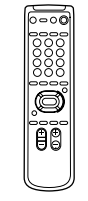
Self Diagnosis
Supported model

SERVICE MANUAL

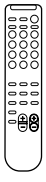
BG-3S CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-XS29M80	RM-954	E	SCC-U13L-A
KV-XS29M97	RM-953	Hong Kong	SCC-U17L-A

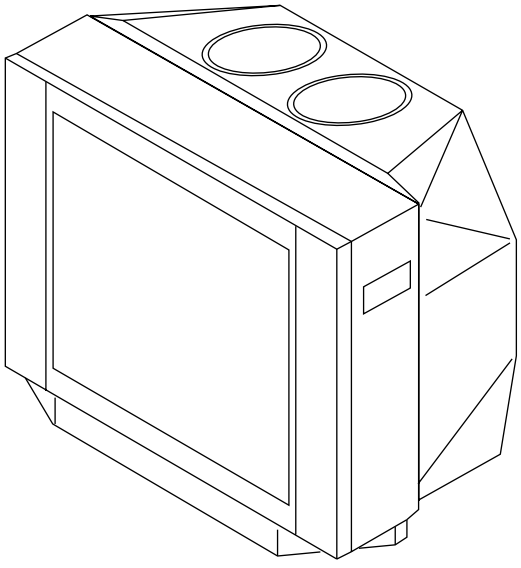
MODEL	COMMANDER	DEST.	CHASSIS NO.



(RM-953)



(RM-954)



MICROFILM

TRINITRON ® COLOR TV

SONY ®

SPECIFICATIONS
(KV-XS29M80)

		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	
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	8W + 8W	
Number of terminal		
(Video)	Input: 3 Output: 1	Phono jacks; 1 V_{P-P}, 75 ohms
♪ (Audio)	Input: 3 Output: 1	Phono jacks; 1 V_{P-P}, 500 mVrms
(S Video)	Input: 2	Y : 1 Vp-p, 75 ohms, unbalanced, sync negative C : 0.286 Vp-p, 75 ohms
(Headphone)	Output: 1	Minijack
Picture tube	29 inch	
Tube size (cm)	72	Measured diagonally
Screen size (cm)	68	Measured diagonally
Dimension (w/h/d, mm)	794 × 573 × 517	
Mass (kg)	50	

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.

SPECIFICATIONS
(KV-XS29M97)

		Note
Power requirements	220-240 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	
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	6W + 6W	10% Distortion
3D WOOFER	15W	
Number of terminal		
(Video)	Input: 4 Output: 1	Phono jacks; 1 V_{P-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	Phono jacks: Y : 1.0 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
(Headphone)	Output: 1	Minijack
Picture tube	29 inch	
Tube size (cm)	72	Measured diagonally
Screen size (cm)	68	Measured diagonally
Dimension (w/h/d, mm)	794 × 589 × 517	
Mass (kg)	54	

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.

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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

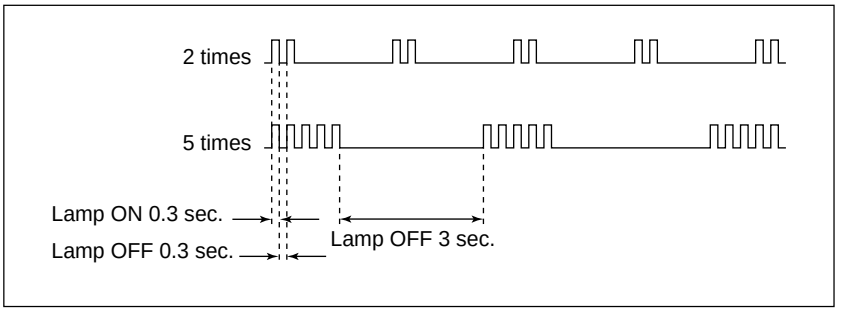
When an errors occurs, the STANDBY/TIMER lamp will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the lamp will identify the first of the problem areas.

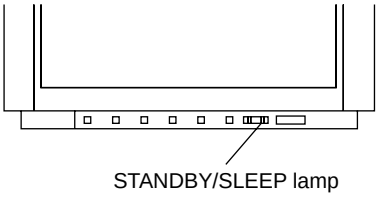
Result for all of the following diagnostic items are displayed on screen. No error has occured if the screen displays a "0".

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	• 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	—	101:00 or 101:001~225	• 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.

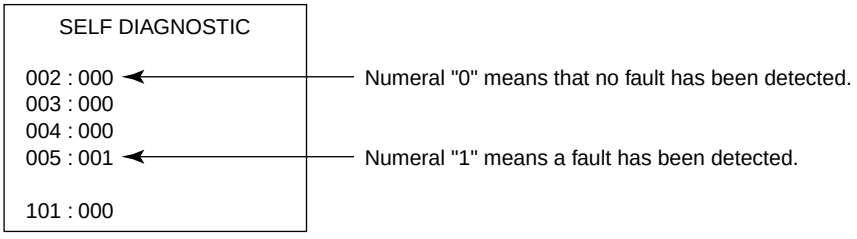
4. SELF-DIAGNOSTIC SCREEN DISPLAY

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”.

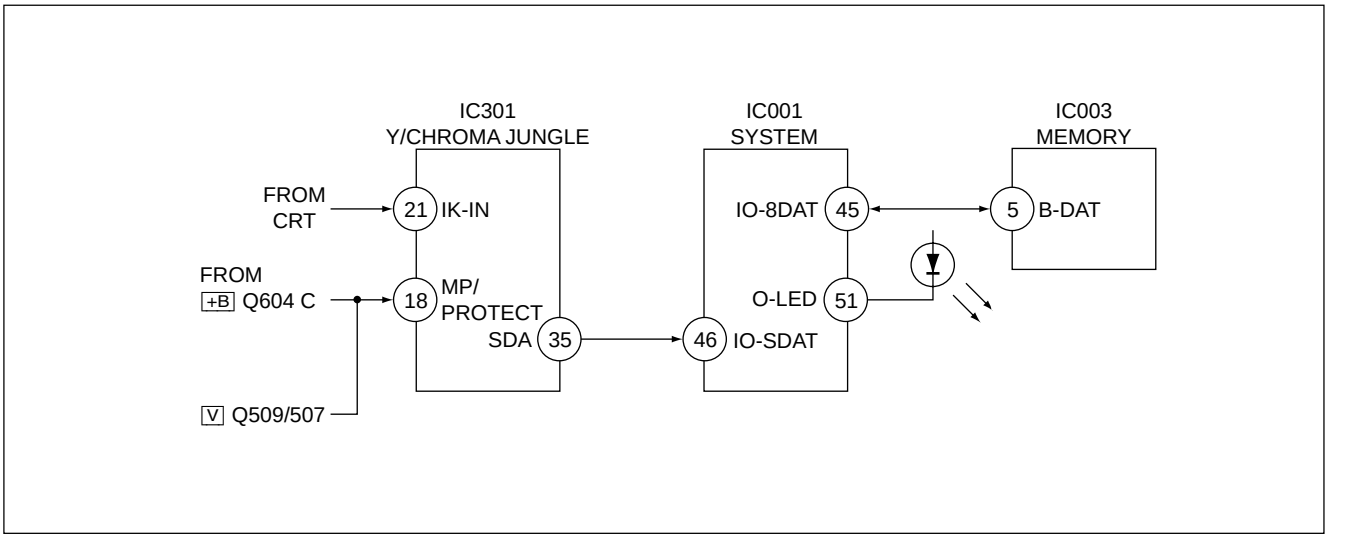
Unless the result display is cleared to “0”, the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

[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



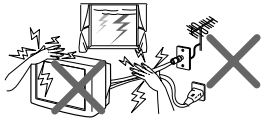
+B overcurrent (OCP)	Occurs when an overcurrent on the +B(135) line is detected by Q604. If Q604 go to ON and the voltage to pin 18 of IC301 should go down when V.SYNC is more than seven verticals in a period, the unit will automatically turn off.
Vertical deflection stopped	Occurs when an absence of the vertical deflection pulse is detected by Q509 and IC001 shut down the power supply.
Vertical deflection overcurrent	Occurs when an overcurrent on V drive line is detected by Q507. Power supply will be shut down when detect this by IC001.
White balance failure	If the RGB levels* do not balance or become low level within 5 seconds, this error will be detected by IC301. 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 remain as in the manual.

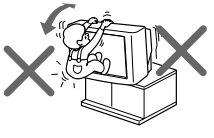
SECTION 1-1 GENERAL (KV-XS29M80)

WARNING

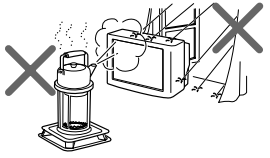
- Dangerously high voltages are present inside the TV.
- Operate the TV only between 110 – 240 V AC. (For Hong Kong only: 220 – 240 V AC).



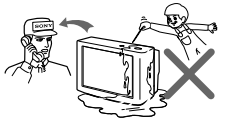
For your own safety, do not touch any part of the TV, the power cord and the antenna cable during lightning storms.



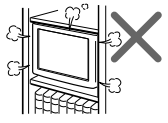
Install the TV in a stable position. Do not allow children to climb onto it.



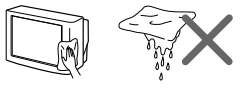
To prevent fire or shock hazard, do not expose the TV to rain or moisture.



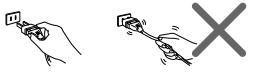
Do not operate the TV if any liquid or solid object falls into it. Have it checked immediately by qualified personnel only.



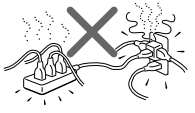
Do not install the TV in a confined space, such as a bookcase or built-in cabinet.
Do not block the ventilation openings of the TV.



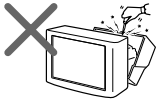
Clean the TV with a dry and soft cloth.
Do not use benzine, thinner, or any other chemicals to clean the TV. Do not scratch the picture tube.



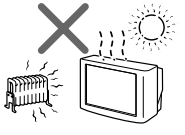
Pull the power cord out by the plug. Do not pull the power cord itself. Disconnect the TV if you are not going to use it for several days.



Do not plug in too many appliances to the same power socket. Do not damage the power cord.



Do not open the cabinet and the rear cover of the TV. Refer servicing to qualified personnel.



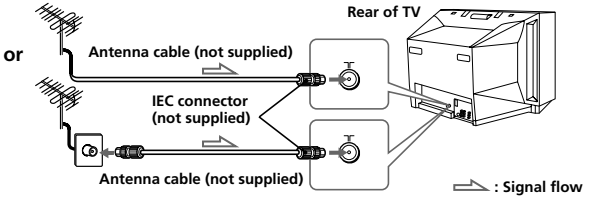
Do not install the TV in hot, humid or excessively dusty places.

Getting Started

Step 1

Connect the antenna

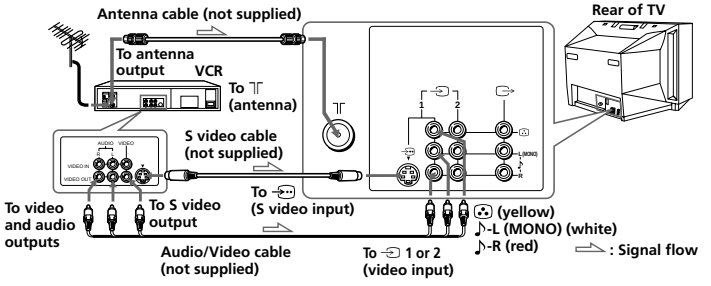
If you wish to connect a VCR, see the "Connecting a VCR" diagram below.



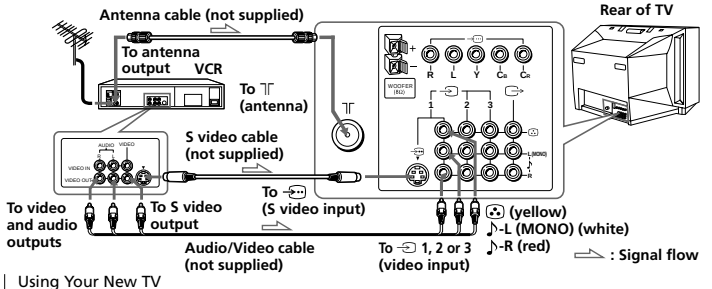
Connecting a VCR

To watch the video, press ⊜ (see page 12).

KV-XS29M80/XS29M50



KV-XS29M93



CAUTION

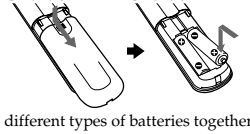
Do not connect the power cord until you have completed making all other connections; otherwise a minimum leakage current might flow through the antenna and other terminals to ground.

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.
- If both (S video input) and 1 (video input) at the rear of your TV are input at the same time, the (S video input) is automatically selected. To view 1 (video input), disconnect the S video cable.
- When no signal is input to the connected video equipment, the TV screen becomes blue.
- *KV-XS29M93 only*
  Do not connect video equipment to the 3 (video input) jacks at the front and the rear of your TV at the same time; otherwise the picture will not be displayed properly on the screen.

Step 2

Insert the batteries into the remote

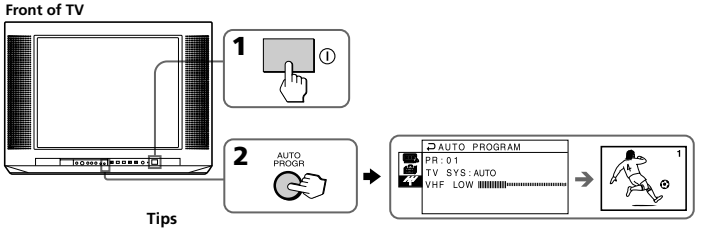


Note

- Do not use old batteries nor use different types of batteries together.

Step 3

Preset the channels automatically



Tips

- If you want to stop the automatic channel presetting, press MENU twice.
- If your TV has preset an unwanted channel or cannot preset a particular channel, then preset your TV manually (see page 26).

Note (KV-XS29M80/XS29M50 only)

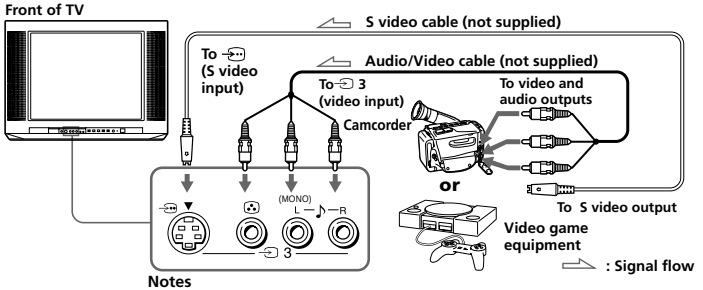
- During automatic channel presetting, your TV screen will indicate "B/G", "I", "D/K" or "M" for the TV system (TV SYS).

Connecting optional components

You can connect optional audio/video components, such as a VCR, multi disc player, DVD, camcorder, video game or stereo system.

To watch the picture of the connected equipment, press (see page 12).

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

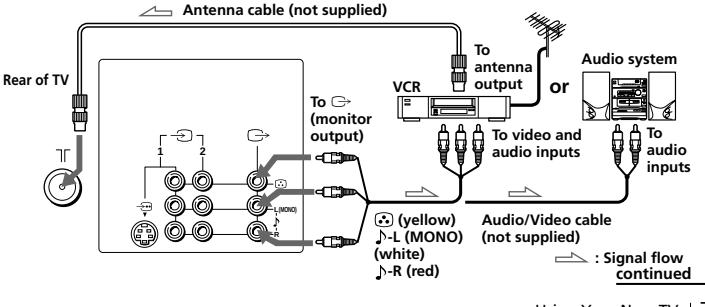


Notes

- You can also connect video equipment to the 1 or 2 (video input) jacks at the rear of your TV.
- If both (S video input) and 3 (video input) at the front of your TV are input at the same time, the (S video input) is automatically selected. To view 3 (video input), disconnect the S video cable.
- *KV-XS29M93 only*
  Do not connect video equipment to the 3 (video input) jacks at the front and the rear of your TV at the same time; otherwise the picture will not be displayed properly on the screen.

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

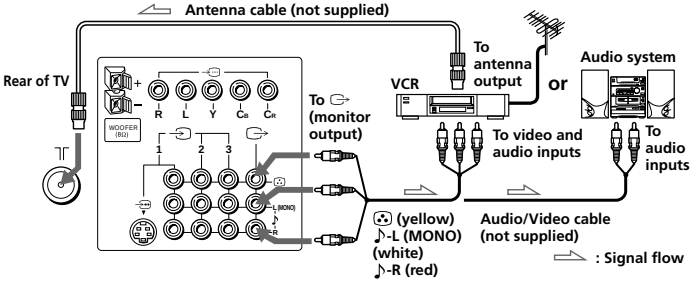
KV-XS29M80



continued

Connecting optional components (continued)

KV-XS29M93 (not used for this model.)

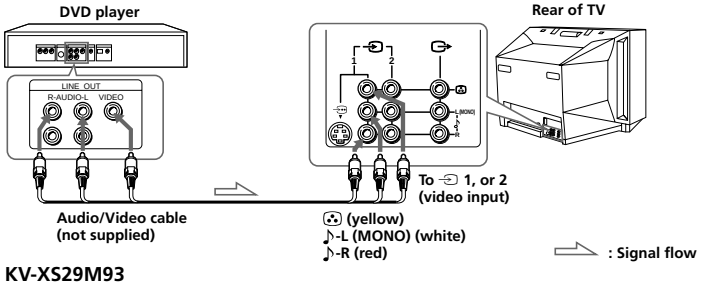


Note

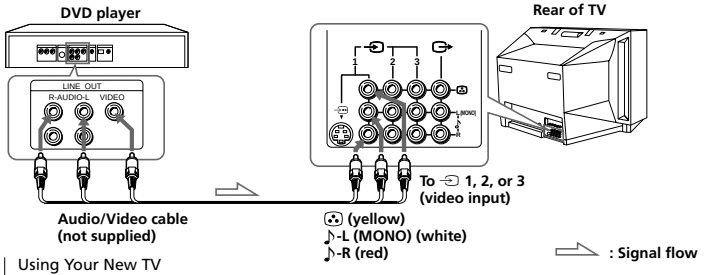
- If you select "DVD" on your TV screen, no signal will be output at the (monitor output) jacks (see page 12).

Connecting a DVD player using the (video input) jacks

KV-XS29M80



KV-XS29M93



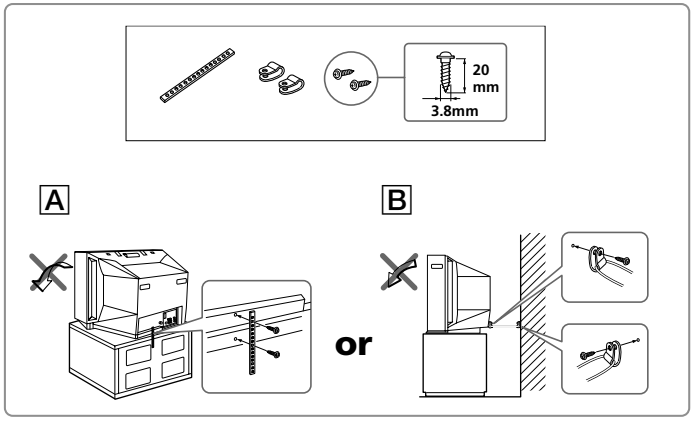
Securing the TV

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

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

or

B Put the cord or chain through the clamps to secure the TV against a wall or pillar.

