%	200V
C634	1-126-934-11	ELECT	220MF	20%	16V
C635	1-104-665-11	ELECT	100MF	20%	10V
C636	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C638	1-161-830-00	CERAMIC	0.0047MF		500V
C641	1-102-002-00	CERAMIC	680PF	10%	500V
C642	1-107-890-11	ELECT	2200MF	20%	25V
C643	1-126-933-11	ELECT	100MF	20%	16V
C644	1-104-331-11	CERAMIC	0.0022MF	10%	1KV
C645	1-137-605-11	FILM	0.01MF	10%	250V
C646	1-107-679-91	ELECT	10MF	20%	450V
C647	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C649	1-126-940-11	ELECT	330MF	20%	25V
C650	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C651	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C652	1-126-965-11	ELECT	22MF	20%	50V
C653	1-126-967-11	ELECT	47MF	20%	50V
C655	⚠ 1-119-886-51	CERAMIC	470PF	10%	250V
C657	1-101-821-00	CERAMIC	0.0022MF		500V
C912	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C913	1-126-933-11	ELECT	100MF	20%	16V
		<CONNECTOR>			
CN101	* 1-779-890-11	CONNECTOR, BOARD TO BOARD 10P			
CN102	* 1-779-889-11	CONNECTOR, BOARD TO BOARD 8P			
CN104	1-695-915-11	TAB (CONTACT)			
CN105	* 1-508-784-21	PIN, CONNECTOR (5mm PITCH) 1P			
CN106	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN201	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN202	* 1-785-608-11	PIN, CONNECTOR 4P			
CN301	* 1-774-813-11	CONNECTOR, BOARD TO BOARD 7P (EF34M31/EF34M61/EF34M91)			
CN302	* 1-779-889-11	CONNECTOR, BOARD TO BOARD 8P			
CN303	* 1-779-890-11	CONNECTOR, BOARD TO BOARD 10P			
CN304	* 1-766-955-11	CONNECTOR, BOARD TO BOARD 11P			
CN307	* 1-774-813-11	CONNECTOR, BOARD TO BOARD 7P (EF34M31/EF34M61/EF34M91)			
CN501	* 1-508-784-21	PIN, CONNECTOR (5mm PITCH) 1P			
CN503	* 1-564-510-11	PLUG, CONNECTOR 7P			
CN504	1-695-915-11	TAB (CONTACT)			
CN505	1-508-766-00	PIN, CONNECTOR (5mm PITCH) 4P			
CN508	1-695-915-11	TAB (CONTACT)			
CN510	* 1-564-507-11	PLUG, CONNECTOR 4P (except EF34M80)			
CN601	* 1-580-843-12	PIN, CONNECTOR (POWER)			
CN602	* 1-508-786-00	PIN, CONNECTOR (5mm PITCH) 2P			
CN603	* 1-508-784-21	PIN, CONNECTOR (5mm PITCH) 1P			
CN604	* 1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P			
CN605	* 1-564-507-11	PLUG, CONNECTOR 4P			
CN607	* 1-508-784-21	PIN, CONNECTOR (5mm PITCH) 1P			
CN904	* 1-564-512-11	PLUG, CONNECTOR 9P			
		<DIODE>			
D001	8-719-404-49	DIODE MA111			
D002	8-719-404-49	DIODE MA111			
D003	8-719-404-49	DIODE MA111			
D004	8-719-404-49	DIODE MA111			
D005	8-719-404-49	DIODE MA111			
D006	1-216-295-91	SHORT	0		
D100	8-719-911-19	DIODE 1SS119-25			
D300	8-719-404-49	DIODE MA111			
D301	8-719-404-49	DIODE MA111			
D303	8-719-404-49	DIODE MA111			
D304	8-719-404-49	DIODE MA111			
D305	8-719-404-49	DIODE MA111			
D306	8-719-404-49	DIODE MA111			
D307	8-719-404-49	DIODE MA111			
D308	8-719-404-49	DIODE MA111			
D309	8-719-159-10	DIODE RD5.1SB-T2			
D311	8-719-404-49	DIODE MA111			
D312	8-719-404-49	DIODE MA111			
D313	8-719-404-49	DIODE MA111			
D315	8-719-404-49	DIODE MA111			
D316	8-719-158-39	DIODE RD10SB			
D317	8-719-404-49	DIODE MA111			
D504	8-719-302-43	DIODE EL1Z			
D505	8-719-404-49	DIODE MA111			
D506	8-719-911-19	DIODE 1SS119-25			
D507	8-719-404-49	DIODE MA111			
D508	8-719-404-49	DIODE MA111			
D509	8-719-158-15	DIODE RD5.6SB			
D510	8-719-404-49	DIODE MA111			
D511	8-719-404-49	DIODE MA111			
D512	8-719-404-49	DIODE MA111			

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REF. NO.	PART NO.	DESCRIPTION	REMARK
D513	8-719-908-03	DIODE GP08D	
D517	8-719-061-21	DIODE FMQ-G5FMS	
D520	8-719-404-49	DIODE MA111	
D521	8-719-302-43	DIODE EL1Z	
D522	8-719-028-45	DIODE D2L20U	
D523	8-719-302-43	DIODE EL1Z	
D525	8-719-911-19	DIODE 1SS119-25	
D526	8-719-150-92	DIODE RD33EB3T	
D527	8-719-908-03	DIODE GP08D	
D528	8-719-908-03	DIODE GP08D	
D529	8-719-028-72	DIODE RGP02-17EL-6433	
D530	8-719-071-39	DIODE FMU-G26S	
D531	8-719-404-49	DIODE MA111	
D532	8-719-404-49	DIODE MA111	
D600	8-719-911-19	DIODE 1SS119-25	
D602	8-719-911-19	DIODE 1SS119-25	
D603	8-719-150-92	DIODE RD33EB3T	
D604	8-719-028-72	DIODE RGP02-17EL-6433	
D605	8-719-510-53	DIODE D4SB60L	
D606	8-719-108-18	THYRISTOR 5P6M	
D607	8-719-404-49	DIODE MA111	
D608	8-719-110-53	DIODE RD20ESB2	
D609	8-719-311-31	DIODE RU-1P	
D610	8-719-043-76	DIODE AK04V0	
D611	8-719-046-74	DIODE AU-01Z-V1	
D612	8-719-071-38	DIODE D5S6M	
D613	8-719-046-74	DIODE AU-01Z-V1	
D614	8-719-046-74	DIODE AU-01Z-V1	
D620	8-719-110-72	DIODE RD30ESB2	
D621	8-719-071-38	DIODE D5S6M	
D622	8-719-071-39	DIODE FMU-G26S	
D623	8-719-158-57	DIODE RD15SB2	
D624	8-719-404-49	DIODE MA111	
D625	8-719-158-39	DIODE RD10SB	
D628	8-719-911-19	DIODE 1SS119-25	
D630	8-719-510-37	DIODE D5LC20U	
D631	8-719-068-00	DIODE ERC04-06SE	
D632	8-719-068-00	DIODE ERC04-06SE	
D633	8-719-948-45	DIODE ERA22-08	
D634	8-719-404-49	DIODE MA111	
D635	8-719-404-49	DIODE MA111	
D636	8-719-510-02	DIODE D1NS4	
D637	8-719-109-96	DIODE RD6.8ESB1	
D638	8-719-510-48	DIODE D1N20R	
		<CONNECTOR>	
DY1	* 1-580-798-11	CONNECTOR PIN (DY) 6P	
		<FERRITE BEAD>	
FB101	1-216-295-91	SHORT 0	
FB102	1-216-295-91	SHORT 0	
FB501	1-410-397-21	FERRITE 1.1UH	
FB502	1-410-397-21	FERRITE 1.1UH	
FB600	1-410-396-41	FERRITE 0.45UH	
FB601	1-410-397-21	FERRITE 1.1UH	
FB602	1-410-397-21	FERRITE 1.1UH	
FB603	1-412-911-11	FERRITE 0UH	
FB604	1-410-397-21	FERRITE 1.1UH	
FB605	1-412-911-11	FERRITE 0UH	
FB606	1-412-911-11	FERRITE 0UH	
FB608	1-412-911-11	FERRITE 0UH	
FB611	1-410-397-21	FERRITE 1.1UH	
FB612	1-410-397-21	FERRITE 1.1UH	
FB613	1-410-397-21	FERRITE 1.1UH	
FB615	1-410-397-21	FERRITE 1.1UH	

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<IC>	
IC001	8-752-898-91	IC CXP750097-001S (EF34M31/EF34M61/EF34M90)	
IC001	8-752-898-92	IC CXP750097-002S (EF34M80/EF34M91)	
IC002	8-759-371-21	IC MM1319AFBE	
IC003	8-759-370-34	IC ST24C08FB6	
IC100	8-759-042-02	IC S-80743AL-A7-S	
IC301	8-752-088-39	IC CXA2130S	
IC502	8-759-700-07	IC NJM2903M	
IC503	8-759-980-58	IC TDA8172	
IC601	8-749-014-48	IC STR-F6656	
IC602	8-749-920-61	IC SE-135N	
IC603	8-759-701-59	IC NJM78M09FA	
IC604	8-759-231-53	IC TA7805S	
		<CHIP CONDUCTOR>	
JR002	1-216-295-91	SHORT 0	
JR003	1-216-295-91	SHORT 0	
JR004	1-216-295-91	SHORT 0	
JR005	1-216-295-91	SHORT 0	
JR006	1-216-295-91	SHORT 0	
JR007	1-216-295-91	SHORT 0	
JR008	1-216-295-91	SHORT 0	
JR009	1-216-295-91	SHORT 0	
JR010	1-216-295-91	SHORT 0	
JR011	1-216-295-91	SHORT 0	
JR012	1-216-295-91	SHORT 0	
JR014	1-216-295-91	SHORT 0	
JR015	1-216-295-91	SHORT 0	
JR016	1-216-295-91	SHORT 0	
JR102	1-216-295-91	SHORT 0	
JR107	1-216-295-91	SHORT 0 (except EF34M80)	
JR109	1-216-295-91	SHORT 0 (EF34M80)	
JR301	1-216-295-91	SHORT 0	
JR500	1-216-295-91	SHORT 0	
JR501	1-216-295-91	SHORT 0	
JR502	1-216-295-91	SHORT 0	
JR600	1-216-295-91	SHORT 0	
		<COIL>	
L002	1-414-856-11	INDUCTOR 10UH	
L003	1-414-180-11	INDUCTOR 3.3UH	
L005	1-414-233-22	INDUCTOR CHIP 0UH	
L101	1-414-856-11	INDUCTOR 10UH	
L102	1-414-856-11	INDUCTOR 10UH	
L103	1-414-856-11	INDUCTOR 10UH	
L104	1-414-856-11	INDUCTOR 10UH	
L105	1-414-856-11	INDUCTOR 10UH	
L301	1-414-189-31	INDUCTOR 100UH	
L302	1-414-185-41	INDUCTOR 22UH	
L501	1-412-525-31	INDUCTOR 10UH	
L502	1-422-613-11	COIL, AIR CORE	
L503	1-412-525-31	INDUCTOR 10UH	
L504	1-412-525-31	INDUCTOR 10UH	
L505	1-412-525-31	INDUCTOR 10UH	
L506	1-412-525-31	INDUCTOR 10UH	
L507	1-459-111-00	INDUCTOR 10mH	
L508	1-412-525-31	INDUCTOR 10UH	
L511	1-406-977-21	INDUCTOR 100UH	
L512	1-412-549-11	INDUCTOR 1mH	
L513	1-412-549-11	INDUCTOR 1mH	
L515	1-459-104-00	COIL, WITH CORE	
L518	1-408-611-31	INDUCTOR 47UH	
L601	1-412-527-11	INDUCTOR 15UH	
L905	1-414-856-11	INDUCTOR 10UH	

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

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

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REF. NO.	PART NO.	DESCRIPTION			REMARK
		<PHOTO COUPLER>			
PH600	⚠ 8-749-924-35	PHOTO COUPLER ON3171-R			
		<TRANSISTOR>			
Q001	8-729-216-22	TRANSISTOR 2SA1162-G			
Q002	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q003	8-729-027-23	TRANSISTOR DTA114EKA-T146			
Q004	8-729-900-53	TRANSISTOR DTC114EK			
Q101	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q301	8-729-216-22	TRANSISTOR 2SA1162-G			
Q304	8-729-216-22	TRANSISTOR 2SA1162-G			
Q305	8-729-216-22	TRANSISTOR 2SA1162-G			
Q306	8-729-216-22	TRANSISTOR 2SA1162-G			
Q307	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q308	8-729-216-22	TRANSISTOR 2SA1162-G			
Q311	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q312	8-729-216-22	TRANSISTOR 2SA1162-G			
Q313	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q315	8-729-900-53	TRANSISTOR DTC114EK			
Q501	8-729-216-22	TRANSISTOR 2SA1162-G			
Q502	8-729-216-22	TRANSISTOR 2SA1162-G			
Q503	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q505	8-729-931-45	TRANSISTOR IRF614			
Q506	8-729-140-96	TRANSISTOR 2SD774-34			
Q507	8-729-216-22	TRANSISTOR 2SA1162-G			
Q509	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q511	8-729-016-32	TRANSISTOR 2SC4927-01			
Q600	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q601	8-729-023-22	TRANSISTOR 2SD2114K			
Q602	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q603	8-729-027-23	TRANSISTOR DTA114EKA-T146			
Q604	8-729-200-17	TRANSISTOR 2SA1091-O			
Q605	8-729-044-30	TRANSISTOR 2SK2845-LB102			
Q606	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q607	8-729-922-37	TRANSISTOR 2SD2144S-UVW			
Q608	8-729-230-49	TRANSISTOR 2SC2712-YG			
		<RESISTOR>			
R001	1-414-233-22	INDUCTOR CHIP 0UH			
R002	1-216-025-91	RES,CHIP	100	5%	1/10W
R003	1-216-073-00	RES,CHIP	10K	5%	1/10W
R004	1-216-025-91	RES,CHIP	100	5%	1/10W
R005	1-216-025-91	RES,CHIP	100	5%	1/10W
R008	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R010	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R011	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R012	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R013	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R014	1-216-025-91	RES,CHIP	100	5%	1/10W
R015	1-216-025-91	RES,CHIP	100	5%	1/10W
R016	1-216-025-91	RES,CHIP	100	5%	1/10W
R017	1-216-049-91	RES,CHIP	1K	5%	1/10W
R018	1-216-033-00	RES,CHIP	220	5%	1/10W
R019	1-216-073-00	RES,CHIP	10K	5%	1/10W
R021	1-216-073-00	RES,CHIP	10K	5%	1/10W
R022	1-216-025-91	RES,CHIP	100	5%	1/10W
R023	1-216-049-91	RES,CHIP	1K	5%	1/10W
R024	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R025	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R026	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R027	1-216-049-91	RES,CHIP	1K	5%	1/10W
R028	1-216-073-00	RES,CHIP	10K	5%	1/10W (except EF34M80)
R029	1-216-049-91	RES,CHIP	1K	5%	1/10W
R031	1-216-049-91	RES,CHIP	1K	5%	1/10W
R032	1-216-025-91	RES,CHIP	100	5%	1/10W
R034	1-216-049-91	RES,CHIP	1K	5%	1/10W
R035	1-216-025-91	RES,CHIP	100	5%	1/10W
R036	1-216-025-91	RES,CHIP	100	5%	1/10W
R037	1-216-025-91	RES,CHIP	100	5%	1/10W
R038	1-216-049-91	RES,CHIP	1K	5%	1/10W
R039	1-216-049-91	RES,CHIP	1K	5%	1/10W
R040	1-216-025-91	RES,CHIP	100	5%	1/10W
R041	1-216-025-91	RES,CHIP	100	5%	1/10W
R042	1-216-295-91	SHORT	0		
R043	1-216-025-91	RES,CHIP	100	5%	1/10W
R044	1-216-025-91	RES,CHIP	100	5%	1/10W
R045	1-414-233-22	INDUCTOR CHIP 0UH			
R046	1-216-049-91	RES,CHIP	1K	5%	1/10W
R047	1-414-233-22	INDUCTOR CHIP 0UH			
R048	1-216-073-00	RES,CHIP	10K	5%	1/10W
R050	1-216-073-00	RES,CHIP	10K	5%	1/10W
R052	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R053	1-216-049-91	RES,CHIP	1K	5%	1/10W
R054	1-216-049-91	RES,CHIP	1K	5%	1/10W
R055	1-216-073-00	RES,CHIP	10K	5%	1/10W
R056	1-216-073-00	RES,CHIP	10K	5%	1/10W
R061	1-216-295-91	SHORT	0		
R062	1-216-041-00	RES,CHIP	470	5%	1/10W
R063	1-216-041-00	RES,CHIP	470	5%	1/10W
R064	1-216-041-00	RES,CHIP	470	5%	1/10W
R065	1-216-041-00	RES,CHIP	470	5%	1/10W
R066	1-216-049-91	RES,CHIP	1K	5%	1/10W
R101	1-216-025-91	RES,CHIP	100	5%	1/10W (except EF34M80)
R102	1-216-025-91	RES,CHIP	100	5%	1/10W (except EF34M80)
R105	1-216-295-91	SHORT	0		
R109	1-216-041-00	RES,CHIP	470	5%	1/10W
R111	1-216-025-91	RES,CHIP	100	5%	1/10W
R112	1-216-025-91	RES,CHIP	100	5%	1/10W
R113	1-216-025-91	RES,CHIP	100	5%	1/10W
R225	1-216-033-00	RES,CHIP	220	5%	1/10W
R226	1-216-033-00	RES,CHIP	220	5%	1/10W
R227	1-216-033-00	RES,CHIP	220	5%	1/10W
R301	1-216-113-00	RES,CHIP	470K	5%	1/10W
R302	1-216-089-91	RES,CHIP	47K	5%	1/10W
R303	1-216-089-91	RES,CHIP	47K	5%	1/10W
R304	1-216-073-00	RES,CHIP	10K	5%	1/10W
R306	1-216-085-00	RES,CHIP	33K	5%	1/10W
R308	1-216-025-91	RES,CHIP	100	5%	1/10W
R309	1-216-025-91	RES,CHIP	100	5%	1/10W
R310	1-216-025-91	RES,CHIP	100	5%	1/10W
R315	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R316	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R318	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R319	1-216-025-91	RES,CHIP	100	5%	1/10W
R320	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R321	1-216-073-00	RES,CHIP	10K	5%	1/10W
R322	1-216-033-00	RES,CHIP	220	5%	1/10W
R326	1-216-029-00	RES,CHIP	150	5%	1/10W
R327	1-216-033-00	RES,CHIP	220	5%	1/10W
R328	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R329	1-216-041-00	RES,CHIP	470	5%	1/10W
R331	1-216-295-91	SHORT	0		
R332	1-216-033-00	RES,CHIP	220	5%	1/10W
R333	1-216-083-00	RES,CHIP	27K	5%	1/10W
R334	1-208-291-11	RES,CHIP	4.7M	5%	1/10W
R335	1-216-045-00	RES,CHIP	680	5%	1/10W
R338	1-216-037-00	RES,CHIP	330	5%	1/10W
R339	1-216-033-00	RES,CHIP	220	5%	1/10W
R340	1-216-025-91	RES,CHIP	100	5%	1/10W
R345	1-216-073-00	RES,CHIP	10K	5%	1/10W
R348	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R349	1-216-073-00	RES,CHIP	10K	5%	1/10W