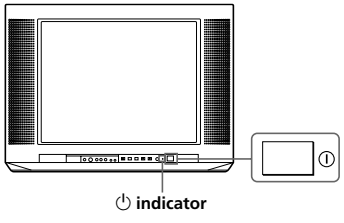


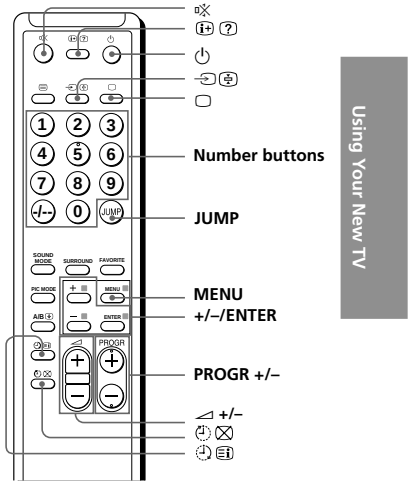
Note

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

Watching the TV

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



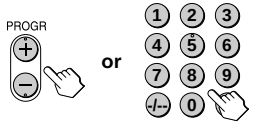


1 Press ⏻ to turn on the TV.

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

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

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



To select a TV program quickly

(1) Press and hold PROGR +/–.
(2) Release PROGR +/– when the desired program number appears.

Note

- When you select a TV program quickly, the picture may be disrupted. This does not indicate a malfunction.

continued

Additional tasks

To	Do this
Turn off temporarily	Press ⏻. The ⏻ indicator on the TV lights up red.
Turn off completely	Press ⏻ on the TV.
Adjust the volume	Press +/–.
Mute the sound	Press 🔇.
Watch the video input (VCR, camcorder, etc.)	Press ⮆ to select "VIDEO 1", "VIDEO 2" , "VIDEO 3" or "DVD" (KV-XS29M93 only). To return to the TV program, press 🖵.
Jump back to the previous channel	Press JUMP.
Display the on-screen information*	Press ⓘ+.

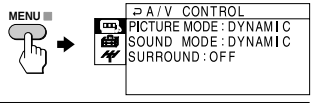
* The picture, sound, and either the program number or video mode are displayed. The on-screen display for the picture and sound information disappears after about 3 seconds.

Changing the menu language

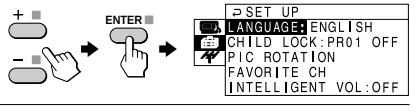
You can change the menu language as well as the on-screen language.

For details on how to use the menu, see "Introducing the menu system" on page 19.

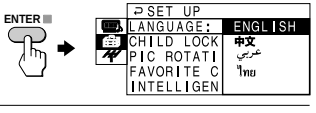
1 Press MENU.



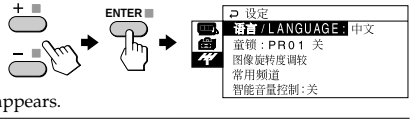
2 Press + or – to select the "SET UP" icon (🧰), then press ENTER.



3 Make sure "LANGUAGE" is selected, then press ENTER.



4 Press + or – to select the desired language (e.g, "中文"), then press ENTER.



The selected menu language appears.

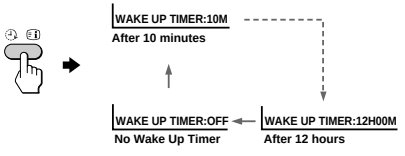
To return to the normal screen

Press MENU.

Setting the Wake Up timer

1 Press ⏲ until the desired period of time appears.

The Wake Up timer starts immediately after you have set it.



2 Select the TV program or video mode you want to display when you wake up.

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.

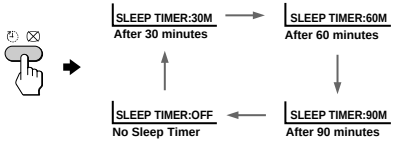
Note

- 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 the standby mode. To continue 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.

The Sleep timer starts immediately after you have set it.

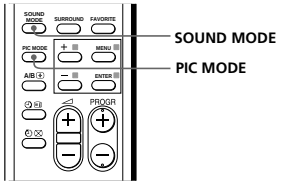


To cancel the Sleep timer

Press ⏲ until "SLEEP TIMER: OFF" appears or turn the TV off.

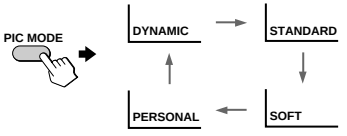
Selecting the picture and sound modes

You can select picture and sound modes and adjust the setting to your preference in "PERSONAL" option.



Selecting the picture mode

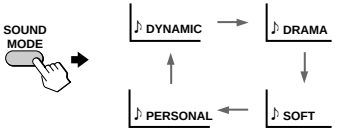
Press PIC MODE repeatedly until you get the desired picture mode.



Select	To
"DYNAMIC"	receive high contrast pictures.
"STANDARD"	receive normal contrast pictures.
"SOFT"	receive mild pictures.
"PERSONAL"	receive the last adjusted picture setting from the "ADJUST" option in the "A/V CONTROL" menu (see page 21).

Selecting the sound mode

Press SOUND MODE repeatedly until you get the desired sound mode.



Select	To
"DYNAMIC"	listen to dynamic and clear sound that emphasizes 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 21).

Tip

- You can also set the picture and sound modes using the menu (see "Changing the "A/V CONTROL" setting" on page 21).

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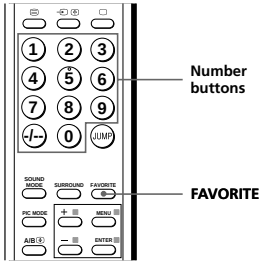
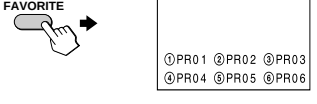
Viewing your favorite channels

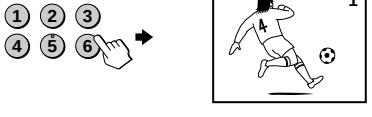
You can display and select six of your favorite channels directly from your TV screen.



1 Press FAVORITE.



2 Press the number button from 1 to 6 to select the desired channel.

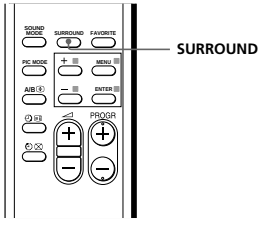


Tip

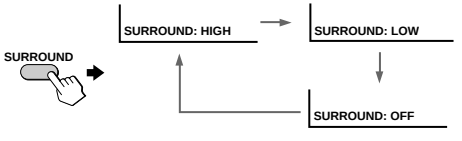
- To program your favorite channels, see "Programming your favorite channels" on page 24.

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.



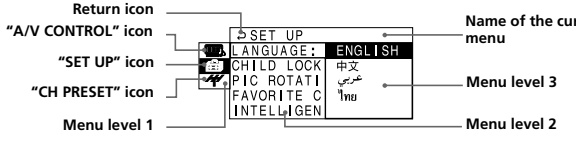
Select	To
"HIGH"	listen to sound that spreads out over a large area, giving the feeling of being at a concert hall.
"LOW"	listen to the sound that gives the feeling of being at a live concert.
"OFF"	turn off the surround sound.

The surround of your TV is categorized as TruSurround.

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.

Introducing the menu system

The MENU button lets you open a menu and change the settings of your TV. Here's 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. "HIGH"→ "LOW"→"OFF"
"SET UP"	"LANGUAGE"	Change the menu language. "ENGLISH"– " 中文 " (Chinese)/ عربي (Arabic)/ ไทย (Thai)
	"CHILD LOCK"	Block the channel independently.
	"PIC ROTATION"	Adjust the picture position.
	"FAVORITE CH"	Program favorite channels.
	"INTELLIGENT VOL"	Adjust volume automatically.
"CH PRESET"	"AUTO PROGRAM"	Preset channels automatically.
	"MANUAL PROGRAM"	Preset channels manually.
	"SKIP"	Skip unwanted or unused program positions.
	"TV SYS"	Select the TV system. "B/G"→ "I"→ "D/K"→ "M"
	"COL SYS"	Select the color system. "AUTO"→ "PAL"→"SECAM"→"NTSC3.58"→"NTSC4.43"

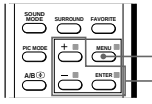
* The "BBE" is manufactured by Sony Corporation under license from BBE Sound, Inc. It is covered by U.S. Patent No. 4,638,258 and No. 4,482,866. The word "BBE" and the BBE symbol are the trademarks of BBE Sound, Inc.

continued

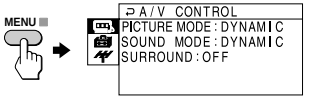
Introducing the menu system (continued)

How to use the menu

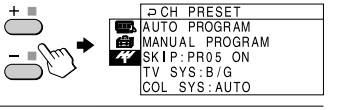
You can use the buttons on the remote and on the TV as well to display the menu and adjust the settings.



1 Press MENU to display the menu.



2 Press + or – to select the desired item.



3 Press ENTER to confirm your option and go to the next menu level.

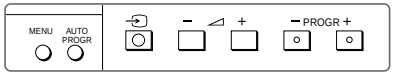
Other menu operations

To	Press
Adjust the setting value	+/–
Return to the previous menu level	ENTER
Cancel the menu	MENU

Tips

- To return from Menu Level 2 to Level 1, press + / – to select the return icon (⮌), then press ENTER.
- You can also use the buttons on the TV for menu operations. ◿ +/– work as + /– on the remote and ⮆ works as ENTER on the remote.

Front of TV



Notes

- If more than 60 seconds elapse between entries, the menu screen automatically disappears.
- With better resolution of the on-screen fonts, interlace scanning might cause flickers on some parts of the menu screen. This does not indicate a malfunction.

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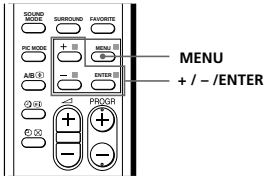
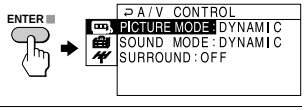
Changing the "A/V CONTROL" setting

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

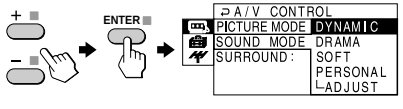


1 Press MENU.

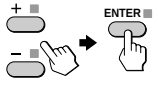
2 Make sure the "A/V CONTROL" icon ( ) is selected, then press ENTER.



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 "HIGH", "LOW", or "OFF".

* When the "PERSONAL" mode is selected, the last adjusted picture and sound settings from the "ADJUST" option are received (see page 22).

Tip

- For details on the options under "PICTURE MODE", "SOUND MODE" and "SURROUND", see page 14 and 16 respectively.

To return to the normal screen

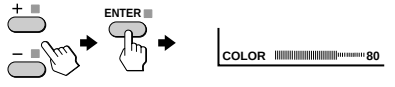
Press MENU.

continued

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 – to	Press + to
"BASS"	decrease the bass	increase the bass
"TREBLE"	decrease the treble	increase the treble
"BALANCE"	increase the left speaker's volume	increase the right speaker's volume
"BBE"	select "HIGH" for higher enhancement of sound clarity; select "LOW" for lower enhancement of sound clarity; select "OFF" to turn off the BBE sound	

3 Repeat the above steps to adjust other items.

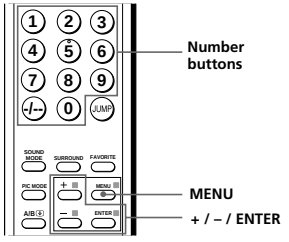
The adjusted settings will be received when you select "PERSONAL".

Tip

- For details on the menu system and how to use the menu, refer to "Introducing the menu system" on page 19.

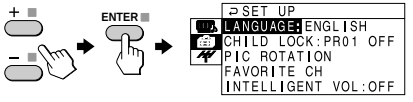
Changing the “SET UP” setting

The “SET UP” menu allows you to change the menu language, block channels, adjust the picture position, program your favorite channels and adjust volume automatically.

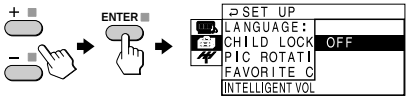


1 Press MENU.

2 Press + or – to select the “SET UP” icon (🔧), then press ENTER.



3 Press + or – to select the desired option (e.g., “INTELLIGENT VOL”), then press ENTER.



Select	To
“LANGUAGE“	Change the menu language (see “Changing the menu language” on page 12).
“CHILD LOCK“	Prevent children from watching certain channels (see “Blocking the channels (“CHILD LOCK“)” on page 25).
“PIC ROTATION“	Adjust the picture position when it is not aligned to the TV screen. Press + or – to adjust the picture position, then press ENTER.
“FAVORITE CH“	Program channels for direct selection (see “Programming your favorite channels” on page 24).
“INTELLIGENT VOL“	Adjust the volume of each TV program automatically. Press + or – to select “ON”, then press ENTER. To turn off the “Intelligent Volume” function, select “OFF”, then press ENTER.

To return to the normal screen.

Press MENU.

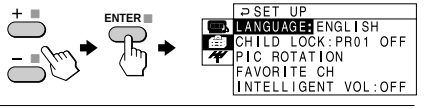
continued

Programming your favorite channels

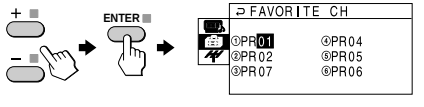
The “FAVORITE CH” feature enables you to program up to six channels for direct selection.

1 Press MENU.

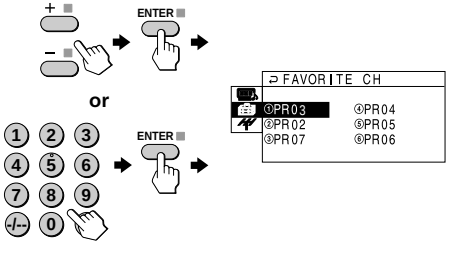
2 Press + or – to select the “SET UP” icon (🔧), then press ENTER.



3 Press + or – to select “FAVORITE CH”, then press ENTER twice.



4 Press + or –, or number buttons to program the desired channel (e.g., “PR03”), then press ENTER.



5 To continue programming other favorite channels, press + or – and then press ENTER. After that, repeat step 4.

To return to the normal screen

Press MENU.

Tip

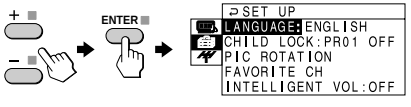
- For details on the menu system and how to use the menu, refer to “Introducing the menu system” on page 19.

Blocking the channels (“CHILD LOCK”)

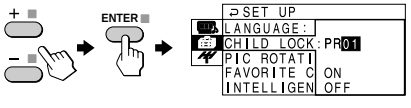
You can prevent your children from watching certain channels by using the “CHILD LOCK” feature.

1 Press MENU.

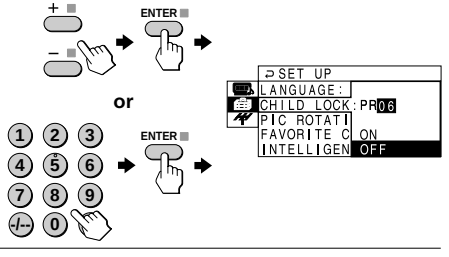
2 Press + or – to select the “SET UP” icon (), then press ENTER.



3 Press + or – to select “CHILD LOCK”, then press ENTER.



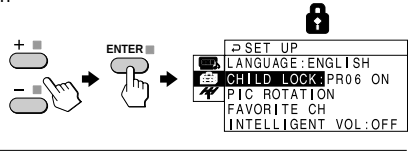
4 Press + or –, or number buttons to select the desired channel, then press ENTER.



5 Press + or – to select ON, then press ENTER.

The lock symbol ( ) appears on the screen.

To unlock the channel, select “OFF”.



6 To continue locking other channels, press ENTER and then repeat step 4 to 5.

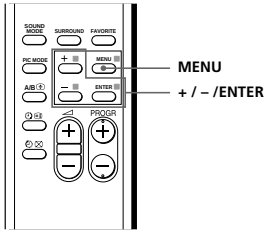
To return to the normal screen

Press MENU.

Note

- If you preset a locked channel, that particular channel will be unlocked automatically (see page 26).

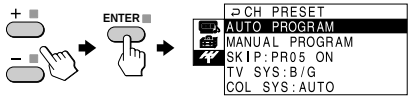
Changing the Channel Preset (“CH PRESET”) setting



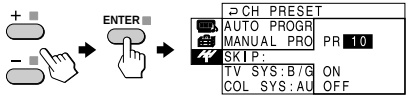
The “CH PRESET” menu allows you to adjust the setup of your TV. For example, you can receive a channel with a weak signal that fails to be tuned in by automatic presetting.

1 Press MENU.

2 Press + or – to select the “CH PRESET” icon (), then press ENTER.



3 Press + or – to select the desired option (e.g., “SKIP”), then press ENTER.



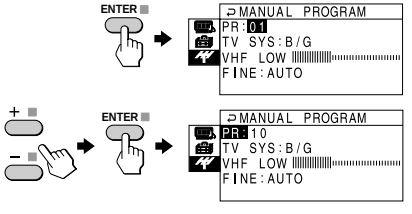
Select	To
“AUTO PROGRAM”	preset channels automatically.
“MANUAL PROGRAM”	preset channels manually. See “Presetting channels manually” on page 27.
“SKIP”	skip unwanted or unused program numbers. 1 Press + or – until the unused or unwanted program number appears, then press ENTER. 2 Press + or – to select “ON”, then press ENTER. To put the skipped program number back on, select “OFF”, then press ENTER.
“TV SYS”	select the TV system. See “Presetting channels manually” on page 27.
“COL SYS”	select the color system. Normally, set this to “AUTO”.

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.

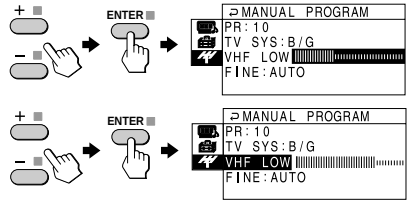
(2) Press + or – until the program number you want to preset (e.g., program number "10") appears on the menu, then press ENTER.



2 Select the desired channel.

(1) Press + or – to select either "VHF LOW", "VHF HIGH" or "UHF", then press ENTER.

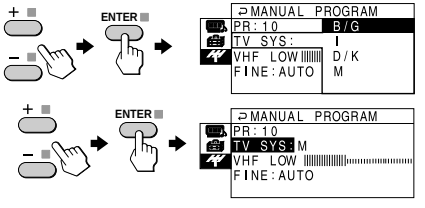
(2) Press + or – until the desired channel picture appears on the TV screen, then press ENTER.