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

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

A

REF. NO.	PART NO.	DESCRIPTION			REMARK
R350	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R351	1-216-049-91	RES,CHIP	1K	5%	1/10W
R357	1-216-079-00	RES,CHIP	18K	5%	1/10W
R358	1-216-049-91	RES,CHIP	1K	5%	1/10W
R359	1-216-033-00	RES,CHIP	220	5%	1/10W
R360	1-216-033-00	RES,CHIP	220	5%	1/10W
R361	1-216-073-00	RES,CHIP	10K	5%	1/10W
R362	1-216-075-00	RES,CHIP	12K	5%	1/10W
R363	1-216-079-00	RES,CHIP	18K	5%	1/10W
R364	1-216-295-91	SHORT	0		
R365	1-216-033-00	RES,CHIP	220	5%	1/10W
R366	1-216-073-00	RES,CHIP	10K	5%	1/10W
R367	1-216-073-00	RES,CHIP	10K	5%	1/10W
R368	1-216-073-00	RES,CHIP	10K	5%	1/10W
R370	1-216-033-00	RES,CHIP	220	5%	1/10W
R375	1-216-025-91	RES,CHIP	100	5%	1/10W
			(except EF34M80/EF34M90)		
R376	1-216-081-00	RES,CHIP	22K	5%	1/10W
R377	1-216-121-91	RES,CHIP	1M	5%	1/10W
R378	1-216-295-91	SHORT	0		
R500	1-249-417-11	CARBON	1K	5%	1/4W
R501	1-216-049-91	RES,CHIP	1K	5%	1/10W
R505	1-216-113-00	RES,CHIP	470K	5%	1/10W
R506	1-216-079-00	RES,CHIP	18K	5%	1/10W
R507	1-249-389-11	CARBON	4.7	5%	1/4W F
R508	1-215-909-11	METAL OXIDE	47	5%	3W F
R509	1-216-474-11	METAL OXIDE	82	5%	3W F
R510	1-216-424-11	METAL OXIDE	39	5%	1W F
R511	1-216-377-11	METAL OXIDE	4.7	5%	2W F
R512	1-249-432-11	CARBON	18K	5%	1/4W
R513	1-215-485-00	METAL	470K	1%	1/4W
R514	1-215-487-00	METAL	560K	1%	1/4W
R515	1-216-353-00	METAL OXIDE	2.2	5%	1W F
R516	1-216-081-00	RES,CHIP	22K	5%	1/10W
R517	1-208-798-11	RES,CHIP	4.7K	0.50%	1/10W
R518	1-247-807-31	CARBON	100	5%	1/4W
R519	1-215-906-11	METAL OXIDE	15	5%	3W F
R520	1-215-445-00	METAL	10K	1%	1/4W
R522	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R523	1-249-411-11	CARBON	330	5%	1/4W
R525	1-208-854-11	RES,CHIP	1M	0.50%	1/10W
R526	1-216-672-11	METAL CHIP	7.5K	0.50%	1/10W
R527	1-216-001-00	RES,CHIP	10	5%	1/10W
R528	1-208-814-11	RES,CHIP	22K	0.50%	1/10W
R529	1-208-766-11	RES,CHIP	220	0.50%	1/10W
R531	1-247-843-11	CARBON	3.3K	5%	1/4W
R532	1-216-073-00	RES,CHIP	10K	5%	1/10W
R533	1-249-417-11	CARBON	1K	5%	1/4W
R534	1-216-361-00	METAL OXIDE	0.22	5%	2W F
R535	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R536	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R537	1-208-804-11	RES,CHIP	8.2K	0.50%	1/10W
R539	1-216-049-91	RES,CHIP	1K	5%	1/10W
R540	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R541	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R542	1-216-097-91	RES,CHIP	100K	5%	1/10W
R543	1-216-437-00	METAL OXIDE	5.6K	5%	1W F
R544	1-216-480-11	METAL OXIDE	820	5%	3W F
R545	1-216-077-00	RES,CHIP	15K	5%	1/10W
R546	1-216-077-00	RES,CHIP	15K	5%	1/10W
R547	1-216-085-00	RES,CHIP	33K	5%	1/10W
R548	1-208-796-11	RES,CHIP	3.9K	0.50%	1/10W
R549	1-215-451-00	METAL	18K	1%	1/4W
R550	1-216-097-91	RES,CHIP	100K	5%	1/10W
R551	1-249-421-11	CARBON	2.2K	5%	1/4W
R552	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R553	1-215-453-00	METAL	22K	1%	1/4W
R554	1-215-453-00	METAL	22K	1%	1/4W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R556	1-215-437-00	METAL	4.7K	1%	1/4W
R557	1-216-361-00	METAL OXIDE	0.22	5%	2W F
R558	1-247-843-11	CARBON	3.3K	5%	1/4W
R559	1-249-429-11	CARBON	10K	5%	1/4W
R560	1-216-073-00	RES,CHIP	10K	5%	1/10W
R561	1-216-049-91	RES,CHIP	1K	5%	1/10W
R562	1-249-401-11	CARBON	47	5%	1/4W
R564	1-208-822-11	RES,CHIP	47K	0.50%	1/10W
R565	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R568	1-249-383-11	CARBON	1.5	5%	1/4W F
R570	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R571	1-215-442-00	METAL	7.5K	1%	1/4W
R575	1-208-796-11	RES,CHIP	3.9K	0.50%	1/10W
R577	1-215-913-11	METAL OXIDE	220	5%	3W F
R578	1-216-369-00	METAL OXIDE	1	5%	2W F
R579	1-216-295-91	SHORT	0		
R580	1-208-830-11	RES,CHIP	100K	0.50%	1/10W
R581	1-208-798-11	RES,CHIP	4.7K	0.50%	1/10W
R582	1-216-295-91	SHORT	0		
R583	1-216-125-00	RES,CHIP	1.5M	5%	1/10W
R584	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R585	1-249-389-11	CARBON	4.7	5%	1/4W
R587	1-208-849-11	RES,CHIP	620K	0.50%	1/10W
R588	1-215-911-11	METAL OXIDE	100	5%	3W F
R589	1-215-886-11	METAL OXIDE	100	5%	2W F
R590	1-215-465-00	METAL	68K	1%	1/4W
R591	1-260-288-11	CARBON	0.47	5%	1/2W F
R592	1-208-830-11	RES,CHIP	100K	0.50%	1/10W
R593	1-260-288-11	CARBON	0.47	5%	1/2W F
R594	1-260-288-11	CARBON	0.47	5%	1/2W F
R596	1-216-480-11	METAL OXIDE	820	5%	3W F
R597	1-247-750-11	CARBON	680	5%	1/2W F
R598	1-249-438-11	CARBON	56K	5%	1/4W
R600	1-249-438-11	CARBON	56K	5%	1/4W
R601	1-249-417-11	CARBON	1K	5%	1/4W F
R602	1-249-389-11	CARBON	4.7	5%	1/4W F
R603	1-215-485-00	METAL	470K	1%	1/4W
R604	1-216-097-91	RES,CHIP	100K	5%	1/10W
R607	1-249-425-11	CARBON	4.7K	5%	1/4W
R608	1-240-205-91	CARBON	22M	5%	1/2W
R609	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R610	1-216-073-00	RES,CHIP	10K	5%	1/10W
R611	1-216-089-91	RES,CHIP	47K	5%	1/10W
R612	1-216-045-00	RES,CHIP	680	5%	1/10W
R614	1-216-041-00	RES,CHIP	470	5%	1/10W
R615	1-216-366-00	METAL OXIDE	0.56	5%	2W F
R616	1-249-484-11	CARBON	6.8	5%	1/2W F
R617	1-247-791-91	CARBON	22	5%	1/4W
R619	1-260-128-11	CARBON	270K	5%	1/2W
R621	1-215-859-00	METAL OXIDE	22	5%	1W F
R623	1-216-095-00	RES,CHIP	82K	5%	1/10W
R624	1-216-089-91	RES,CHIP	47K	5%	1/10W
R626	1-216-049-91	RES,CHIP	1K	5%	1/10W
R627	1-240-251-11	CMT,MELF	6.8	5%	10W
R629	1-247-747-11	CARBON	470	5%	1/2W F
R630	1-249-429-11	CARBON	10K	5%	1/4W F
R631	1-216-089-91	RES,CHIP	47K	5%	1/10W
R632	1-220-886-11	FUSIBLE	0.1	10%	1W F
R634	⚠ 1-218-265-91	METAL	8.2M	5%	1W
R635	1-216-492-11	METAL OXIDE	82K	5%	3W F
R636	1-215-924-00	METAL OXIDE	15K	5%	3W F
R637	1-216-492-11	METAL OXIDE	82K	5%	3W F
R639	1-216-361-00	METAL OXIDE	0.22	5%	2W F
R640	1-249-415-11	CARBON	680	5%	1/4W
R641	1-216-361-00	METAL OXIDE	0.22	5%	2W F
R642	1-249-419-11	CARBON	1.5K	5%	1/4W
R643	1-247-843-11	CARBON	3.3K	5%	1/4W
R644	1-249-419-11	CARBON	1.5K	5%	1/4W
R646	1-215-924-00	METAL OXIDE	15K	5%	3W F

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R647	1-249-387-11	CARBON	3.3	5% 1/4W	
R648	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	
R649	1-249-417-11	CARBON	1K	5% 1/4W	
R650	1-215-882-00	METAL OXIDE	22	5% 2W	F
R652	1-215-900-11	METAL OXIDE	22K	5% 2W	F
R653	1-215-873-00	METAL OXIDE	4.7K	5% 1W	F
R654	1-216-369-00	METAL OXIDE	1	5% 2W	F
R656	1-249-417-11	CARBON	1K	5% 1/4W	
R657	1-260-127-11	CARBON	220K	5% 1/2W	
R659	1-216-049-91	RES,CHIP	1K	5% 1/10W	
R660	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R661	1-215-873-00	METAL OXIDE	4.7K	5% 1W	F
R909	1-216-065-91	RES,CHIP	4.7K	5% 1/10W	
R910	1-216-065-91	RES,CHIP	4.7K	5% 1/10W	
		<RELAY>			
RY600	⚠ 1-755-040-11	RELAY			
RY601	⚠ 1-755-266-11	RELAY, AC POWER			
		<SWITCH>			
S501	1-572-707-11	SWITCH, LEVER			
S502	1-572-707-11	SWITCH, LEVER			
		<TRANSFORMER>			
T501	1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE			
T503	⚠ X-4036-321-1	TRANSFORMER ASSY, FLYBACK (NX-4009//J1A4)			
T504	1-431-475-11	TRANSFORMER, HORIZONTAL LINEAR			
T505	1-426-981-11	TRANSFORMER, FERRITE (PMT)			
T601	⚠ 1-431-536-11	TRANSFORMER, LINE FILTER			
T603	⚠ 1-431-946-11	TRANSFORMER, CONVERTER			
T604	⚠ 1-431-852-11	TRANSFORMER, CONVERTER (SRT)			
		<THERMISTOR>			
THP600	⚠ 1-809-827-21	THERMISTOR, POSITIVE			
		<TUNER>			
TU101	8-598-450-00	TUNER, FSS BTF-LG434 (EF34M80)			
TU101	8-598-452-00	TUNER, FSS BTF-WG442 (except EF34M80)			
		<CRYSTAL>			
X001	1-781-174-21	VIBRATOR, CERAMIC			
X301	1-781-134-21	VIBRATOR, CRYSTAL			
X302	1-781-132-21	VIBRATOR, CRYSTAL			

****

* A-1331-868-A C BOARD, COMPLETE
****

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

<CAPACITOR>

C700	1-110-389-11	FILM MELF	0.1MF	5%	250V
C701	1-162-114-00	CERAMIC	0.0047MF		2KV
C702	1-102-074-00	CERAMIC	0.001MF	10%	50V
C704	1-107-652-11	ELECT	10MF	20%	250V
C707	1-137-399-11	MYLAR	0.1MF	5%	50V
C708	1-102-228-00	CERAMIC	470PF	10%	500V
C709	1-102-228-00	CERAMIC	470PF	10%	500V
C710	1-102-960-00	CERAMIC	24PF	5%	50V
C711	1-102-852-91	CERAMIC	47PF	5%	50V
C712	1-102-525-11	CERAMIC	68PF	5%	50V
C713	1-102-228-00	CERAMIC	470PF	10%	500V
C716	1-126-968-11	ELECT	100MF	20%	50V
C717	1-107-651-11	ELECT	4.7MF	20%	250V
C726	1-104-664-11	ELECT	47MF	20%	25V
C1800	1-126-964-11	ELECT	10MF	20%	50V
C1803	1-126-964-11	ELECT	10MF	20%	50V
C1804	1-126-964-11	ELECT	10MF	20%	50V
C1809	1-126-942-61	ELECT	1000MF	20%	25V

<CONNECTOR>

CN700	1-695-915-11	TAB (CONTACT)
CN701	1-508-765-00	PIN, CONNECTOR (5mm PITCH) 3P
CN702	1-695-915-11	TAB (CONTACT)
CN703	* 1-564-509-11	PLUG, CONNECTOR 6P
CN704	1-695-915-11	TAB (CONTACT)
CN705	* 1-564-518-11	PLUG, CONNECTOR 3P
CN1801	* 1-564-509-11	PLUG, CONNECTOR 6P
CN1802	* 1-564-506-11	PLUG, CONNECTOR 3P

<DIODE>

D700	8-719-911-19	DIODE 1SS119-25
D701	8-719-911-19	DIODE 1SS119-25
D702	8-719-911-19	DIODE 1SS119-25
D703	8-719-911-19	DIODE 1SS119-25
D704	8-719-911-19	DIODE 1SS119-25
D705	8-719-051-85	DIODE HSS83TD
D706	8-719-051-85	DIODE HSS83TD
D707	8-719-051-85	DIODE HSS83TD
D708	8-719-911-19	DIODE 1SS119-25
D709	8-719-911-19	DIODE 1SS119-25
D710	8-719-911-19	DIODE 1SS119-25
D711	8-719-110-23	DIODE RD11ESB3
D714	8-719-051-85	DIODE HSS83TD
D715	8-719-051-85	DIODE HSS83TD
D716	8-719-051-85	DIODE HSS83TD
D720	8-719-911-19	DIODE 1SS119-25
D721	8-719-911-19	DIODE 1SS119-25
D722	8-719-911-19	DIODE 1SS119-25
D1803	8-719-911-19	DIODE 1SS119-25
D1804	8-719-911-19	DIODE 1SS119-25
D1808	8-719-908-03	DIODE GP08D