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 (e.g., "M"), then press ENTER.



continued

Changing the Channel Preset ("CH PRESET") setting (continued)

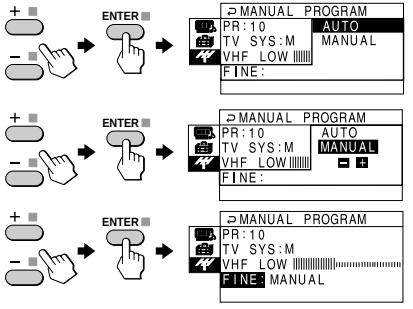
4 If you are not satisfied with the picture and sound quality, you may improve them by using fine tuning.

(1) Press + or – to select "FINE", then press ENTER.

(2) Press + or – to select "MANUAL", then press ENTER.

(3) Press + or – until the picture and sound quality are optimal, then press ENTER.

The + or – icon on the menu flashes while tuning.



To return to the normal screen

Press MENU.

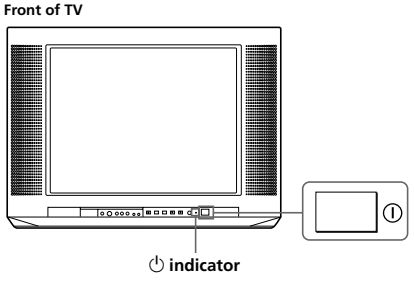
Notes

- If you preset a locked channel, that particular channel will be unlocked automatically (see page 25).
- The TV system ("TV SYS") and the fine tuning ("FINE") settings are memorized for each program number.

KV-XS29M80/XS29M97
RM-954 RM-953

Self-diagnosis function

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



1 Check that the red flashes of the ⏻ indicator is about 3 seconds per interval.

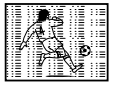
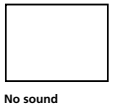
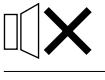
2 Count the number of times the ⏻ indicator flashes.

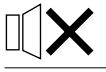
3 Press ⏽ (main power) to turn off your TV.

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

Troubleshooting

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

Symptom	Possible cause	Solutions	Page
Snowy picture 	• Connection is loose or the cable is damaged.	• Check the antenna cable and connection on the TV, VCR and on the wall.	4
	• Channel presetting is inappropriate or incomplete.	• Display the “CH PRESET” menu and select “MANUAL PROGRAM” to preset the channel again.	26
Noisy sound	• The antenna type is inappropriate.	• Check the antenna type (“VHF” / “UHF”). Contact a Sony dealer for advice.	–
	• The antenna direction is inappropriate.	• Adjust the antenna direction. Contact a Sony dealer for advice.	–
	• Signal transmission is low.	• Try using a booster.	–
Distorted picture	• Broadcast signals are too strong.	• Turn off or disconnect the booster if it is in use.	–
Noisy sound			
Good picture	• The TV system setting or channel presetting is inappropriate or incomplete.	• If the sound of all the channels are noisy, display the “CH PRESET” menu and check the TV system (“TV SYS”) setting, then select “AUTO PROGRAM” to preset the channel again.	26
Noisy sound		• If the sound of some channels are noisy, select the channel, then display the “CH PRESET” menu and select the appropriate TV system (“TV SYS”).	26
No picture 	• The power cord, antenna or VCR is not connected.	• Check the power cord, antenna and the VCR connections.	4
	• The TV is not turned on.	• Press ⏻ (power).	12
No sound 		• Press ⏽ (main power) on the TV to turn off the TV for about five seconds, then turn it on again.	11

Symptom	Possible cause	Solutions	Page
Good picture **No sound** 	• The volume level is too low.	• Press + to increase the volume level.	12
	• The sound is muted.	• Press to cancel the muting.	12
	• Broadcast signal has a transmission problem.	• Press A/B until a good sound is heard. (KV-XS29M93 only)	17
Dotted lines or stripes 	• There is local interference from cars, neon signs, hair dryers, power generators, etc.	• 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.	– –
Double images or "ghosts" 	• Broadcast signals are reflected by nearby mountains or buildings.	• Use a highly directional antenna. • Use the fine tuning ("FINE") function.	– 28
	• The antenna direction is inappropriate.	• Adjust the antenna direction. Contact a Sony dealer for advice.	–
	• Use of a booster is inappropriate.	• Turn off or disconnect the booster if it is in use.	–
No color 	• The color level setting is too low.	• Display the "A/V CONTROL" menu and select "ADJUST" of "PICTURE MODE", then adjust the "COLOR" level.	21
	• The color system setting is inappropriate.	• Display the "CH PRESET" menu and check the color system ("COL SYS") setting (usually set this to "AUTO").	26
	• The antenna direction is inappropriate.	• Adjust the antenna direction. Contact a Sony dealer for advice.	–
Abnormal color patches 	• The magnetic disturbance from external speakers or other equipment, or the direction of the earth's magnetic field may affect the TV.	• Keep external speakers or other electrical equipment away from the TV. Do not move the TV while the TV is turned on. Press ⏻ (main power) on the TV to turn off the TV for about five minutes, then turn it on again.	–
TV cannot receive stereo broadcast signal. (KV-XS29M93 only)	• The stereo reception setting is inappropriate.	• Press A/B until "AUTO" appears on the screen.	17

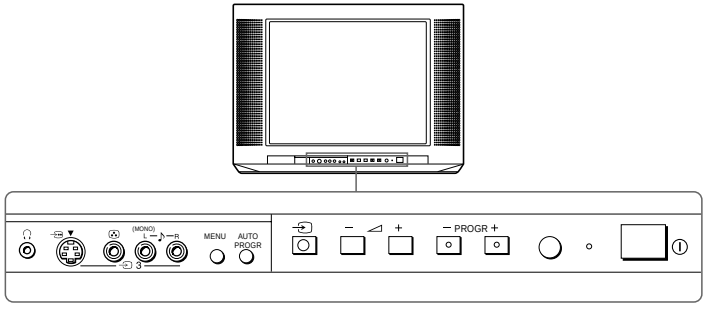
continued

Troubleshooting (continued)

Symptom	Possible cause	Solutions	Page
Stereo broadcast sound switches on and off or is distorted. **or** **The sound switches between monaural and stereo frequently. (KV-XS29M93 only)**	• Connection is loose or the cable is damaged.	• Check the antenna cable and connection on the TV, VCR and on the wall.	4
	• The antenna direction is inappropriate.	• Adjust the antenna direction. Contact a Sony dealer for advice.	–
	• Broadcast signal has a transmission problem.	• Press A/B until a good sound is heard.	17
Picture slant 	• The terrestrial magnetism affects your TV set.	• Display the "SET UP" menu and adjust "PIC ROTATION" so that the picture is aligned to the TV screen.	23
Lines moving across the TV screen.	• There is interference from external sources, e.g., heavy machineries, nearby broadcast station.	• Use the fine tuning ("FINE") function.	28
The ⏻ indicator on your TV flashes red a number of times between 3-second intervals.	• Your TV may need service.	• Contact your nearest Sony service center.	29
TV cabinet creaks.	• Changes in room temperature sometimes make the TV cabinet expand or contract, making a noise. This does not indicate a malfunction.	—	–
A "boom" sound is heard when the TV is turned on.	• The TV's demagnetizing function is working. This does not indicate a malfunction.	—	–

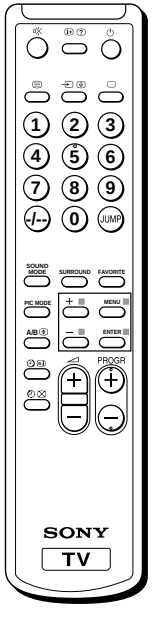
Identifying parts and controls

Front panel



Button	Function	Page
AUTO PROGR	Preset channels automatically.	5
⏻	Turn off completely or turn on the TV.	11
PROGR +/–	Select program number.	11
◿ +/–	Adjust volume.	12
⏎	Select TV or video input.	12
MENU	Display the menu.	20
🎧	Headphones jack.	–

Remote control



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 operations
Green	For Teletext operations

Button	Function	Page
PROGR +/–	Select program number.	11
0 – 9, -/--	Input numbers.	11
◿ +/–	Adjust volume.	12
⏻	Turn off temporarily or turn on the TV.	12
⏎	Select TV or video input.	12
▢	Display the TV program.	12
🔇	Mute the sound.	12
ⓘ	Display on-screen information.	12
JUMP	Jump to previous channel.	12
Timer operations		
◴	Set TV to turn on automatically.	13
◴	Set TV to turn off automatically.	13
PIC MODE	Select picture mode.	14
SOUND MODE	Select sound mode.	14
FAVORITE	Display favorite channels.	15
SURROUND	Select surround mode.	16
A/B (KV-XS29M93 only)	Select stereo/bilingual mode.	17
Menu operations		
MENU	Display the menu.	20
+ or –	Select and adjust item.	20
ENTER	Confirm selected item.	20
Teletext operations (Not used for KV-XS29M93/XS29M80/XS29M50)		
☰	Display Teletext broadcast.	–
⊕	Enlarge the Teletext display.	–
?	Reveal concealed information.	–
⊕	Stop Teletext page from scrolling.	–
☰ⓘ	Display Teletext service contents.	–
⊠	Show TV screen while waiting for Teletext page.	–
■ (red, green, yellow, blue)	Access a Fastext menu	–

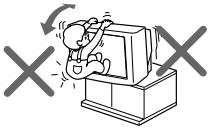
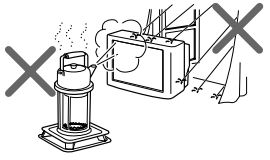
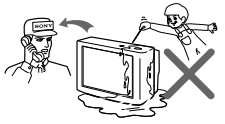
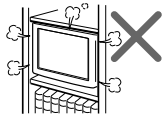
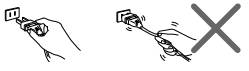
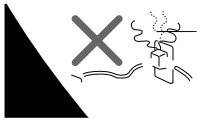
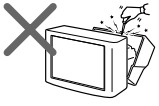
continued

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

SECTION 1-2 GENERAL (KV-XS29M97)

WARNING

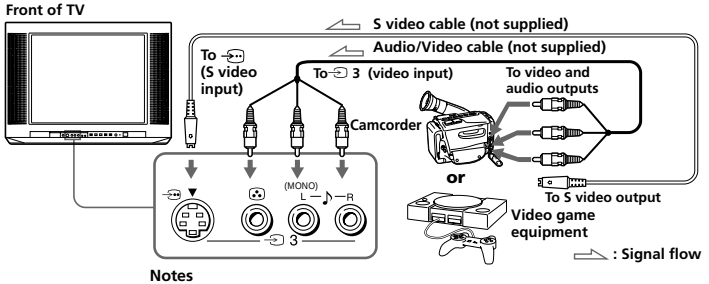
- Dangerously high voltages are present inside the TV.
- TV operating voltage: 110 – 240 V AC. (For Hong Kong only: 220 – 240 V AC).

	 Install the TV in a stable position. Do not allow children to climb onto it.
 To prevent fire or shock hazard, do not expose the TV to rain or moisture.	 Do not operate the TV if any liquid or solid object falls into it. Have it checked immediately by qualified personnel only.
 Do not install the TV in a confined space, such as a bookcase or built-in cabinet. Do not block the ventilation openings of the TV.	 Clean the TV with a dry and soft cloth. Do not use benzine, thinner, or any other chemicals to clean the TV. Do not scratch the picture tube.
 Do not pull the power cord to disconnect the TV. Pull it out by the plug. Disconnect the TV if you are not going to use it for several days.	 Do not plug in too many appliances to the same power socket. Do not damage the power cord.
 Do not open the cabinet and the rear cover of the TV. Refer servicing to qualified personnel.	Do not install the TV in hot, humid or excessively dusty places.

Connecting optional components

You can connect optional audio/video components, such as a VCR, multi disc player, camcorder, video game or stereo system. To watch the picture of the connected equipment, press ⊖ (see page 11).

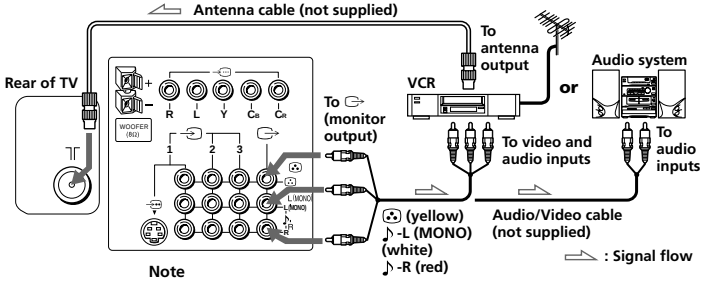
Connecting a camcorder/video game equipment using the ⊖ (video input) jacks



Notes

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

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



Note

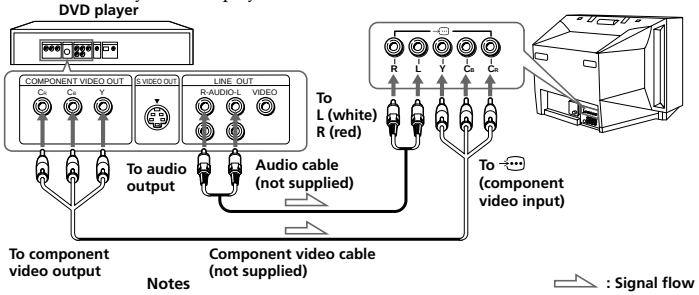
- When connecting a monaural VCR, connect the yellow plug to ⊙ (the yellow jack) and the black plug to ♪-L (MONO) (the white jack).

continued

Connecting optional components (continued)

Connecting a DVD player using the ⊷ (component video input) jacks

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, CB, and CR under ⊷ (component video input) on your TV to the COMPONENT VIDEO OUT Y, CB, and CR output connectors on your DVD player.



Notes

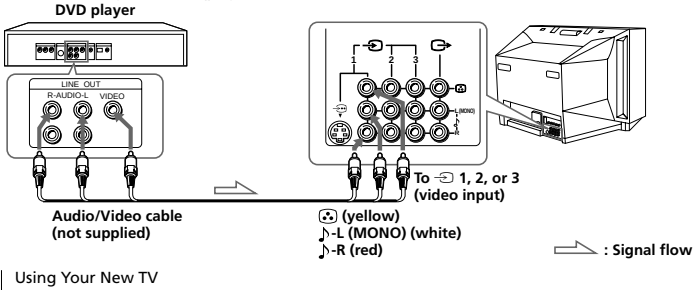
- Some DVD player terminals may be labeled differently:

Connect	To (on the DVD player)
Y (green)	Y
CB (blue)	CB, B-Y or PB
CR (red)	CR, R-Y or PR

- 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 25).
- Connect your DVD player directly to your TV. Connecting the DVD player through other video equipment will cause unwanted picture noise.

Connecting a DVD player using the ⊖ (video input) jacks

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



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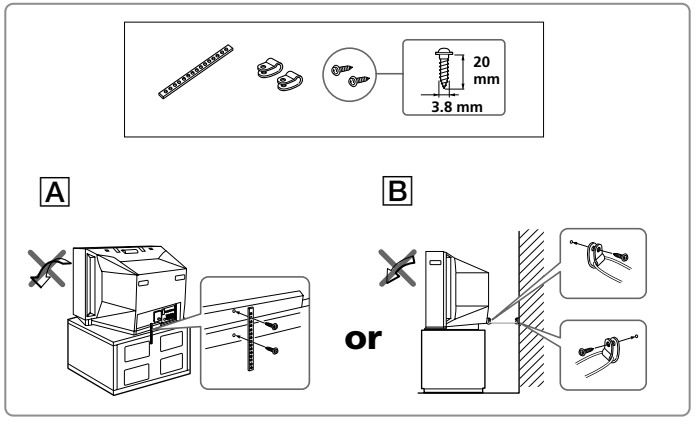
Securing the TV

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

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

or

B Put the cord or chain through the clamps to secure the TV against a wall or pillar.

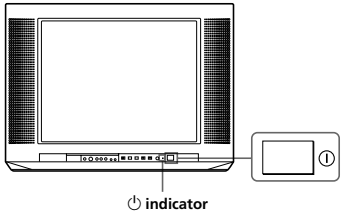


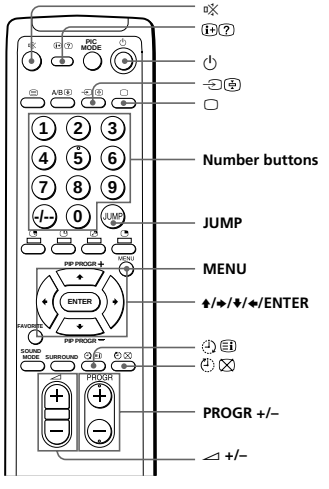
Note

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

Watching the TV

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



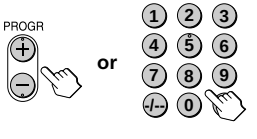


1 Press ⏻ to turn on the TV.

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

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

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



To select a TV program quickly

(1) Press and hold PROGR +/–.
(2) Release PROGR +/– when the desired program number appears.

Note

- When you select a TV program quickly, the picture may be disrupted. This does not indicate a malfunction.

Additional tasks

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

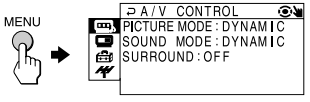
* The picture, sound, and either the program number or video mode are displayed. The on-screen display for the picture and sound information disappears after about 3 seconds.

Changing the menu language

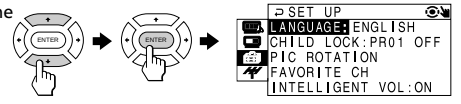
You can change the menu language as well as the on-screen language.

For details on how to use the menu, see "Introducing the menu system" on page 22.

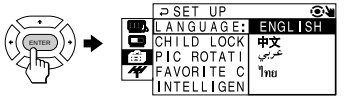
1 Press MENU.



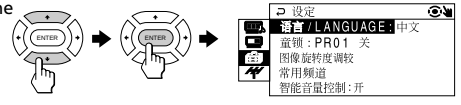
2 Press ↑ or ↓ to select the SET UP icon (🧰), then press ENTER.



3 Make sure "LANGUAGE" is selected, then press ENTER.



4 Press ↑ or ↓ to select the desired language (e.g., "中文"), then press ENTER.



The selected menu language appears.

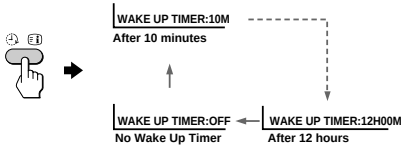
To return to the normal screen

Press MENU.

continued

Setting the Wake Up timer

1 Press ⏲ until the desired period of time appears.



2 Select the TV program or video mode you want to display when you wake up.

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

The ⏲ indicator lights up orange.