<IC>

IC701	8-759-561-28	IC STV5112
IC1800	8-759-822-38	IC LA6510

<JACK>

J701	⚠ 1-540-071-22	SOCKET, PICTURE TUBE

<COIL>

L701	1-410-667-31	INDUCTOR 22UH
L705	1-408-609-41	INDUCTOR 33UH
L706	1-408-609-41	INDUCTOR 33UH
L707	1-408-609-41	INDUCTOR 33UH

<TRANSISTOR>

Q1800	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q1802	8-729-119-78	TRANSISTOR 2SC2785-HFE

<RESISTOR>

R700	1-249-393-11	CARBON	10	5% 1/4W	F
R701	1-249-496-11	CARBON	100K	5% 1/2W	
R702	1-215-461-00	METAL	47K	1% 1/4W	

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C VM2

REF. NO.	PART NO.	DESCRIPTION			REMARK
R703	1-215-414-00	METAL	510	1%	1/4W
R704	1-215-414-00	METAL	510	1%	1/4W
R705	1-249-417-11	CARBON	1K	5%	1/4W
R706	1-249-417-11	CARBON	1K	5%	1/4W
R707	1-215-414-00	METAL	510	1%	1/4W
R708	1-249-417-11	CARBON	1K	5%	1/4W
R709	1-215-903-11	METAL OXIDE	68K	5%	2W F
R711	1-215-903-11	METAL OXIDE	68K	5%	2W F
R712	1-215-903-11	METAL OXIDE	68K	5%	2W F
R713	1-215-461-00	METAL	47K	1%	1/4W
R714	1-249-425-11	CARBON	4.7K	5%	1/4W
R715	1-249-413-11	CARBON	470	5%	1/4W
R716	1-249-413-11	CARBON	470	5%	1/4W
R717	1-249-425-11	CARBON	4.7K	5%	1/4W
R718	1-247-752-11	CARBON	1K	5%	1/2W
R719	1-249-425-11	CARBON	4.7K	5%	1/4W
R722	1-247-752-11	CARBON	1K	5%	1/2W
R723	1-249-413-11	CARBON	470	5%	1/4W
R724	1-247-752-11	CARBON	1K	5%	1/2W
R730	1-216-392-11	METAL OXIDE	1.8	5%	3W F
R734	1-247-739-11	CARBON	100	5%	1/2W
R744	1-215-415-00	METAL	560	1%	1/4W
R745	1-215-410-00	METAL	360	1%	1/4W
R1800	1-249-417-11	CARBON	1K	5%	1/4W
R1801	1-249-426-11	CARBON	5.6K	5%	1/4W
R1802	1-249-382-11	CARBON	1.2	5%	1/4W F
R1803	1-249-382-11	CARBON	1.2	5%	1/4W F
R1805	1-249-429-11	CARBON	10K	5%	1/4W
R1806	1-249-425-11	CARBON	4.7K	5%	1/4W
R1808	1-249-425-11	CARBON	4.7K	5%	1/4W
R1809	1-249-435-11	CARBON	33K	5%	1/4W
R1810	1-249-435-11	CARBON	33K	5%	1/4W
R1811	1-249-440-11	CARBON	82K	5%	1/4W
R1812	1-249-435-11	CARBON	33K	5%	1/4W
R1821	1-249-440-11	CARBON	82K	5%	1/4W
R1822	1-249-435-11	CARBON	33K	5%	1/4W
R1823	1-249-426-11	CARBON	5.6K	5%	1/4W
R1824	1-249-435-11	CARBON	33K	5%	1/4W
R1825	1-247-843-11	CARBON	3.3K	5%	1/4W

<VARIABLE RESISTOR>

RV702	⚠1-241-656-21	RES, ADJ, METAL FILM 110M	
RV1801	1-223-241-11	RES, ADJ, CARBON 47K	

****

* A-1342-440-A VM2 BOARD, COMPLETE
****

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

<CAPACITOR>

C5900	1-102-115-00	CERAMIC	560PF	10%	50V
C5902	1-107-883-11	ELECT	330MF	20%	16V
C5903	1-161-830-00	CERAMIC	0.0047MF		500V
C5905	1-126-925-11	ELECT	470MF	20%	10V
C5906	1-130-491-00	MYLAR	0.047MF	5%	50V
C5907	1-107-638-11	ELECT	33MF	20%	160V
C5908	1-106-383-00	MYLAR	0.047MF	10%	200V
C5910	1-130-471-00	MYLAR	0.001MF	5%	50V
C5911	1-107-949-11	ELECT	2.2MF	20%	160V
C5912	1-104-999-11	MYLAR	0.1MF	10%	200V
C5913	1-130-471-00	MYLAR	0.001MF	5%	50V
C5914	1-126-933-11	ELECT	100MF	20%	16V
C5916	1-130-491-00	MYLAR	0.047MF	5%	50V
C5917	1-126-925-11	ELECT	470MF	20%	10V
C5919	1-130-471-00	MYLAR	0.001MF	5%	50V
C5921	1-101-880-00	CERAMIC	47PF	10%	50V
C5922	1-107-714-11	ELECT	10MF	20%	16V

<CONNECTOR>

CN2801	* 1-564-506-11	PLUG, CONNECTOR 3P	
CN5901	* 1-564-510-11	PLUG, CONNECTOR 7P	
CN5904	* 1-770-723-11	CONNECTOR, BOARD TO BOARD 8P	

<DIODE>

D5901	8-719-911-19	DIODE 1SS119-25			
D5902	8-719-110-88	DIODE RD39ESB2			
D5904	8-719-110-88	DIODE RD39ESB2			
D5906	1-249-399-11	CARBON	33	5%	1/4W
D5907	1-249-399-11	CARBON	33	5%	1/4W
D5909	8-719-911-19	DIODE 1SS119-25			
D5910	8-719-911-19	DIODE 1SS119-25			

<COIL>

L5901	1-414-187-11	INDUCTOR 47UH	

<TRANSISTOR>

Q5901	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q5902	8-729-017-05	TRANSISTOR 2SA1837
Q5903	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q5904	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q5905	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q5906	8-729-017-06	TRANSISTOR 2SC4793
Q5907	8-729-922-37	TRANSISTOR 2SD2144S-UVW
Q5908	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q5909	8-729-119-78	TRANSISTOR 2SC2785-HFE

<RESISTOR>

R5901	1-249-401-11	CARBON	47	5%	1/4W
R5902	1-249-414-11	CARBON	560	5%	1/4W F
R5903	1-247-731-11	CARBON	22	5%	1/2W F
R5904	1-249-408-11	CARBON	180	5%	1/4W
R5905	1-249-417-11	CARBON	1K	5%	1/4W
R5906	1-249-417-11	CARBON	1K	5%	1/4W
R5907	1-249-417-11	CARBON	1K	5%	1/4W
R5908	1-249-383-11	CARBON	1.5	5%	1/4W F
R5909	1-247-815-91	CARBON	220	5%	1/4W
R5910	1-249-403-11	CARBON	68	5%	1/4W
R5911	1-249-432-11	CARBON	18K	5%	1/4W
R5914	1-249-403-11	CARBON	68	5%	1/4W
R5917	1-249-418-11	CARBON	1.2K	5%	1/4W
R5918	1-249-429-11	CARBON	10K	5%	1/4W
R5919	1-249-417-11	CARBON	1K	5%	1/4W F
R5920	1-249-432-11	CARBON	18K	5%	1/4W
R5921	1-216-477-11	METAL OXIDE	270	5%	3W F
R5922	1-249-414-11	CARBON	560	5%	1/4W
R5923	1-249-383-11	CARBON	1.5	5%	1/4W F
R5924	1-249-397-11	CARBON	22	5%	1/4W F
R5925	1-249-397-11	CARBON	22	5%	1/4W F
R5927	1-249-416-11	CARBON	820	5%	1/4W
R5930	1-249-419-11	CARBON	1.5K	5%	1/4W
R5931	1-249-442-11	CARBON	510	5%	1/4W
R5932	1-249-437-11	CARBON	47K	5%	1/4W
R5933	1-249-417-11	CARBON	1K	5%	1/4W

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V1

REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1342-452-A	V1 BOARD, COMPLETE			
		**********			
		(KV-EF34M31/EF34M61/EF34M91)			
		<CAPACITOR>			
C801	1-104-664-11	ELECT	47MF	20%	16V
C805	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C806	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C815	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C816	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C817	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C818	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C820	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C821	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C822	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C823	1-126-933-11	ELECT	100MF	20%	16V
C826	1-126-963-11	ELECT	4.7MF	20%	50V
C829	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C830	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C831	1-126-933-11	ELECT	100MF	20%	16V
C832	1-126-964-11	ELECT	10MF	20%	50V
C835	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C837	1-126-933-11	ELECT	100MF	20%	16V
		<CONNECTOR>			
CN801	* 1-774-812-11	CONNECTOR, BOARD TO BOARD 7P			
CN803	* 1-774-812-11	CONNECTOR, BOARD TO BOARD 7P			
		<DIODE>			
D802	8-719-914-44	DIODE DAP202K			
D803	8-719-105-46	DIODE RD3.3M-B2			
D804	8-719-105-91	DIODE RD5.6M-B2			
D806	8-719-404-49	DIODE MA111			
D807	8-719-404-49	DIODE MA111			
		<FERRITE BEAD>			
FB801	1-410-397-21	FERRITE	1.1UH		
FB802	1-410-397-21	FERRITE	1.1UH		
FB803	1-410-397-21	FERRITE	1.1UH		
FB804	1-410-682-31	INDUCTOR	470UH		
FB805	1-410-397-21	FERRITE	1.1UH		
		<IC>			
IC801	8-759-476-87	IC SAA5261			
		<CHIP CONDUCTOR>			
JR801	1-216-295-91	SHORT	0		
JR802	1-216-295-91	SHORT	0		
JR804	1-216-295-91	SHORT	0		
JR805	1-216-295-91	SHORT	0		
JR806	1-216-295-91	SHORT	0		
JR807	1-216-295-91	SHORT	0		
JR808	1-216-295-91	SHORT	0		
		<TRANSISTOR>			
Q801	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q803	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q805	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q806	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q807	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q808	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q810	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q811	8-729-019-01	TRANSISTOR 2SD2394-EF			
Q812	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q813	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q814	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q817	8-729-900-53	TRANSISTOR DTC114EK			
Q818	8-729-230-49	TRANSISTOR 2SC2712-YG			
		<RESISTOR>			
R800	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R801	1-216-295-91	SHORT	0		
R802	1-216-025-91	RES,CHIP	100	5%	1/10W
R803	1-216-295-91	SHORT	0		
R804	1-216-295-91	SHORT	0		
R805	1-216-295-91	SHORT	0		
R807	1-216-295-91	SHORT	0		
R813	1-216-295-91	SHORT	0		
R820	1-216-073-00	RES,CHIP	10K	5%	1/10W
R821	1-216-083-00	RES,CHIP	27K	5%	1/10W
R822	1-216-025-91	RES,CHIP	100	5%	1/10W
R824	1-216-295-91	SHORT	0		
R825	1-216-295-91	SHORT	0		
R827	1-216-295-91	SHORT	0		
R828	1-216-025-91	RES,CHIP	100	5%	1/10W
R829	1-216-025-91	RES,CHIP	100	5%	1/10W
R830	1-216-295-91	SHORT	0		
R831	1-216-295-91	SHORT	0		
R832	1-208-790-11	RES,CHIP	2.2K	0.50%	1/10W
R835	1-216-295-91	SHORT	0		
R839	1-216-655-11	RES,CHIP	1.5K	0.50%	1/10W
R841	1-216-025-91	RES,CHIP	100	5%	1/10W
R842	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R843	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R844	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R845	1-216-049-91	RES,CHIP	1K	5%	1/10W
R846	1-216-049-91	RES,CHIP	1K	5%	1/10W
R847	1-216-049-91	RES,CHIP	1K	5%	1/10W
R848	1-216-049-91	RES,CHIP	1K	5%	1/10W
R849	1-216-049-91	RES,CHIP	1K	5%	1/10W
R850	1-216-105-91	RES,CHIP	220K	5%	1/10W
R851	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R853	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R857	1-216-081-00	RES,CHIP	22K	5%	1/10W
R858	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R861	1-216-049-91	RES,CHIP	1K	5%	1/10W
R862	1-260-095-11	CARBON	470	5%	1/2W
R863	1-216-049-91	RES,CHIP	1K	5%	1/10W
R864	1-216-041-00	RES,CHIP	470	5%	1/10W
R866	1-215-880-00	METAL OXIDE	10	5%	2W F
R871	1-216-037-00	RES,CHIP	330	5%	1/10W
R879	1-216-073-00	RES,CHIP	10K	5%	1/10W
R880	1-216-041-00	RES,CHIP	470	5%	1/10W
R882	1-216-049-91	RES,CHIP	1K	5%	1/10W
R884	1-216-025-91	RES,CHIP	100	5%	1/10W
R888	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R889	1-216-073-00	RES,CHIP	10K	5%	1/10W
R890	1-216-081-00	RES,CHIP	22K	5%	1/10W
R894	1-216-073-00	RES,CHIP	10K	5%	1/10W
R895	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R896	1-216-073-00	RES,CHIP	10K	5%	1/10W
R897	1-216-073-00	RES,CHIP	10K	5%	1/10W
R898	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
		<CRYSTAL>			
X801	1-578-774-11	VIBRATOR, CRYSTAL			