To cancel the Wake Up timer

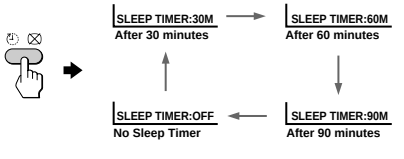
Press ⏲ until "WAKE UP TIMER: OFF" appears or turn off the TV's main power.

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 the standby mode. To continue 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.

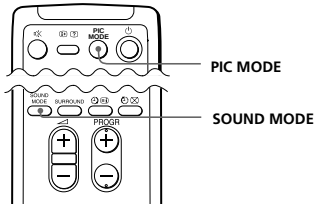


To cancel the Sleep timer

Press ⏱ until "SLEEP TIMER: OFF" appears or turn the TV off.

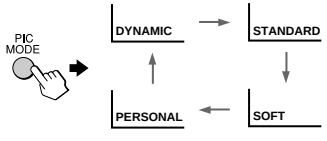
Selecting the picture and sound modes

You can select picture and sound modes and adjust the setting to your preference in "PERSONAL" option.



Selecting the picture mode

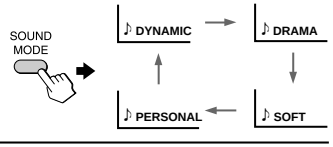
Press "PIC MODE" repeatedly until you get the desired picture mode.



Select	To
"DYNAMIC"	receive high contrast pictures.
"STANDARD"	receive normal contrast pictures.
"SOFT"	receive mild pictures.
"PERSONAL"	receive the last adjusted picture setting from the "ADJUST" option in the "A/V CONTROL" menu (see page 24 and 25).

Selecting the sound mode

Press "SOUND MODE" repeatedly until you get the desired sound mode.



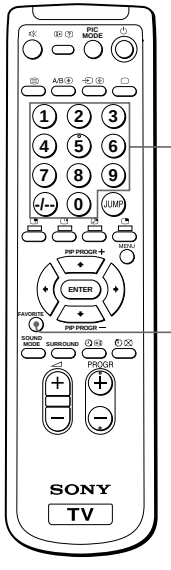
Select	To
"DYNAMIC"	listen to dynamic and clear sound that emphasizes the low and high tones.
"DRAMA"	listen to sound that emphasizes voice and high tones.
"SOFT"	receive soft sound.
"PERSONAL"	receive the last adjusted sound setting from the "ADJUST" option in the "A/V CONTROL" menu (see page 24 and 25).

Tip

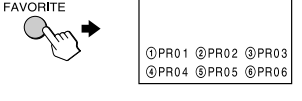
- You can also set the picture and sound modes using the menu (see "Changing the "A/V CONTROL" setting" on page 24).

Viewing your favorite channels

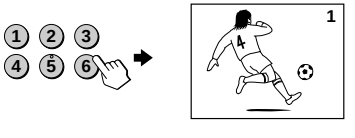
You can display and select six of your favorite channels directly from your TV screen.



1 Press FAVORITE.



2 Press the number button from 1 to 6 to select the desired channel.



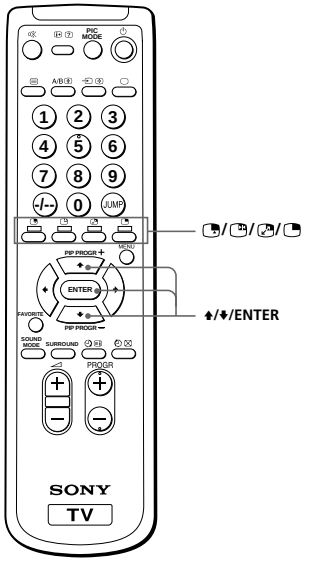
Tip

- To program your favorite channels, see "Programming your favorite channels" on page 28.

Watching two programs at the same time

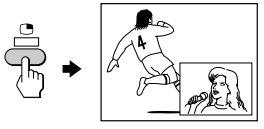
— PIP

With the Picture-in-Picture (PIP) feature, you can display a different TV program or video directly within the main picture.



Displaying the PIP screen

Press .



Additional PIP tasks

To	Press
change a TV program in the PIP screen	↑ or ↓.
change a video input in the PIP screen	.
swap pictures between the main and PIP screens	.
freeze the PIP screen	. To unfreeze the screen, press the button again.

To return to the normal screen

Press .

Tips

- You can also display the PIP screen using the menu (see "Changing the PIP setting" on page 26).
- You can change the position of the PIP screen (see "Changing the PIP setting" on page 26).

Notes

- 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 PIP screen, the size of the PIP screen may be different and the picture may be disrupted. This does not indicate a malfunction of the TV.

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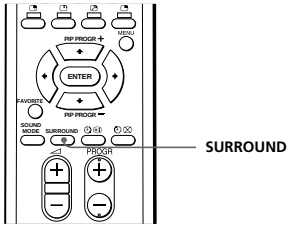
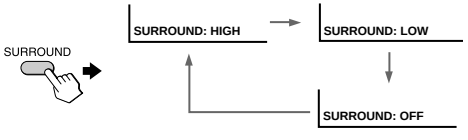
Listening with surround sound

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.



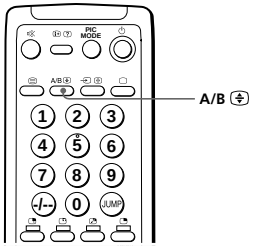
Select	To
"HIGH"	listen to sound that spreads out over a large area, giving the feeling of being at a concert hall.
"LOW"	listen to the sound that gives the feeling of being at a live concert.
"OFF"	turn off the surround sound.

The surround of your TV is categorized as TruSurround.

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.

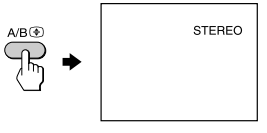
Selecting a stereo or bilingual program

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



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

The on-screen display changes to show the selected sound 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)

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.
- Before receiving a NICAM stereo program in China, please check the NICAM broadcast condition at your area. When receiving a NICAM stereo program, the receiving conditions might vary depending on area. In addition, different strength of the NICAM broadcast signal might affect the receiving quality.

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.

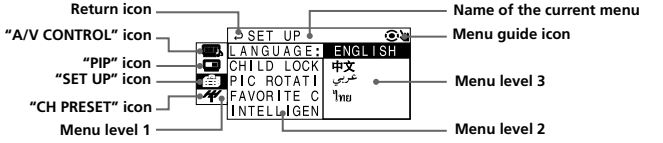
MONO → AUTO

Notes

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

Introducing the menu system

The MENU button lets you open a menu and change the settings of your TV. Here's an overview of the menu system.

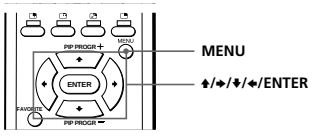


Level 1	Level 2	Level 3/Function
"A/V CONTROL"	"PICTURE MODE"	Select the picture mode. "DYNAMIC" → "STANDARD" → "SOFT" → "PERSONAL" → "ADJUST"
	"ADJUST"	Adjust the "PERSONAL" option "PICTURE" → "COLOR" → "BRIGHT" → "HUE" → "SHARP"
	"SOUND MODE"	Select the sound mode. "DYNAMIC" → "DRAMA" → "SOFT" → "PERSONAL" → "ADJUST"
	"ADJUST"	Adjust the "PERSONAL" option. "BASS" → "TREBLE" → "BALANCE" → "BBE"*
	"SURROUND"	Select the surround mode. "HIGH" → "LOW" → "OFF"
"PIP"	"PIP POSITION"	Change the position of the PIP screen.
	"PIP"	Display a sub screen within the main picture.
	"SWAP"	Exchange program between main screen and sub screen
"SET UP"	"LANGUAGE"	Change the menu language. ENGLISH - 中文 (Chinese)/ عربي (Arabic)/ ไทย (Thai)
	"CHILD LOCK"	Lock the channel independently.
	"PIC ROTATION"	Adjust the picture position.
	"FAVORITE CH"	Program favorite channels.
	"INTELLIGENT VOL"	Adjust volume automatically.
"CH PRESET"	"AUTO PROGRAM"	Preset channels automatically.
	"MANUAL PROGRAM"	Preset channels manually.
	"SKIP"	Skip unwanted or unused program positions.
	"TV SYS"	Select the TV system. "B/G" → "I" → "D/K" → "M"
	"COL SYS"	Select the color system. "AUTO" → "PAL" → "SECAM" → "NTSC3.58" → "NTSC4.43"

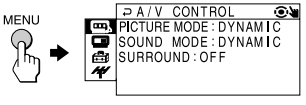
* The BBE is manufactured by Sony Corporation under license from BBE Sound, Inc. It is covered by U.S. Patent No. 4,638,258 and No. 4,482,866. The word "BBE" and the BBE symbol are the trademarks of BBE Sound, Inc.

How to use the menu

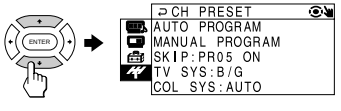
You can use the buttons on the remote and on the TV as well to display the menu and adjust the settings.



1 Press MENU to display the menu.



2 Press ↑ or ↓ to select the desired item.



3 Press ENTER to confirm your option and go to the next menu level.

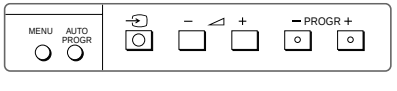
Other menu operations

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.
- You can also use the buttons on the TV for menu operations. +/– works as ↑ or ↓ on the remote and ⊕ works as ENTER on the remote.

Front of TV

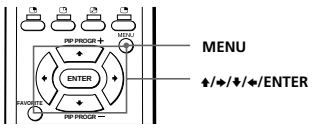


Note

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

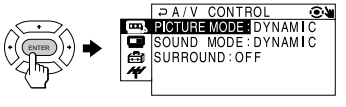
Changing the "A/V CONTROL" setting

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

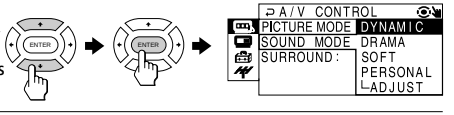


1 Press MENU.

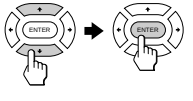
2 Make sure the "A/V CONTROL" icon ( ) is selected, then press ENTER.



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 "HIGH", "LOW", or "OFF".

* When the "PERSONAL" mode is selected, the last adjusted picture and sound settings from the "ADJUST" option are received.

Tip

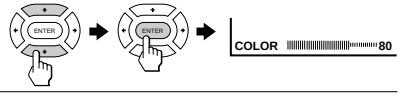
- For details on the options under "PICTURE MODE" and "SOUND MODE", or "SURROUND", see page 13 or 17 respectively.

To return to the normal screen

Press MENU.

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

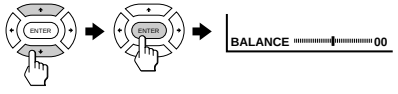
* You can adjust "HUE" for the "NTSC" color system only.

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 ↓/← to	Press ↑/→ to
"BASS"	decrease the bass	increase the bass
"TREBLE"	decrease the treble	increase the treble
"BALANCE"	increase the left speaker's volume	increase the right speaker's volume
"BBE"	select "HIGH" for higher enhancement of sound clarity; select "LOW" for lower enhancement of sound clarity; select "OFF" to turn off the BBE sound	

3 Repeat the above steps to adjust other items.

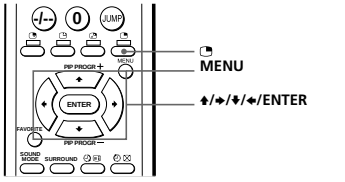
The adjusted settings will be received when you select "PERSONAL".

Tip

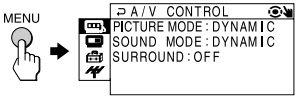
- For details on the menu system and how to use the menu, refer to "Introducing the menu system" on page 22.

Changing the "PIP" setting

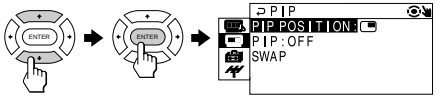
With the Picture-In-Picture (PIP) feature, you can display a sub screen within the main picture of different TV programs or video inputs.



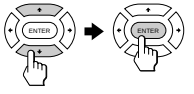
1 Press MENU.



2 Press ↑ or ↓ to select the "PIP" icon ( ), then press ENTER.



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



PIP operations

Select	To
"PIP POSITION"	change the position of the PIP screen. Press ↑ or ↓ to select the desired position, then press ENTER.
"PIP"	display a sub screen within the main picture. Press ↑ or ↓ to select "ON", then press ENTER. To cancel, press or select "PIP : OFF", then press ENTER.
"SWAP"	exchange program between main screen and sub-screen.

To return to the normal screen

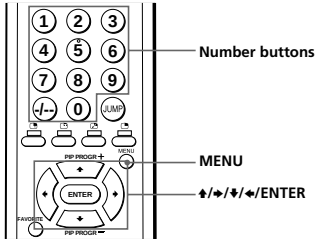
Press MENU.

Tip

- For details on the menu system and how to use the menu, refer to "Introducing the menu system" on page 22.

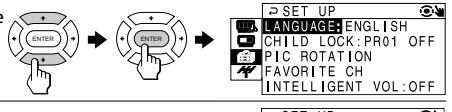
Changing the "SET UP" setting

The "SET UP" menu allows you to change the menu language, lock channels, adjust the picture position, program your favorite channels and adjust volume automatically.

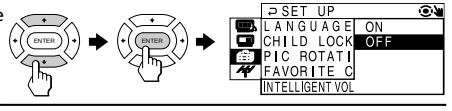


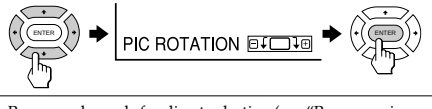
1 Press MENU.

2 Press ↑ or ↓ to select the "SET UP" icon ( ), then press ENTER.



3 Press ↑ or ↓ to select the desired option (e.g., "INTELLIGENT VOL"), then press ENTER.



Select	To
"LANGUAGE"	Change the menu language (see "Changing the menu language" on page 11).
"CHILD LOCK"	Prevent children from watching certain programs (see "Using the "CHILD LOCK" feature" on page 29).
"PIC ROTATION"	Adjust the picture position when it is not aligned to the TV screen. Press ↑, →, ↓ or ← to adjust the picture position, then press ENTER. 
"FAVORITE CH"	Program channels for direct selection (see "Programming your favorite channels" on page 28).
"INTELLIGENT VOL"	Adjust the volume of each program automatically. Press ↑ or ↓ to select "ON", then press ENTER. To turn off the Intelligent Volume function, select "OFF", then press ENTER.

To return to the normal screen

Press MENU.

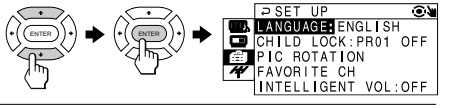
continued

Programming your favorite channels

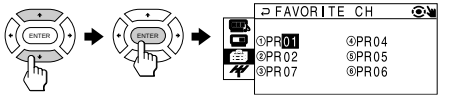
The "FAVORITE CH" feature enables you to program up to six channels for direct selection.

1 Press MENU.

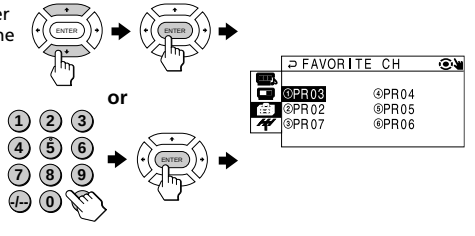
2 Press ↑ or ↓ to select the "SET UP" icon ( ), then press ENTER.



3 Press ↑ or ↓ to select FAVORITE CH, then press ENTER twice.



4 Press ↑ or ↓, or number buttons to program the desired channel (e.g., "PR03"), then press ENTER.



5 To continue programming other favorite channels, press ↑ or ↓ and then press ENTER. After that, repeat step 4.

To return to the normal screen

Press MENU.

Tip

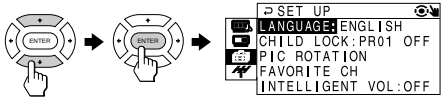
- For details on the menu system and how to use the menu, refer to "Introducing the menu system" on page 22.

Using the "CHILD LOCK" feature

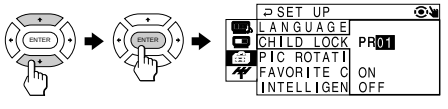
You can prevent your children from watching certain programs by using the "CHILD LOCK" feature.

1 Press MENU.

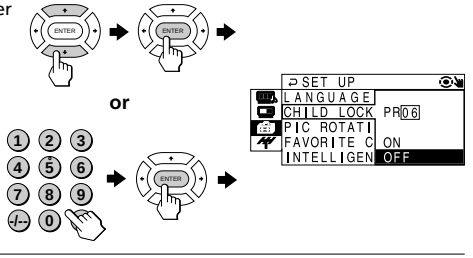
2 Press ↑ or ↓ to select the "SET UP" icon ( ), then press ENTER.



3 Press ↑ or ↓ to select "CHILD LOCK", then press ENTER.



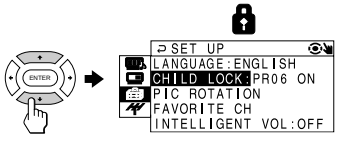
4 Press ↑ or ↓, or number buttons to select the desired channel, then press ENTER.



5 Press ↑ or ↓ to select "ON", then press ENTER.

The lock symbol ( ) appears on the screen.

To unlock the channel, select "OFF".

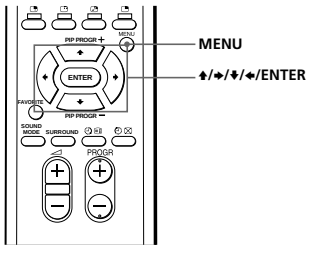


6 To continue locking other channels, press ENTER and then repeat step 4 to 5.

To return to the normal screen

Press MENU.

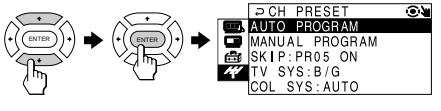
Changing the Channel Preset ("CH PRESET") setting



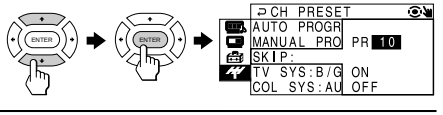
The "CH PRESET" menu allows you to adjust the setup of your TV. For example, you can receive a channel with a weak signal that fails to be tuned in by automatic presetting.

1 Press MENU.

2 Press ↑ or ↓ to select the "CH PRESET" icon ( ), then press ENTER.



3 Press ↑ or ↓ to select the desired option (e.g., "SKIP"), then press ENTER.

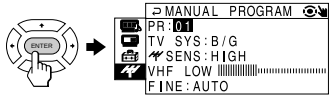


Select	To
"AUTO PROGRAM"	preset channels automatically.
"MANUAL PROGRAM"	preset channels manually. See "Presetting channels manually" on page 31.
"SKIP"	skip unwanted or unused program numbers. 1 Press ↑ or ↓ until the unused or unwanted program number appears, then press ENTER. 2 Press ↑ or ↓ to select "ON", then press ENTER. To put the skipped program number back on, select "OFF", then press ENTER.
"TV SYS"	select the TV system. See "Presetting channels manually" on page 31.
"COL SYS"	select the color system. Normally, set this to "AUTO".

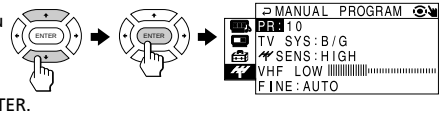
Presetting channels manually

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.

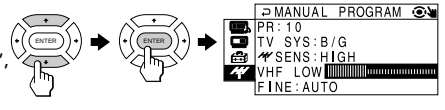


Tip

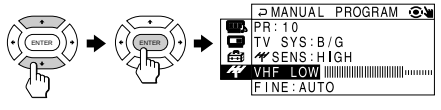
• You can also select the program number with the PROGR +/– or number buttons.

2 Select the desired channel.

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

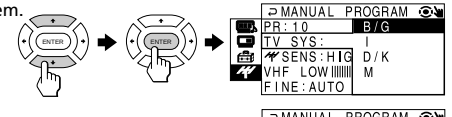


(2) Press ↑ or ↓ until the desired channel picture appears on the TV screen, then press ENTER.

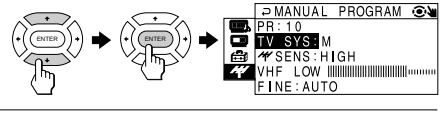


3 If the sound of the desired channel is abnormal, select the appropriate TV system.

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



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

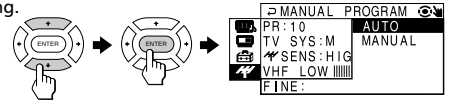


continued

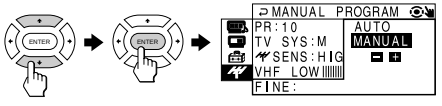
Changing the Channel Preset ("CH PRESET") setting (continued)

4 If you are not satisfied with the picture and sound quality, you may improve them by using fine tuning.

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

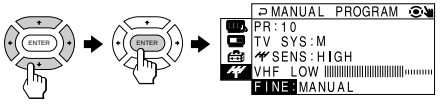


(2) Press ↑ or ↓ to select "MANUAL", then press ENTER.



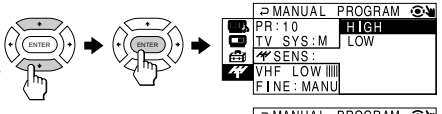
(3) Press ↑, →, ↓ or ← until the picture and sound quality are optimal, then press ENTER.

The + or – icon on the menu flashes while tuning.

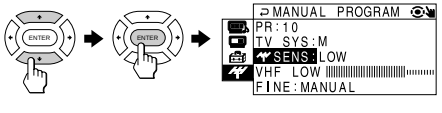


5 If the TV signal is too strong and the picture is distorted, you may reduce the TV receiving sensitivity.

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



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



To return to the normal screen

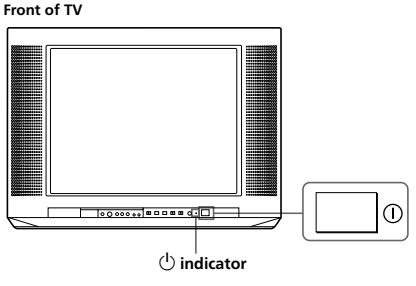
Press MENU.

Notes

- If you preset a locked channel, that particular channel will be unlocked automatically.
- The TV system (TV SYS), "SENS" and the fine tuning (FINE) settings are memorized for each program number.

Self-diagnosis function

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



1 Check that the ⏻ indicator flashes red a number of times between 3-second intervals.

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 flashes.
Be sure to note the model name and serial number located on the rear of your TV.

Troubleshooting

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

Symptom	Possible cause	Solutions	Page
Snowy picture	• Connection is loose or the cable is damaged.	• Check the antenna cable and connection on the TV, VCR and on the wall.	4
	• Channel presetting is inappropriate or incomplete.	• Display the "CH PRESET" menu and select "MANUAL PROGRAM" to preset the channel again.	31
Noisy sound	• The antenna type is inappropriate.	• Check the antenna type (VHF/UHF). Contact a Sony dealer for advice.	–
	• The antenna direction is inappropriate.	• Adjust the antenna direction. Contact a Sony dealer for advice.	–
	• Signal transmission is low.	• Try using a booster.	–
Distorted picture	• Broadcast signals are too strong.	• Display the "CH PRESET" menu and select "MANUAL PROGRAM". Then, select "AV SENS: LOW".	32
		• Turn off or disconnect the booster if it is in use.	–
Noisy sound			
Good picture	• The TV system setting or channel presetting is inappropriate or incomplete.	• If the sound of all the channels are noisy, display the "CH PRESET" menu and check the TV system (TV SYS) setting, then select "AUTO PROGRAM" to preset the channels again.	30
Noisy sound		• If the sound of some channels are noisy, select the channel, then display the "CH PRESET" menu and select the appropriate TV system (TV SYS).	31
No picture	• The power cord, antenna or VCR is not connected.	• Check the power cord, antenna and the VCR connections.	4
	• The TV is not turned on.	• Press ⏻ (power).	11
No sound		• Press ⏽ (main power) on the TV to turn off the TV about five seconds, then turn it on again.	10

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Troubleshooting (continued)

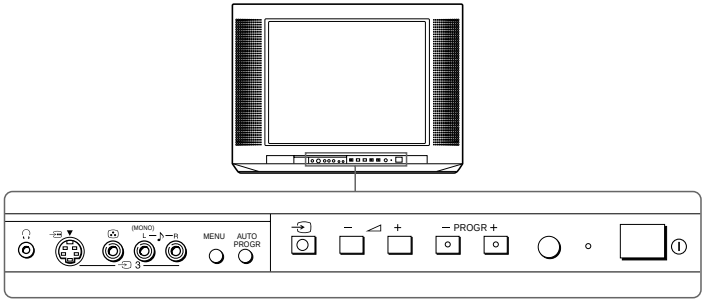
Symptom	Possible cause	Solutions	Page
Good picture **No sound** 	• The volume level is too low.	• Press + to increase the volume level.	11
	• The sound is muted.	• Press to cancel the muting.	11
	• Broadcast signal has a transmission problem.	• Press A/B until a good sound is heard.	18, 19
Dotted lines or stripes 	• There is local interference from cars, neon signs, hair dryers, power generators, etc.	• 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.	– –
Double images or "ghosts" 	• Broadcast signals are reflected by nearby mountains or buildings.	• Use a highly directional antenna. • Use the fine tuning (FINE) function.	– 32
	• The antenna direction is inappropriate.	• Adjust the antenna direction. Contact a Sony dealer for advice.	–
	• Use of a booster is inappropriate.	• Turn off or disconnect the booster if it is in use.	–
No color 	• The color level setting is too low.	• Display the "A/V CONTROL" menu and select "ADJUST" of "PICTURE MODE", then adjust the "COLOR" level.	25
	• The color system setting is inappropriate.	• Display the "CH PRESET" menu and check the color system (COL SYS) setting (usually set this to "AUTO").	30
	• The antenna direction is inappropriate.	• Adjust the antenna direction. Contact a Sony dealer for advice.	–
Abnormal color patches 	• The magnetic disturbance from external speakers or other equipment, or the direction of the earth's magnetic field may affect the TV.	• Keep external speakers or other electrical equipment away from the TV. Do not move the TV while the TV is turned on. Press ⏻ (main power) on the TV to turn off the TV for about five minutes, then turn it on again.	–
TV cannot receive stereo broadcast signal.	• The stereo reception setting is inappropriate.	• Press A/B until "AUTO" appears on the screen.	18, 19

Symptom	Possible cause	Solutions	Page
Stereo broadcast sound switches on and off or is distorted. **or** **The sound switches between monaural and stereo frequently.**	• Connection is loose or the cable is damaged.	• Check the antenna cable and connection on the TV, VCR and on the wall.	4
	• The antenna direction is inappropriate.	• Adjust the antenna direction. Contact a Sony dealer for advice.	–
	• Broadcast signal has a transmission problem.	• Press A/B until a good sound is heard.	18, 19
Picture slant 	• The terrestrial magnetism affects your TV set.	• Display the "SET UP" menu and adjust "PIC ROTATION" so that the picture is aligned to the TV screen.	27
Lines moving across the TV screen.	• There is interference from external sources, e.g., heavy machineries, nearby broadcast station.	• Use the fine tuning (FINE) function.	32
The ⏻ indicator on your TV flashes red a number of times between 3-second intervals.	• Your TV may need service.	• Contact your nearest Sony service center.	33
TV cabinet creaks.	• Changes in room temperature sometimes make the TV cabinet expand or contract, making a noise. This does not indicate a malfunction.	—	–
A "boom" sound is heard when the TV is turned on.	• The TV's demagnetizing function is working. This does not indicate a malfunction.	—	–

continued

Identifying parts and controls

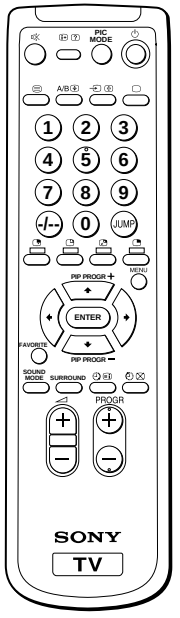
Front panel



Button	Function	Page
⏻	Turn off completely or turn on the TV.	10
PROGR +/–	Select program number.	10
◿ +/–	Adjust volume.	11
⊖	Select TV or video input.	11
MENU	Display the menu.	23
AUTO PROGR	Activate auto program.	5
🎧	Headphone jack.	–

continued

Remote control



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

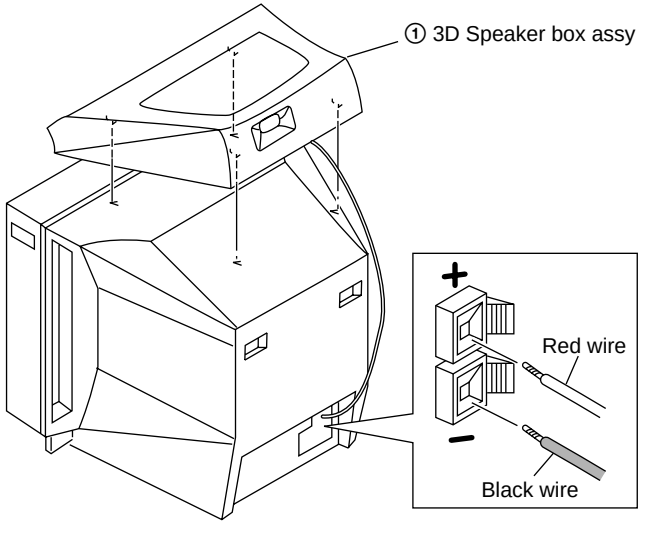
Label color	Button function
White	For general TV operations
Green	For Teletext operations
Yellow	For PIP operations

Button	Function	Page
🔇	Mute the sound.	11
ⓘ	Display on-screen information.	11
PIC MODE	Select picture mode.	13
⏻	Turn off temporarily or turn on the TV.	10
A/B	Select stereo/bilingual mode.	18
⊖	Select TV or video input.	11
▢	Display the TV program.	11
JUMP	Jump to previous channel.	11
Menu operation		
MENU	Display the menu.	23
↑/→/↓/←/ENTER	Menu operations.	23
SURROUND	Select surround mode.	17
Timer Operation		
🕒	Set TV to turn on automatically.	12
🕒	Set TV to turn off automatically.	12
FAVORITE	Display favorite channels.	14
SOUND MODE	Select sound mode.	13
PROGR +/–	Select program number.	10
◿ +/–	Adjust volume.	10
0 – 9, -/--	Input numbers.	10
Teletext operations (not used for this model)		
☰	Display Teletext broadcast.	20, 21
⊕	Enlarge the Teletext display.	20, 21
?	Reveal concealed information.	20, 21
⊕	Stop Teletext page from scrolling.	20, 21
▭ (red, green, yellow, blue)	A Fastext menu.	20, 21
☰i	Display Teletext service contents.	20, 21
⊠	Show TV screen while waiting for Teletext page.	20, 21
PIP operations	Select video input for PIP/ Twin picture.	15
◔	Freeze PIP screen.	15
◔	Swap main and PIP/ Twin picture.	15
◔	Display another smaller picture.	15
↑/↓ (PIP PROGR +/–)	Change program in PIP/ Twin picture.	15

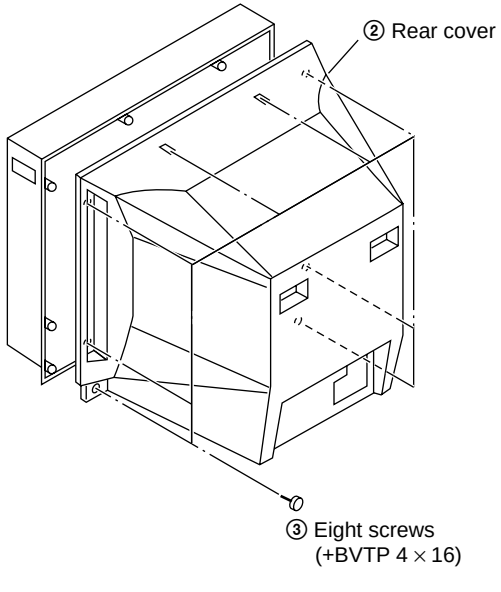
KV-XS29M80/XS29M97
RM-954 RM-953

SECTION 2
DISASSEMBLY

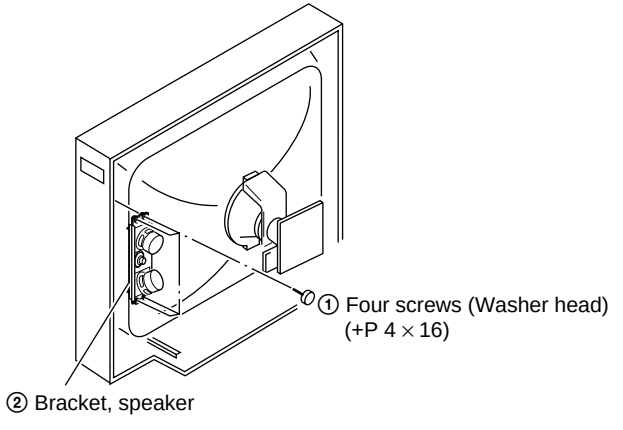
2-1. 3D SPEAKER BOX REMOVAL



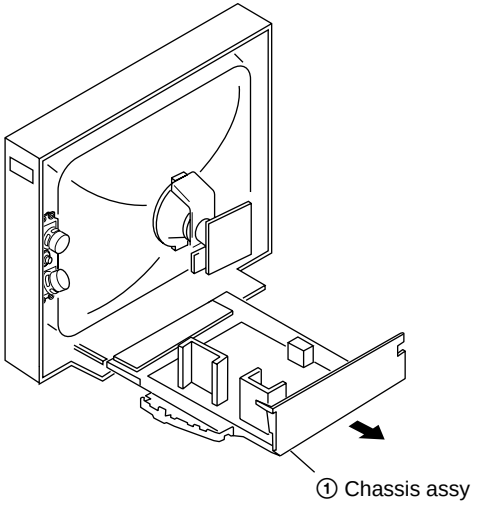
2-2. REAR COVER REMOVAL



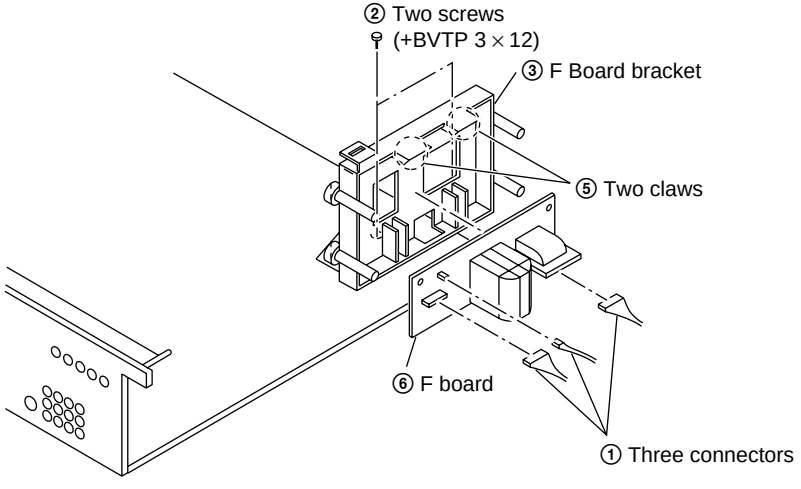
2-3. SPEAKER REMOVAL



2-4. CHASSIS ASSY REMOVAL

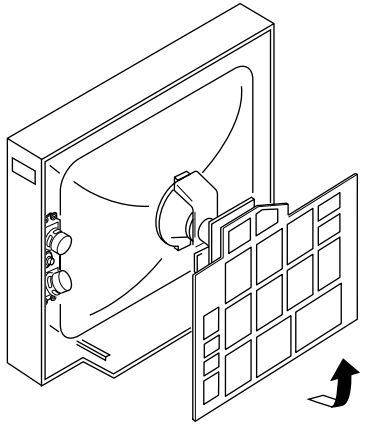


2-5. F BRACKET REMOVAL



2-6. SERVICE POSITION

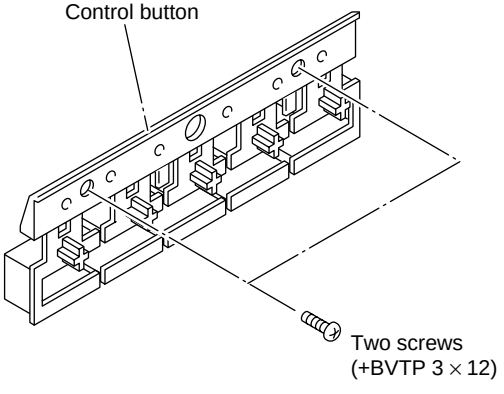
(Note: Remove F Bracket first.)



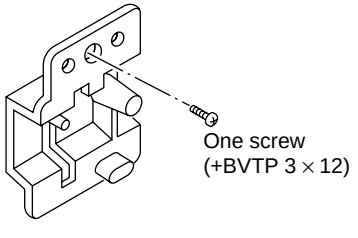
2-7. REPLACEMENT OF PARTS

For replacement of the Control Button and Light Guide, unscrew them, exchange with the new parts, and fix them with screws (+BVTP) respectively.