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D2

REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1343-584-A	D2 BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C2801	1-130-479-00	MYLAR	0.0047MF	5%	50V
C2803	1-136-357-11	FILM	680PF	5%	50V
C2805	1-104-664-11	ELECT	47MF	20%	25V
C2806	1-136-559-11	MYLAR	0.0047MF	10%	400V
C2809	1-126-964-11	ELECT	10MF	20%	50V
C2810	1-102-228-00	CERAMIC	470PF	10%	500V
C2811	1-107-938-11	ELECT	0.47MF	20%	160V
C2813	1-107-636-11	ELECT	10MF	20%	160V
C2814	1-126-964-11	ELECT	10MF	20%	50V
C2817	1-102-244-00	CERAMIC	220PF	10%	500V
C2818	1-129-928-00	FILM	0.0027MF	5%	630V
C2819	1-104-664-11	ELECT	47MF	20%	25V
C2820	1-107-714-11	ELECT	10MF	20%	16V
C2821	1-130-469-00	MYLAR	680PF	5%	50V
C2822	1-106-375-12	MYLAR	0.022MF	10%	250V
C2824	1-104-664-11	ELECT	47MF	20%	25V
C2825	1-136-601-11	FILM	0.01MF	5%	630V
C2826	1-137-194-81	FILM	0.47MF	5%	50V
C2828	1-107-714-11	ELECT	10MF	20%	16V
C2829	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C2830	1-110-205-11	FILM	0.0068MF	5%	50V
C2832	1-126-960-11	ELECT	1MF	20%	50V
C2833	1-137-366-11	FILM	0.0022MF	5%	50V
C2834	1-106-220-00	MYLAR	0.1MF	10%	100V
C2835	1-216-295-91	SHORT	0		
C2837	1-102-129-00	CERAMIC	0.01MF	10%	50V
C2840	1-110-174-71	MYLAR	0.082MF	5%	100V
C2841	1-136-177-00	FILM	1MF	5%	50V
C2842	1-130-477-00	MYLAR	0.0033MF	5%	50V
C2843	1-107-714-11	ELECT	10MF	20%	16V
		<CONNECTOR>			
CN2821	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN2822	* 1-564-510-11	PLUG, CONNECTOR 7P			
CN2823	1-695-915-11	TAB (CONTACT)			
		<DIODE>			
D2801	8-719-404-49	DIODE MA111			
D2803	8-719-063-73	DIODE D1NL20U-TR			
D2804	8-719-063-73	DIODE D1NL20U-TR			
D2806	8-719-302-43	DIODE EL1Z			
D2813	8-719-404-49	DIODE MA111			
D2814	8-719-210-21	DIODE 11EQS04			
D2815	8-719-911-19	DIODE 1SS119-25			
D2816	8-719-911-19	DIODE 1SS119-25			
		<IC>			
IC2801	8-759-700-07	IC NJM2903M			
IC2803	8-759-701-59	IC NJM78M09FA			
IC2805	8-759-998-98	IC LM358D			
IC2806	8-759-700-07	IC NJM2903M			
		<CHIP CONDUCTOR>			
JR2803	1-216-295-91	SHORT	0		
JR2804	1-216-295-91	SHORT	0		
JR2805	1-216-295-91	SHORT	0		
JR2815	1-216-295-91	SHORT	0		
		<COIL>			
L2801	1-406-677-11	INDUCTOR 10mH			
L2802	1-459-111-00	INDUCTOR 10mH			
L2803	1-414-502-21	INDUCTOR 33mH			
L2806	1-406-677-11	INDUCTOR 10mH			
		<TRANSISTOR>			
Q2802	8-729-216-22	TRANSISTOR 2SA1162-G			
Q2805	8-729-216-22	TRANSISTOR 2SA1162-G			
Q2806	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q2807	8-729-043-95	TRANSISTOR 2SC3840(3)			
Q2811	8-729-931-45	TRANSISTOR IRF614			
Q2813	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q2821	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q2822	8-729-216-22	TRANSISTOR 2SA1162-G			
Q2823	8-729-017-06	TRANSISTOR 2SC4793			
Q2824	8-729-140-97	TRANSISTOR 2SB734-34			
		<RESISTOR>			
R2801	1-216-057-91	RES,CHIP	2.2K	5%	1/10W
R2803	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2804	1-216-041-00	RES,CHIP	470	5%	1/10W
R2806	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2809	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2812	1-216-097-91	RES,CHIP	100K	5%	1/10W
R2813	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2816	1-216-097-91	RES,CHIP	100K	5%	1/10W
R2820	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2821	1-249-412-11	CARBON	390	5%	1/4W F
R2824	1-249-393-11	CARBON	10	5%	1/4W F
R2825	1-216-037-00	RES,CHIP	330	5%	1/10W
R2827	1-216-041-00	RES,CHIP	470	5%	1/10W
R2830	1-215-899-11	METAL OXIDE	15K	5%	2W F
R2831	1-215-873-00	METAL OXIDE	4.7K	5%	1W F
R2833	1-216-460-00	METAL OXIDE	3.9K	5%	2W F
R2834	1-215-873-00	METAL OXIDE	4.7K	5%	1W F
R2837	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R2838	1-216-675-00	RES,CHIP	10K	5%	1/10W
R2839	1-216-081-00	RES,CHIP	22K	5%	1/10W
R2840	1-216-097-91	RES,CHIP	100K	5%	1/10W
R2843	1-216-097-91	RES,CHIP	100K	5%	1/10W
R2844	1-216-097-91	RES,CHIP	100K	5%	1/10W
R2846	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2847	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2857	1-216-671-00	RES,CHIP	6.8K	5%	1/10W
R2858	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R2859	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2860	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R2861	1-216-107-00	RES,CHIP	270K	5%	1/10W
R2862	1-216-107-00	RES,CHIP	270K	5%	1/10W
R2866	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2867	1-216-081-00	RES,CHIP	22K	5%	1/10W
R2869	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2871	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2872	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2874	1-216-085-00	RES,CHIP	33K	5%	1/10W
R2877	1-216-421-11	METAL OXIDE	12	5%	1W F
R2878	1-216-081-00	RES,CHIP	22K	5%	1/10W
R2879	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2880	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2882	1-216-657-00	RES,CHIP	1.8K	5%	1/10W
R2883	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R2884	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R2885	1-216-689-11	RES,CHIP	39K	5%	1/10W
R2886	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R2887	1-216-651-91	RES,CHIP	1K	5%	1/10W
R2888	1-216-049-91	RES,CHIP	1K	5%	1/10W

D2 DH H1

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<SWITCH>			
S2801	1-572-707-11	SWITCH, LEVER			
		<TRANSFORMER>			
T2801	1-424-584-11	TRANSFORMER, DYNAMIC FOCUS			
**********					
	* A-1343-585-A	DH BOARD, COMPLETE ********** (except KV-EF34M31/EF34M61)			
	* A-1343-609-A	DH BOARD, COMPLETE (KV-EF34M61) **********			
	* A-1343-610-A	DH BOARD, COMPLETE (KV-EF34M31) **********			
		<CAPACITOR>			
C3801	1-126-964-11	ELECT	10MF	20%	50V
C3804	1-102-129-00	CERAMIC	0.01MF	10%	50V
C3805	1-126-964-11	ELECT	10MF	20%	50V
C3807	1-102-129-00	CERAMIC	0.01MF	10%	50V
C3816	1-126-964-11	ELECT	10MF	20%	50V
C3819	1-126-960-11	ELECT	1MF	20%	50V
C3822	1-136-165-00	FILM	0.1MF	5%	50V
		<CONNECTOR>			
CN3802	* 1-564-507-11	PLUG, CONNECTOR 4P			
CN3803	* 1-564-506-11	PLUG, CONNECTOR 3P			
		<DIODE>			
D3805	8-719-911-19	DIODE 1SS119-25			
		<IC>			
IC3805	8-759-822-38	IC LA6510			
IC3807	1-475-556-11	SENSOR UNIT, MAGNETIC			
		<TRANSISTOR>			
Q3807	8-729-030-02	TRANSISTOR DTC144ESA			
Q3808	8-729-030-02	TRANSISTOR DTC144ESA			
Q3809	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q3810	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q3811	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q3812	8-729-119-78	TRANSISTOR 2SC2785-HFE			
		<RESISTOR>			
R3802	1-249-417-11	CARBON	1K	5%	1/4W
R3803	1-249-417-11	CARBON	1K	5%	1/4W
R3804	1-215-444-00	METAL	9.1K	1%	1/4W
R3805	1-249-420-11	CARBON	1.8K	5%	1/4W (except EF34M31/EF34M61)
R3805	1-249-422-11	CARBON	2.7K	5%	1/4W (EF34M31/EF34M61)
R3807	1-215-413-00	METAL	470	1%	1/4W
R3808	1-247-883-00	CARBON	150K	5%	1/4W
R3809	1-247-876-11	CARBON	75K	5%	1/4W
R3810	1-249-425-11	CARBON	4.7K	5%	1/4W
R3814	1-249-411-11	CARBON	330	5%	1/4W
R3823	1-249-395-11	CARBON	15	5%	1/4W
R3825	1-249-417-11	CARBON	1K	5%	1/4W
R3828	1-249-377-11	CARBON	0.47	5%	1/4W F
R3839	1-249-429-11	CARBON	10K	5%	1/4W
R3845	1-249-425-11	CARBON	4.7K	5%	1/4W
R3846	1-249-417-11	CARBON	1K	5%	1/4W
R3847	1-247-807-31	CARBON	100	5%	1/4W
R3848	1-249-417-11	CARBON	1K	5%	1/4W
R3849	1-249-377-11	CARBON	0.47	5%	1/4W F
R3852	1-249-441-11	CARBON	100K	5%	1/4W
R3854	1-249-429-11	CARBON	10K	5%	1/4W
**********					
	* A-1372-556-A	H1 BOARD, COMPLETE **********			
	* 4-055-304-01	HOLDER, LED			
		<CAPACITOR>			
C1900	1-136-153-00	FILM	0.01MF	5%	50V
C1901	1-136-175-00	FILM	0.68MF	5%	50V
C1902	1-136-153-00	FILM	0.01MF	5%	50V
C1903	1-136-175-00	FILM	0.68MF	5%	50V
C1904	1-126-965-11	ELECT	22MF	20%	50V
C1905	1-102-824-00	CERAMIC	470PF	5%	50V
C1908	1-102-824-00	CERAMIC	470PF	5%	50V
C1910	1-104-664-11	ELECT	47MF	20%	16V
C1911	1-104-664-11	ELECT	47MF	20%	16V
C1912	1-102-824-00	CERAMIC	470PF	5%	50V
C1913	1-126-960-11	ELECT	1MF	20%	50V
C1914	1-126-965-11	ELECT	22MF	20%	50V
		<CONNECTOR>			
CN1601	* 1-580-844-11	PIN, CONNECTOR (POWER)			
CN1602	* 1-695-292-11	PIN, CONNECTOR (POWER)			
CN1901	* 1-564-507-11	PLUG, CONNECTOR 4P			
CN1902	* 1-564-507-11	PLUG, CONNECTOR 4P			
CN1903	* 1-564-518-11	PLUG, CONNECTOR 3P			
CN1904	* 1-564-509-11	PLUG, CONNECTOR 6P			
CN1905	* 1-564-512-11	PLUG, CONNECTOR 9P			
CN1906	* 1-564-507-11	PLUG, CONNECTOR 4P			
		<DIODE>			
D1900	8-719-121-26	DIODE RD9.1ESL2			
D1901	8-719-121-26	DIODE RD9.1ESL2			
D1904	8-719-121-26	DIODE RD9.1ESL2			
D1905	8-719-121-26	DIODE RD9.1ESL2			
D1906	8-719-045-19	DIODE SPB-26MVWF			
D1907	8-719-121-26	DIODE RD9.1ESL2			
D1912	8-719-911-19	DIODE 1SS119-25			
D1913	8-719-911-19	DIODE 1SS119-25			
		<IC>			
IC1901	8-742-041-12	HYB IC SBX1981-11(12)			
		<JACK>			
J1901	1-770-786-11	JACK			
J1902	1-784-646-11	TERMINAL, S			
J1903	1-770-329-11	JACK, PIN 3P			
		<COIL>			
L1901	1-408-603-31	INDUCTOR 10UH			
L1902	1-408-603-31	INDUCTOR 10UH			