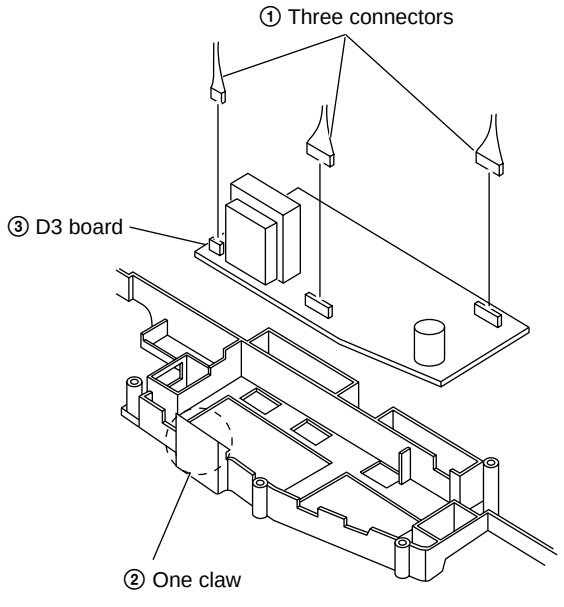
2-7-1. REPLACEMENT OF CONTROL BUTTON



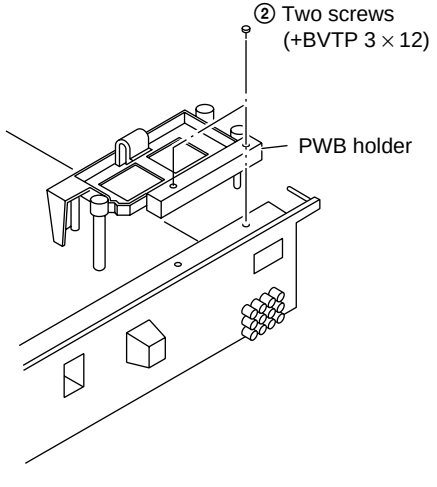
2-7-2. REPLACEMENT OF LIGHT GUIDE



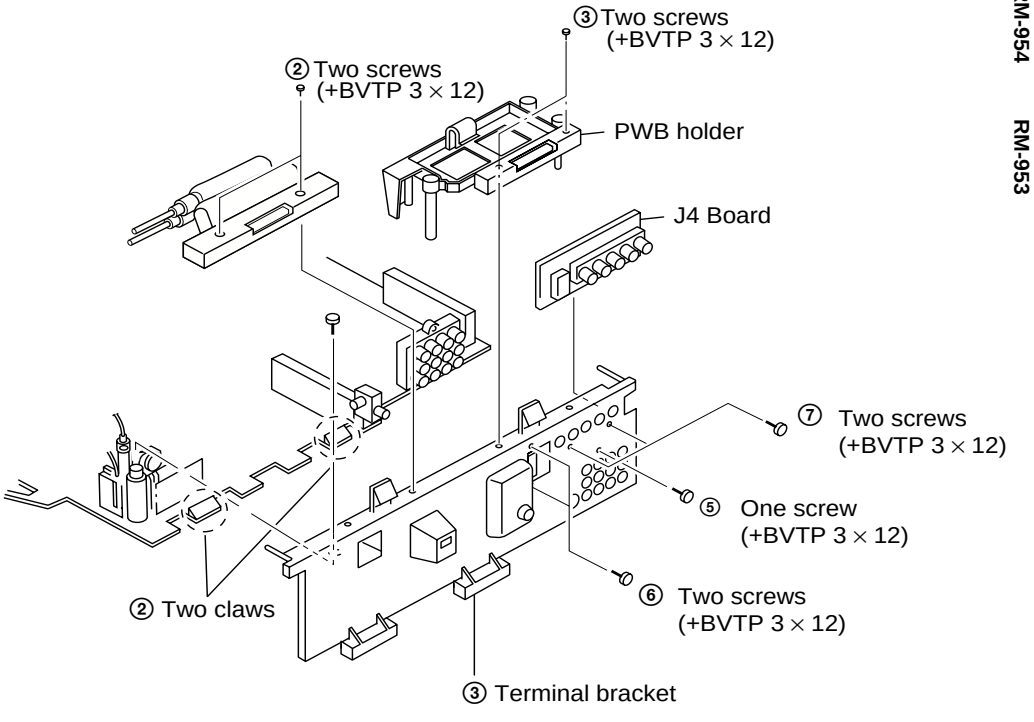
2-8. D3 BOARD REMOVAL



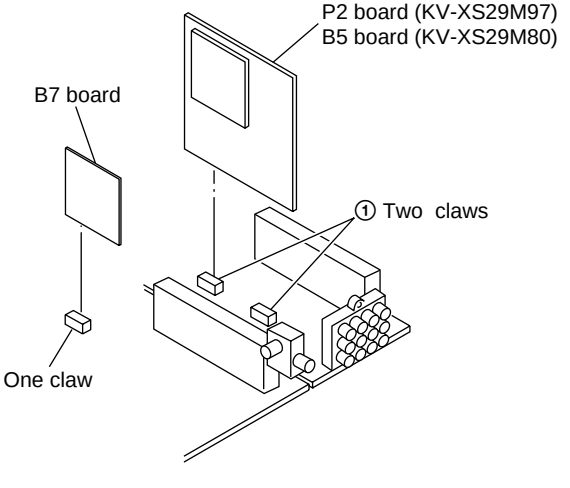
2-9. PWB HOLDER REMOVAL



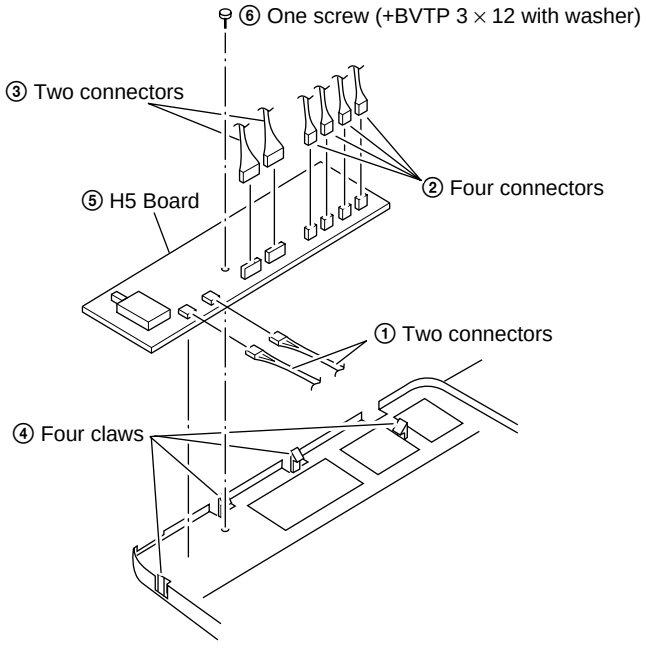
2-10. TERMINAL BRACKET REMOVAL



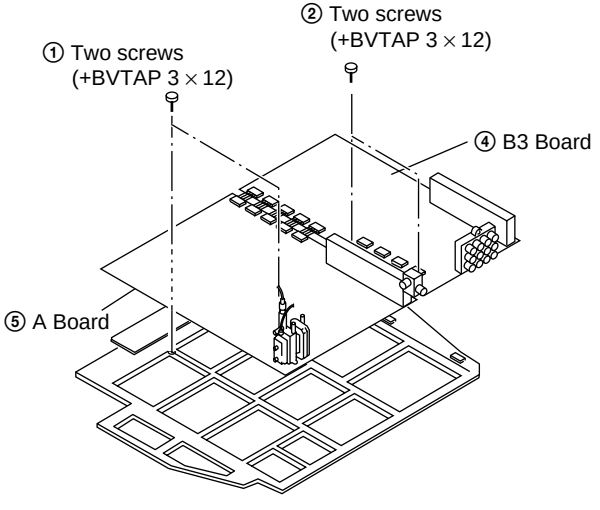
2-11. P2, B5 and B7 BOARDS REMOVAL



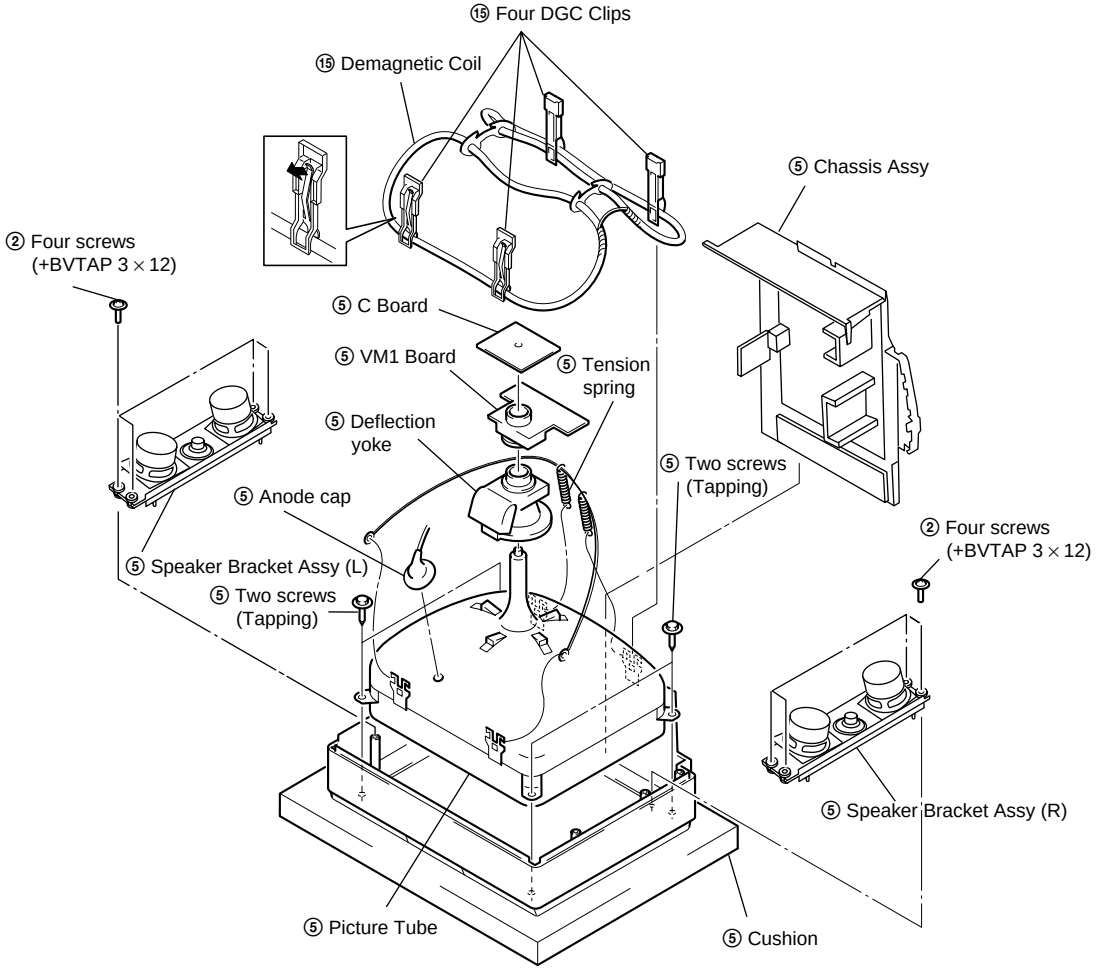
2-12. H5 BOARD REMOVAL



2-13. A AND B3 BOARDS REMOVAL



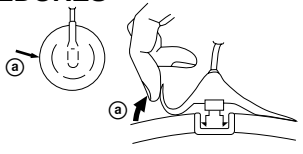
2-14. PICTURE TUBE REMOVAL



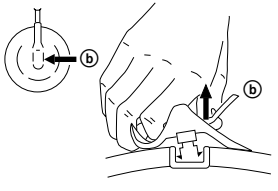
• REMOVAL OF ANODE-CAP

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.

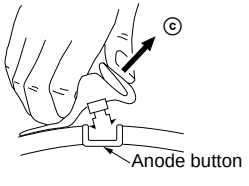
• REMOVING PROCEDURES



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



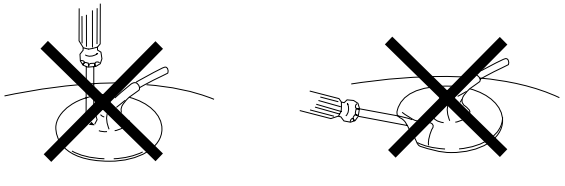
② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.



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

1. Input a white signal with the pattern generator.
   Contrast } normal
   Brightness }
2. Position neck assy as shown in Fig3-2.
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 3-4.)
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 red 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 3-5.)

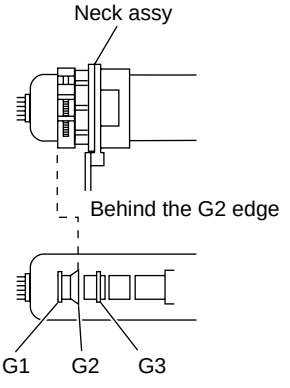


Fig. 3-1

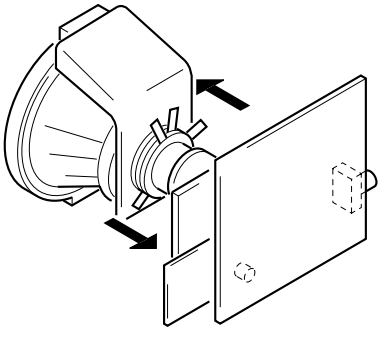


Fig. 3-2

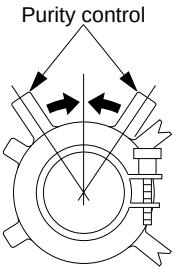


Fig. 3-3

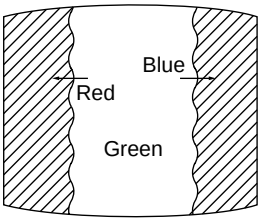


Fig. 3-4

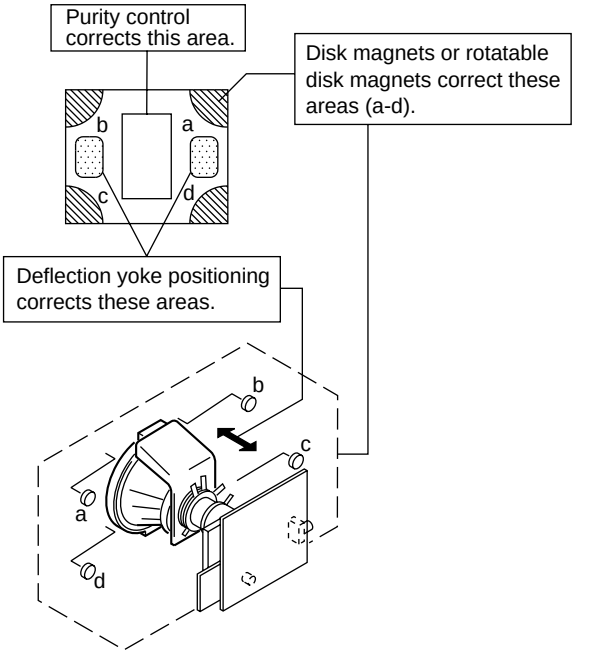


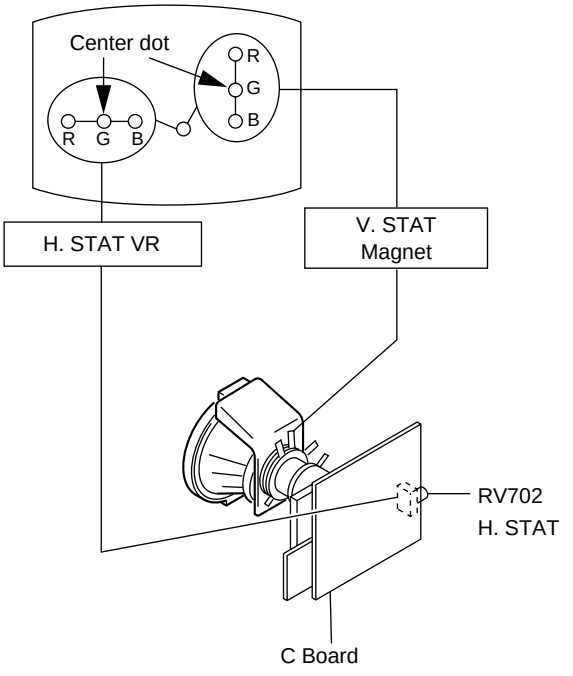
Fig. 3-5

3-2. CONVERGENCE

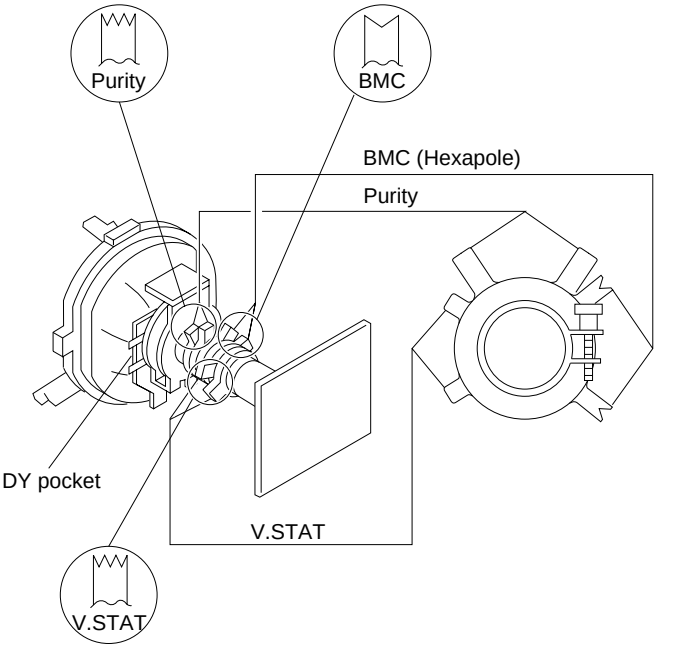
Preparation :

- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

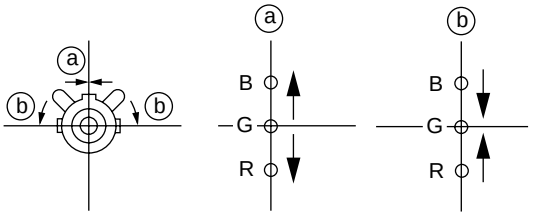
(1) Horizontal and Vertical Static Convergence



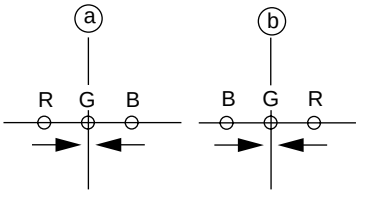
1. (Moving horizontally), adjust the H.STAT control so that the red, green and blue dots are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue dots are on top of each other at the center of the screen.
3. If the H.STAT variable 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.)