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

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

H1 J1

REF. NO.	PART NO.	DESCRIPTION			REMARK
L1903	1-416-857-11	INDUCTOR 65UH			
L1904	1-416-857-11	INDUCTOR 65UH			
		<TRANSISTOR>			
Q1901	8-729-030-02	TRANSISTOR DTC144ESA			
Q1902	8-729-030-02	TRANSISTOR DTC144ESA			
		<RESISTOR>			
R1900	1-249-411-11	CARBON	330	5%	1/4W
R1901	1-249-411-11	CARBON	330	5%	1/4W
R1902	1-247-804-11	CARBON	75	5%	1/4W
R1903	1-249-441-11	CARBON	100K	5%	1/4W
R1904	1-249-437-11	CARBON	47K	5%	1/4W
R1905	1-249-437-11	CARBON	47K	5%	1/4W
R1906	1-249-441-11	CARBON	100K	5%	1/4W
R1908	1-249-413-11	CARBON	470	5%	1/4W
R1909	1-249-417-11	CARBON	1K	5%	1/4W
R1910	1-249-420-11	CARBON	1.8K	5%	1/4W
R1911	1-249-411-11	CARBON	330	5%	1/4W
R1912	1-247-843-11	CARBON	3.3K	5%	1/4W
R1913	1-249-429-11	CARBON	10K	5%	1/4W
R1914	1-249-411-11	CARBON	330	5%	1/4W
R1915	1-249-429-11	CARBON	10K	5%	1/4W
R1916	1-249-401-11	CARBON	47	5%	1/4W
R1917	1-247-804-11	CARBON	75	5%	1/4W
R1920	1-247-807-31	CARBON	100	5%	1/4W
R1921	1-247-807-31	CARBON	100	5%	1/4W
R1922	1-249-421-11	CARBON	2.2K	5%	1/4W
R1924	1-247-804-11	CARBON	75	5%	1/4W
R1925	1-215-381-00	METAL	22	1%	1/4W
R1926	1-215-381-00	METAL	22	1%	1/4W
		<SWITCH>			
S1601	⚠ 1-571-433-21	SWITCH, PUSH (AC POWER)			
S1902	1-692-431-21	SWITCH, TACTILE			
S1903	1-692-431-21	SWITCH, TACTILE			
S1904	1-692-431-21	SWITCH, TACTILE			
S1905	1-692-431-21	SWITCH, TACTILE			
S1906	1-692-431-21	SWITCH, TACTILE			

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* A-1388-226-A J1 BOARD, COMPLETE
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		<CAPACITOR>			
C2410	1-126-967-11	ELECT	47MF	20%	50V
C2411	1-126-967-11	ELECT	47MF	20%	50V
C2412	1-126-967-11	ELECT	47MF	20%	50V
C2413	1-102-112-00	CERAMIC	330PF	10%	50V
C2414	1-102-112-00	CERAMIC	330PF	10%	50V
C2418	1-126-960-11	ELECT	1MF	20%	50V
C2419	1-126-960-11	ELECT	1MF	20%	50V
		<CONNECTOR>			
CN2410	* 1-564-523-11	PLUG, CONNECTOR 8P			
		<DIODE>			
D2410	8-719-121-26	DIODE RD9.1ESL2			
D2411	8-719-121-26	DIODE RD9.1ESL2			
D2412	8-719-121-26	DIODE RD9.1ESL2			
D2414	8-719-121-26	DIODE RD9.1ESL2			
D2415	8-719-121-26	DIODE RD9.1ESL2			
		<JACK>			
J2410	1-784-623-11	BLOCK, PIN JACK 5P			
		<RESISTOR>			
R2410	1-247-804-11	CARBON	75	5%	1/4W
R2411	1-247-804-11	CARBON	75	5%	1/4W
R2412	1-247-804-11	CARBON	75	5%	1/4W
R2414	1-247-887-00	CARBON	220K	5%	1/4W
R2415	1-247-807-31	CARBON	100	5%	1/4W
R2417	1-247-887-00	CARBON	220K	5%	1/4W
R2418	1-247-807-31	CARBON	100	5%	1/4W
R2419	1-247-815-91	CARBON	220	5%	1/4W
R2420	1-247-815-91	CARBON	220	5%	1/4W
R2421	1-247-815-91	CARBON	220	5%	1/4W

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MISCELLANEOUS
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1-251-658-21	SPLITTER RF	
⚠ 1-416-757-11	COIL, DEMAGNETIC	
1-416-871-11	COIL, LANDING CORRECTION	
1-452-032-00	MAGNET,DISK ; 10mmØ	
1-452-094-00	CIRCULAR DISC MAGNET B	
1-452-896-61	COIL, NA ROTATION (RT-200)	
⚠ 1-467-525-22	CAP BLOCK, HIGH-VOLTAGE	
1-505-473-11	SPEAKER (12CM)	
1-505-474-11	SPEAKER (5CM)	
* 1-555-110-00	P-P CABLE	
⚠ 1-574-062-12	CORD, POWER (WITH CONNECTOR)	2.5A/250V (except EF34M90(HK))
⚠ 1-769-609-21	CORD, POWER (WITH CONNECTOR)	(EF34M90(HK))
1-771-360-11	SWITCH, TOP	
1-900-241-30	LEAD ASSY, G2 (except EF34M31)	
1-900-243-56	LEAD ASSY, G2 (EF34M31)	
⚠ 8-451-499-11	DEFLECTION YOKE (Y34RSN)	
⚠ 8-453-007-31	NECK ASSEMBLY NA324-M3	
⚠ 8-735-049-05	PICTURE TUBE (A80LPD80X)	(except EF34M61/EF34M90(JE))
⚠ 8-735-050-05	PICTURE TUBE (A80LPD80X) (EF34M61)	
⚠ 8-735-055-05	PICTURE TUBE(A80LPD80X) (EF34M90(JE))	
8-742-166-00	IC SBX3005-01	

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REF. NO.	PART NO.	DESCRIPTION	REMARK
		ACCESSORIES AND PACKING MATERIALS	
		**********	
	1-569-008-21	ADAPTOR, CONVERSION 2P (except EF34M31/EF34M90(HK))	
	3-701-910-00	SCREW, SPECIAL (DIA. 3.8X20)	
	3-864-789-11	MANUAL, INSTRUCTION (except EF34M90(HK)/EF34M90(JE))	
	3-864-789-31	MANUAL, INSTRUCTION (EF34M80/EF34M90(JE)/EF34M91)	
	3-864-789-41	MANUAL, INSTRUCTION (EF34M90(HK)/EF34M90(JE))	
	4-032-113-01	REINFORCEMENT	
*	4-067-102-01	INDIVIDUAL CARTON	
*	4-067-102-11	INDIVIDUAL CARTON (EF34M80/EF34M91)	
*	4-067-103-01	TRAY	
*	4-067-103-11	TRAY (EF34M80/EF34M91)	
*	4-067-104-01	CUSHION (UPPER) (ASSY)	
*	4-067-105-01	CUSHION (LOWER) (ASSY)	
*	4-384-101-21	BAG, PROTECTION	
	4-392-003-01	BAND, HOLD	
	4-392-004-01	CLIP	
	4-392-004-11	CLIP (except EF34M61)	
*	4-396-077-01	JOINT	
		REMOTE COMMANDER	
		**********	
	1-418-039-11	REMOTE COMMANDER (RM-951)	
	4-978-977-01	POCKET, COVER (FOR RM-951)	

9-965-242-01

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Quality Assurance Division

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