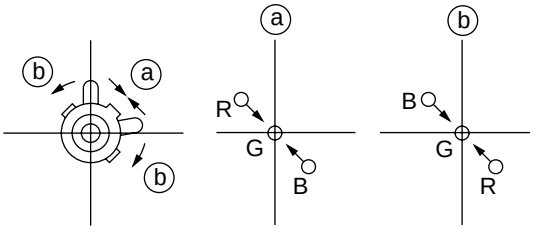
① V. STAT



② H. STAT VR

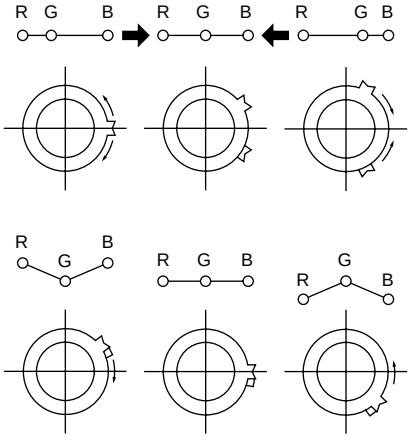


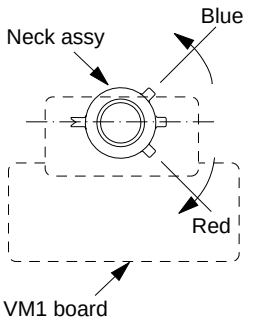
③

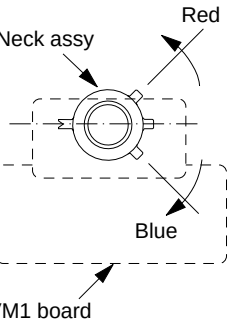


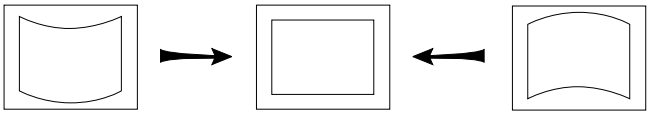
④ BMC (Hexapole) Magnet.

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.

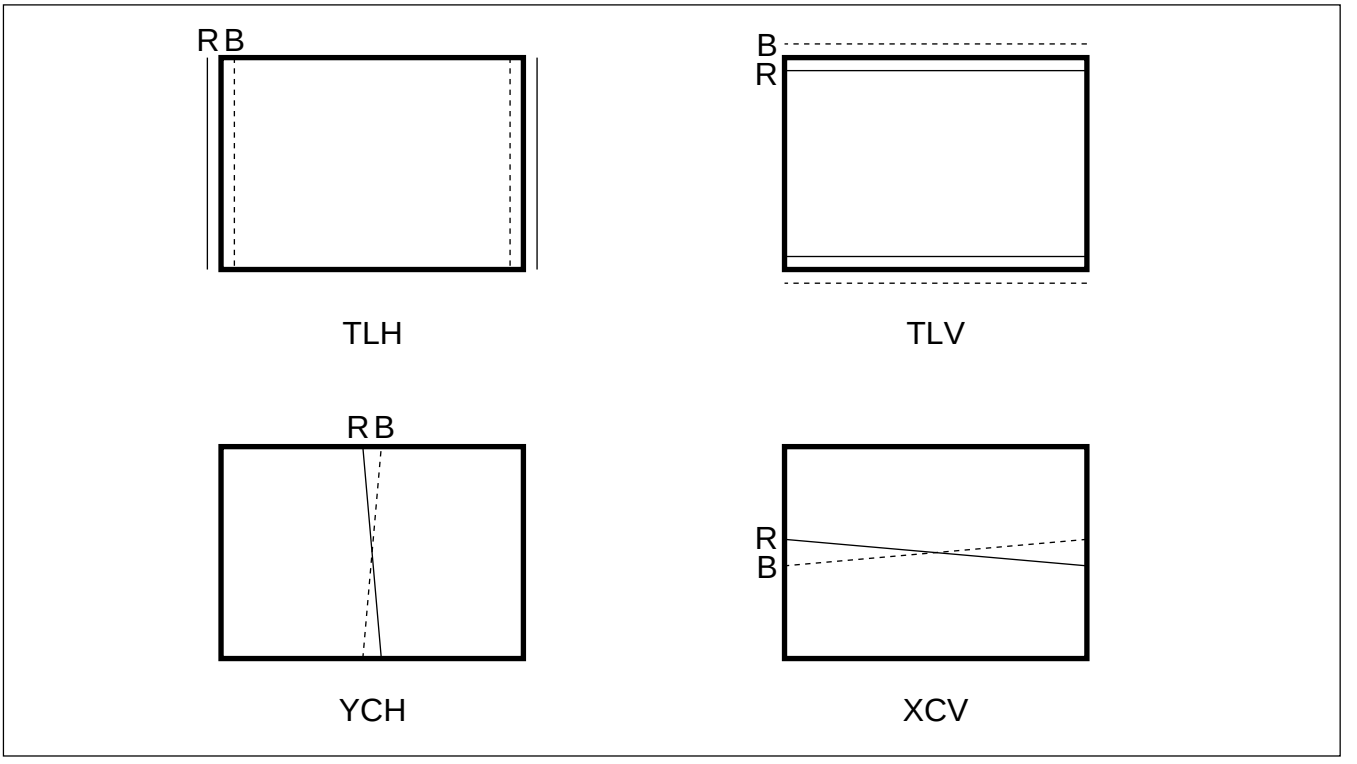
Note

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

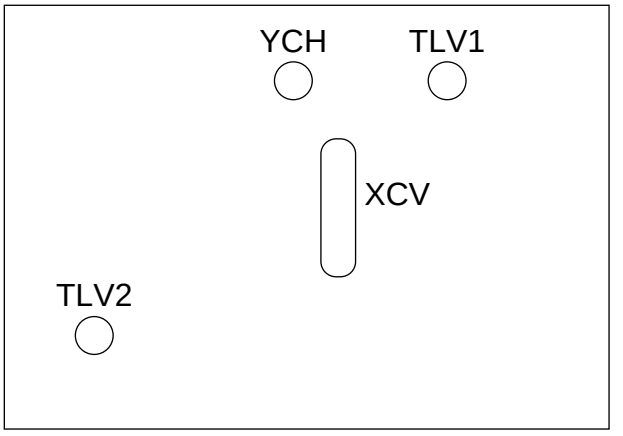
Preparation:

- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence

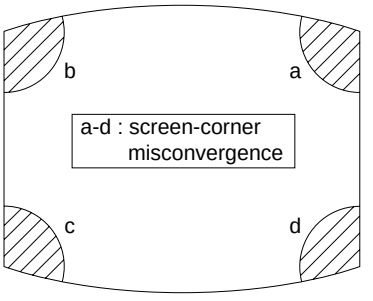


TLV	Rotate	TLV-2	VOL (29”, 34”) on DY
	Rotate	TLV	VOL (25”) on DY
XCV	Rotate	XCV	Adj core on DY
YCH	Rotate	YCH	VOL on DY
TLH	Insert	TLH	Correction Plate to DY Pocket (Left or Right)

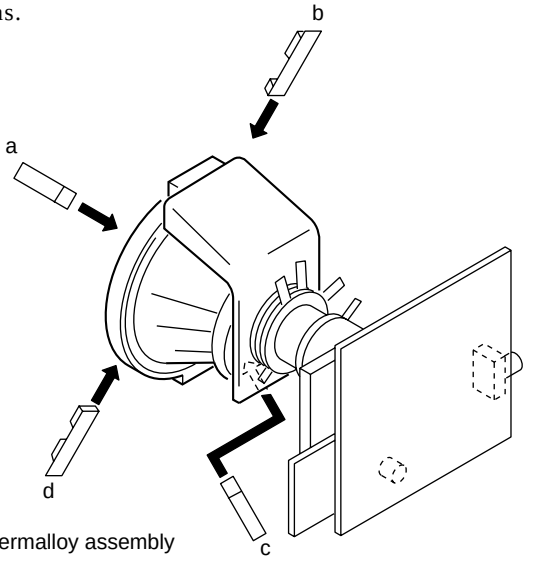
ON DY:



(3) Screen-corner Convergence

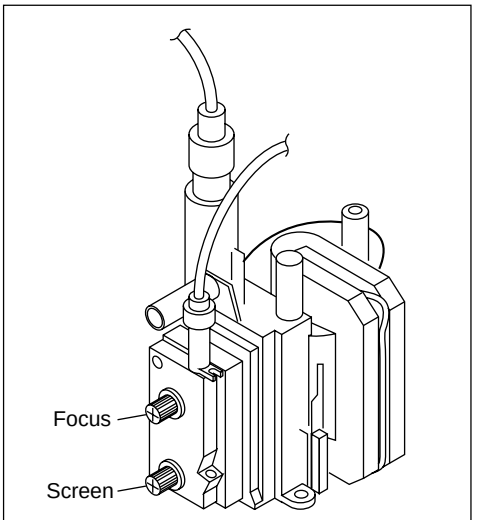


Fix a Permalloy assy corresponding to the misconverged areas.



3-3. FOCUS ADJUSTMENT

Adjust FOCUS control on the flyback transformer for the best focus.

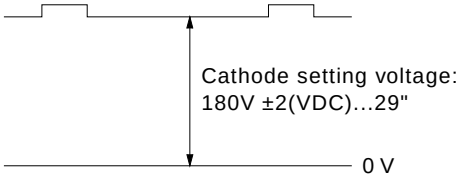


FLYBACK TRANSFORMER (T503)

3-4. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

1. G2 (SCREEN) ADJUSTMENT

1) Set the PICTURE 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 BRIGHTNESS to obtain the cathode voltage to the value below.
5) Adjust G2 (screen) on the FBT until picture shows the point before cut off.

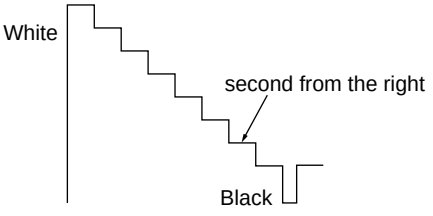


2. WHITE BALANCE ADJUSTMENT

1) Set to Service Mode (Refer Section 4-1: ADJUSTMENTS WITH COMMANDER).
2) Input white raster signal.
3) Set the PICTURE to minimum.
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].

3. SUB BRIGHT ADJUSTMENT

1) Set to service mode.
2) Input a staircase signal of black to white from the pattern generator.
3) BRIGHTNESS .... 50%.
   PICTURE ..... MINIMUM
4) 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.



SECTION 4
CIRCUIT ADJUSTMENTS

4-1. ADJUSTMENTS WITH COMMANDER

Service adjustments are made with the RM-954 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.

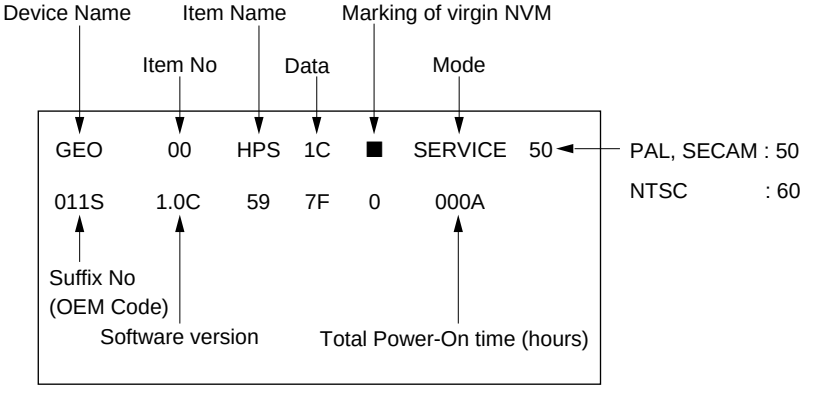
c. METHOD OF WRITE INTO MEMORY

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

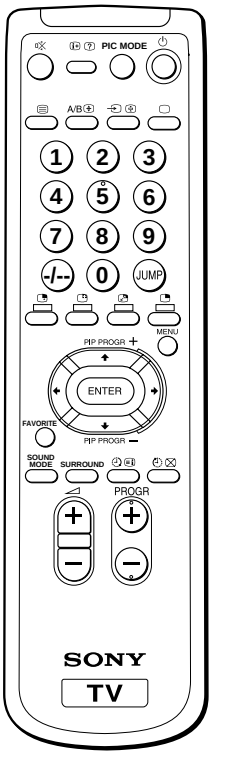
1) After adjustment, pull out the plug from AC outlet, and then plug into AC outlet again.
2) Turn the power switch ON and set to Service Mode.
3) Call the adjusted items again to confirm adjustments were made.

The screen display is :

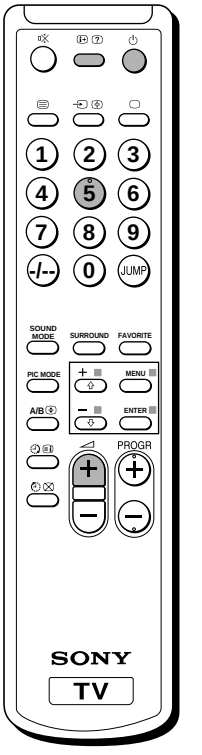


[1], [4]	Select the adjustment item.
↓	
[3], [6]	Raise/lower the data value.
↓	
[MUTING]	Writes.
↓	
[0]	Executes the writing.

[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-953



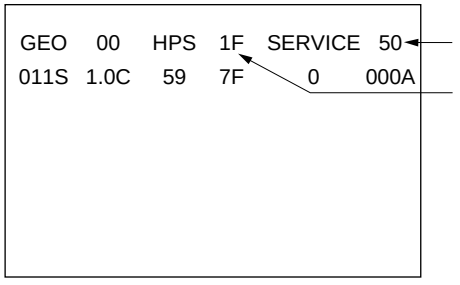
RM-954

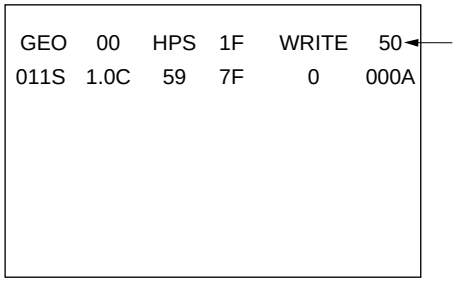
4-2. ADJUSTMENT METHOD

Item Number 00 of device GEO

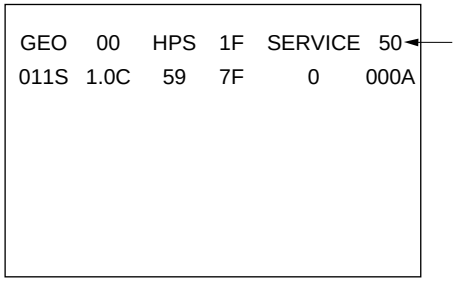
This explanation uses H-Position as an example.

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	Register No. (bit)	Slava Address	RAM Address (bit)
GEO	0	HPS	7	3F	H Position	50/60Hz	12 (7-2)	CXA2130S(88H)	96 (7-2)
	1	HSZ	1F	3F	H Size	50/60Hz	11 (7-2)		95 (7-2)
	2	PAP	1F	3F	Pin Amp	50/60Hz	13 (7-2)		97 (7-2)
	3	TLT	7	0F	Trapezium	50/60Hz	15 (7-4)		99 (7-4)
	4	VPS	1F	3F	V Position	50/60Hz	0F (7-2)		93 (7-2)
	5	VSZ	1F	3F	V Size	50/60Hz	0E (7-2)		92 (7-2)
	6	SCO	7	0F	S Correction	50/60Hz	10 (7-4)		94 (7-4)
	7	VLN	7	0F	V Linearity	50/60Hz	10 (3-0)		94 (3-0)
	8	BOW	7	0F	AFC Bow	50/60Hz	16 (7-4)		9A (7-4)
	9	AGL	7	0F	AFC Angle	50/60Hz	16 (3-0)		9A (3-0)
	10	UPN	1F	3F	Upper Pin	50/60Hz	14 (7-2)		98 (7-2)
	11	LPN	2F	3F	Lower Pin	50/60Hz	18 (7-2)		9C (7-2)
	12	HBL	1	1	H Blanking on/off		18 (1)		6C (1)
	13	LBL	0F	0F	Left H Blanking	50/60Hz	17 (7-4)		9B (7-4)
	14	RBL	2	0F	Right H Blanking	50/60Hz	17 (3-0)		9B (3-0)
WHB	0	RDR	1F	3F	R Drive	DYNAMIC/others	09 (7-2)	CXA2130S(88H)	A3 (7-2)
	1	GDR	1F	3F	G Drive	DYNAMIC/others	0A (7-2)		A4 (7-2)
	2	BDR	1F	3F	B Drive	DYNAMIC/others	0B (7-2)		A5 (7-2)
	3	RCT	7	0F	R Cutoff	SECAM/others	07 (3-0)		A7 (3-0)
	4	GCT	7	0F	G Cutoff	SECAM/others	08 (7-4)		A8 (7-4)
	5	BCT	7	0F	B Cutoff	SECAM/others	08 (3-0)		A8 (3-0)
	6	BMN	15	1F	Brightness Minimum Data		06 (7-2)		106
	7	SBR	1F	3F	Sub Brightness Control		06 (7-2)		107
SAJ	0	PMX	33	3F	Picture Maximum Data		03 (7-2)	CXA2130S(88H)	105
	1	SHU	8	0F	Sub Hue Control	TV/Video	05 (7-2)		108
	2	SSH	8	0F	Sub Sharpness Control	TV/Video	07 (7-4)		109
	3	SCL	1F	3F	Sub Color Control	NTSC/others	04 (7-2)		10A
VP	0	EHT	5	0F	EHT Comp	50/60HLC	15 (3-0)	CXA2130S(88H)	99 (3-0)
	1	GMA	2	03	Gamma Correction	NTSC/others	0B (1-0)		25B (1-0)
	2	YDL	6	0F	Y Delay	PAL/SECAM/NTSC/DVD	0C (3-0)		A0 (3-0)
	3	SST	1	03	SECAM ID Start Position		1B (1-0)		6F (1-0)
	4	SSP	1	03	SECAM ID Stop Position		1B (3-2)		6F (3-2)
	5	SLV	2	03	SECAM ID Level		1C (1-0)		70 (1-0)
	6	SBF	22	3F	SECAM BELL fO		1C (7-2)		70 (7-2)
	7	DYC	1	1	Dynamic Color on/off		0A (1)		5E (1)
	8	ABL	1	1	ABL Mode Switching (except STANDARD)		09 (1)		5D (1)
	9	VTH	1	1	ABL Detection Vth Switching		09 (0)		5D (0)
	10	SFO	1	1	FO Switching for Sharpness	NTSC/others	05 (1)		24A (1)
	11	DCX	1	1	DC Trans. Ratio Switching		06 (1)		5A (1)
	12	SHT	1	1	Pre-/Overshoot ratio Switch	NTSC/others	06 (0)		24A (0)

Adjustment Item Table

Device Name	Functionality No	Functionality Name	Note	Data Range	Function	Note for Different Data	Register No. (bit)	Slava Address	RAM Address (bit)
VP	13	HDW	0	1	H Drive Pulse Width Switch		00 (6)		54 (6)
	14	AFC	1	03	AFC Gain Control	TV/Video/Text	0F (1-0)		A1 (1-0)
	15	HOS	7	0F	H Oscillation		0C (7-4)		60 (7-4)
	16	HSS	0	1	Slice Level of H Sync Sep.		0D (1)		61 (1)
	17	VSS	0	1	Slice Level of V Sync Sep.		0D (0)		61 (0)
	18	HMS	1	1	Macro Vision C/m off/on	50/60Hz	0E (0)		92 (0)
	19	YUV	0	1	YUV Switch Control		01 (0)		55 (0)
	20	CDV	1	3	CD mode for Video	Video only	0D (5-4)		259 (5-4)
	21	RON	1	1	R ON	not memorized	01 (3)		55 (3)
	22	GON	1	1	G ON	not memorized	01 (2)		55 (2)
	23	BON	1	1	B ON	not memorized	01 (1)		55 (1)
	24	PON	1	1	P ON	not memorized	00 (7)		54 (7)
	25	BLK	0	1	BLK Off		12 (0)		66 (0)
	26	VMC	0	1	VM Off		13 (0)		67 (0)
AP	0	BCS	1	3	Bass Center Shift		#4 (3-0)	TDA7315(80H)	24C (1-0)
	1	TCS	1	3	Treble Center Shift		#5 (3-0)		24D (1-0)
	2	TRF	2	3	RF Treble Offset		#5 (3-0)		256 (1-0)
MSP	0	WST	15	FF	W/G Stereo Threshold			MSP3415D(84H)	165
	1	WBT	EA	FF	W/G Bilingual Threshold				166
	2	WLL	5	FF	W/G Monaural Threshold				167
	3	WAC	1	0F	W/G Agreement Count				168
	4	WDL	30	FF	W/G Search Delay				169
	5	NDL	20	FF	NICAM Search Delay				16A
	6	SDL	10	FF	Stereo status Read Delay				16B
	7	AGC	1	1	AGC Switch Auto/Constant		00BB (7)		116 (7)
	8	REL	28	3F	AGC Gain at Constant Mode		00BB (6-1)		116 (6-1)
	9	CRM	0	1	Carrier muting on/off		00BB (9)		115 (9)
	10	ACO	1	1	Audio Clock out on/off		0083 (5)		11A (5)
	11	FP	1B	7F	FM Prescale for non-M system		000E (14-8)		221
	12	FPM	32	7F	FM Prescale for M system		000E (14-8)		222
	13	FH	36	7F	FM Prescale for HDEV		000E (14-8)		223
	14	FHM	65	7F	FM Prescale for HDEV and M		000E (14-8)		224
	15	WGP	2A	7F	W/G Prescale		000E (14-8)		225
	16	NIP	6D	7F	NICAM Prescale		0010 (14-8)		14F
	17	ERR	50	FF	Auto FM switch Threshold		0021 (10-3)		174
	18	VOL	6D	FF	Loud Speaker gain 7000h to 7ff0h		0000 (15-4)		252

Adjustment Item Table

Device Name	Functionality No	Functionality Name	Note	Data Range	Function	Note for Different Data	Register No. (bit)	Slava Address	RAM Address (bit)
SVP	0	SBF	22	3F	SECAM BELL f0		1C (7-2)	CXA2060AS(8AH)	85 (7-2)
	1	HOS	7	0F	H Oscillation		0C (7-4)		80 (7-4)
	2	SHU	8	0F	Sub Hue Control	TV Video	05 (7-2)		210
	3	SCL	1F	3F	Sub Color Control	NTSC/others	04 (7-2)		211
PIP	0	SDL	1	0F	Delay of output SELECT		01 (6-3)	SDA9288X(D6H)	18E (6-3)
	1	PPH	15	FF	H Position of TOP-LEFT Pin P		01/02		190
	2	PPV	2E	FF	V Position of TOP-LEFT Pin P		03 (7-0)		19E
	3	YDL	0	07	Delay of Luminance Input		04 (2-0)		191 (2-0)
	4	HDI	0	0F	H Sync Delay for Inset		06 (3-0)		193 (3-0)
	5	ISC	01	1	Inset Clock Selection		06 (4)		193 (4)
	6	CLP	1	1	Clamp Pulse Selection		06 (5)		193 (5)
	7	CLC	0	1	Clamp Cycle Selection		06 (6)		193 (6)
	8	CON	1	0F	Contrast Adjustment for inset		09 (7-4)		196 (7-4)
	9	PLL	2	03	H Position For A-ch		0D (6-5)		19A (6-5)
	10	PDV	0	0F	PIP V Pedestal Level		0E (7-4)		19B (7-4)
	11	PDU	0	0F	PIP U Pedestal Level		0E (3-0)		19B (3-0)
OPM	0	OSH	0A	3F	OSD H Position	Option-Misc	1F1	CXP86461(60H)	17B (7-2)
	1	COM	1	03	Comb Selection				23F (7-6)
	2	APC	1	1	APC Switch				23E (5)
	3	TSY	0	03	TV Sys at Auto TV Sys				23E (4-3)
	4	MUT	0	1	No Signal Mute				23E (0)
	5	AFM	1	1	Auto FM switch				23E (1)
	6	RFB	0	3	C-BPF Control				23F (5-4)
	7	TVO	0	7	Tilt to V-Angle offset				23F (2-0)
	8	DBL	0	1	Disable Blueback function				23F (2)
OPB	0	OP1	FF	FF	Optional Bits 1 (see below)	Option-Bits		CXP86461(60H)	48
	1	OP2	E3	FF	Optional Bits 2 (see below)				49
	2	OP3	0	FF	Optional Bits 3 (see below)				4A
	3	OP4	7	FF	Optional Bits 4 (see below)				4B

NOTE

- shaded items are fixed data.
- 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
KV-XS29M80	1	1	1	1	1	1	1	1
KV-XS29M97	1	1	1	1	1	1	1	1

No. OPB1 OP2

Item	TOP	NICAM	HDEV	Thai Bil	Dis. Fav	DVD Input	AV Input	
KV-XS29M80	0	0	0	0	0	0	1	1
KV-XS29M97	0	1	1	0	0	1	1	1

No. OPB2 OP3

Item	PIC Rotate	2199 Curve	Auto PIC	Auto TV sys	US ST	AV Mono	11 KEY	Color SW
KV-XS29M80	0	0	1	1	0	0	0	1
KV-XS29M97	0	0	1	1	0	0	0	0

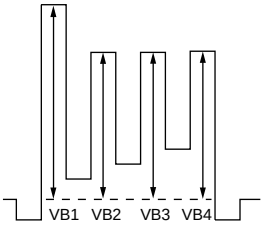
No. OPB3 OP4

Item	–	–	–	–	–	Chinese	Arabic	Thai
KV-XS29M80						1	1	1
KV-XS29M97						1	1	1

4-3. PICTURE QUALITY ADJUSTMENTS

SUB COLOR ADJUSTMENT

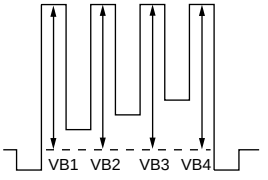
1. Input a PAL color-bar.
2. Set to the following condition:
   PICTURE 100%, BRIGHTNESS 50%, COLOR 50%
3. Connect an oscilloscope to pin ① (B OUT) of CN305, A board.
4. Set to Service Mode and select SAJ 3 'SCL' with [1] and [4] of the commander then adjust to VB2=VB3=VB4 with [3] and [6].
5. Press [MUTING] → [0] of the commander to write the data.
6. Adjust SAJ 3 'SCL' as step 2 to 5 when receiving NTSC color-bar.



VB2 = VB3 = VB4

SUB HUE ADJUSTMENT

1. Select Video 1.
2. Input a NTSC color-bar, video into Video 1.
3. Set the following condition:
   PICTURE 100%, BRIGHTNESS 50%, COLOR 50%
4. Connect an oscilloscope to pin ① (B OUT) of CN305, A board.
5. Select SAJ 1 'SHU' with [1] and [4] of the commander by setting to Service Mode and adjust to VB1=VB2=VB3=VB4 with [3] and [6].

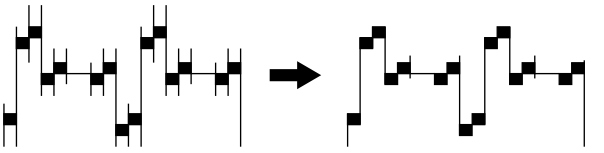


VB1 = VB2 = VB3 = VB4

6. Press [MUTING] → [0] of the commander to write the data.

BELL FILTER ADJUSTMENT

1. Input SECAM color-bar signal.
2. Connect the dual-trace oscilloscope to CN303 pin ⑨ (not mounted).
3. Adjust SERVICE MODE, ITEMS 'SBF' as shown below.



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.
IC001(µ-CON):
CXP750097-011S

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]).

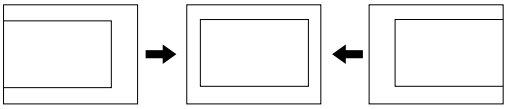
4. Select item numbers "OPB0" (OP1), "OPB1" (OP2) and "OPB2" (OP3) and respectively set the bit per model with command buttons [3] and [6].

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.)

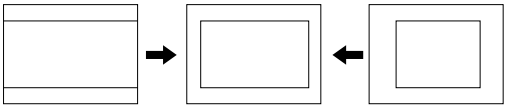
4-5. PICTURE DISTORTION ADJUSTMENT (1)

Item Number 00 – 0B

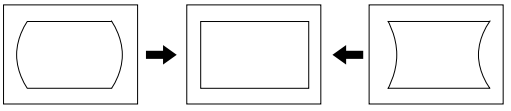
GEO 0 HPS (H POSITION)



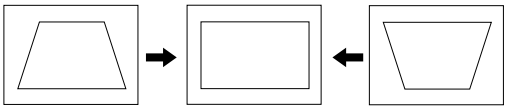
GEO 1 HSZ (H SIZE)



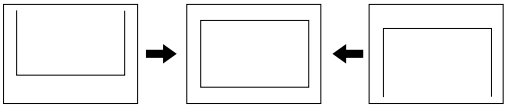
GEO 2 PAP (PIN AMP)



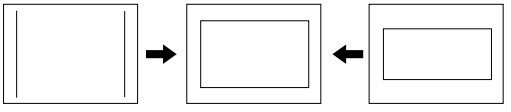
GEO 3 TLT (TRAPEZIUM)



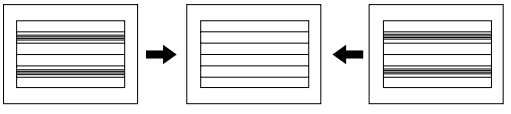
GEO 4 VPS (V POSITION)



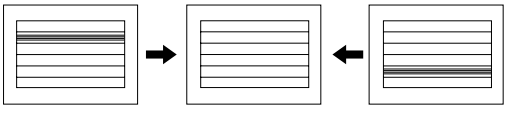
GEO 5 VSZ (V SIZE)



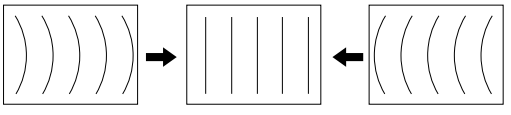
GEO 6 SCO (VERTICAL S-Correction)



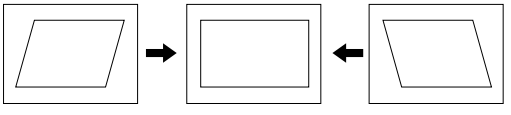
GEO 7 VLN (V LINEARITY)



GEO 8 BOW (AFC.BOW)

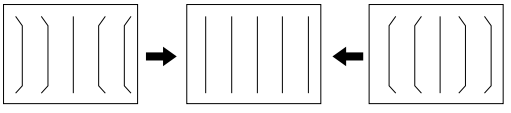


GEO 9 AGL (AFC.ANGLE)



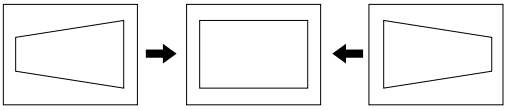
GEO 0A UCP (UPPER CORNER PIN)

GEO 0B LCP (LOWER CORNER PIN)



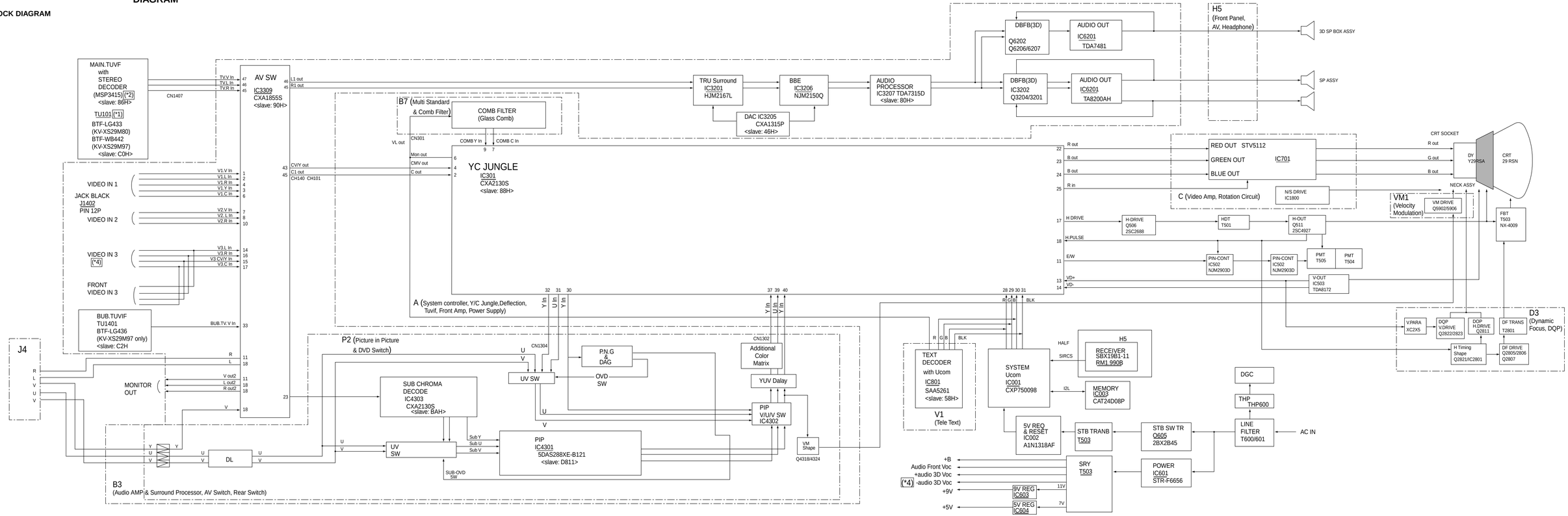
PICTURE DISTORTION ADJUSTMENT (2)

H-TRAPEZOID (Rotate RV1801)



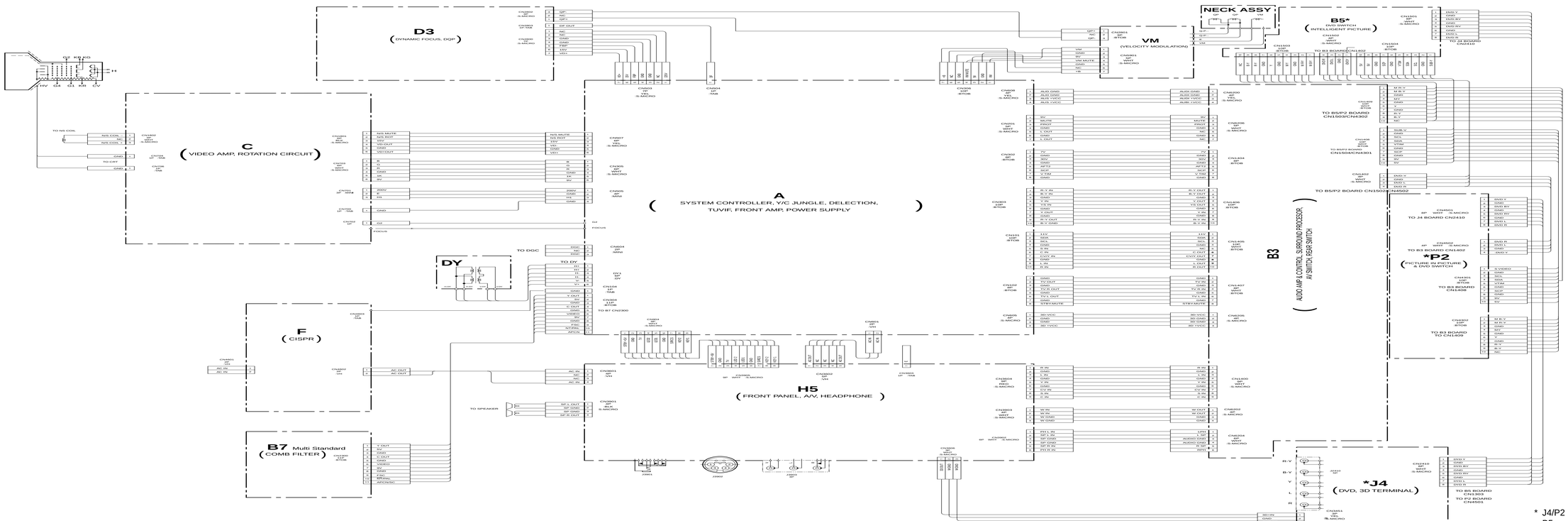
SECTION 5
DIAGRAM

5-1. BLOCK DIAGRAM



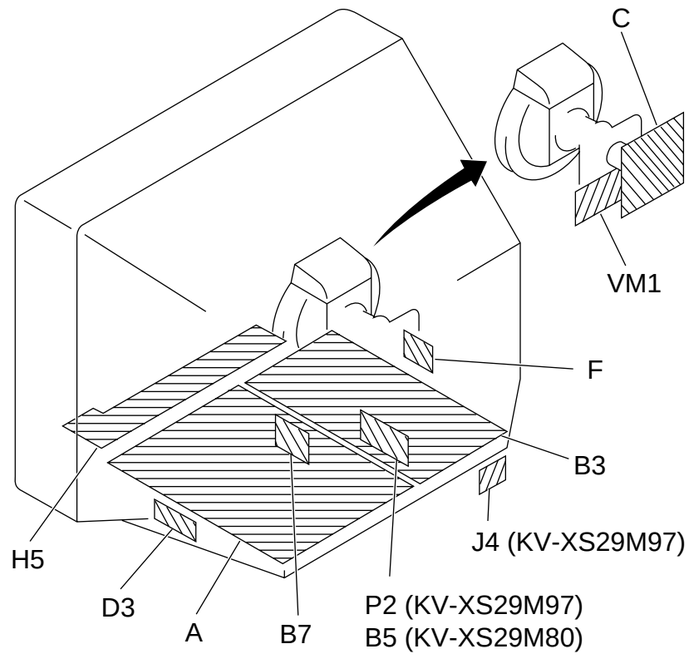
KV-XS29M80/XS29M97 KV-XS29M80/XS29M97
RM-954 RM-953 RM-954 RM-953

5-1. FRAME SCHEMATIC DIAGRAM

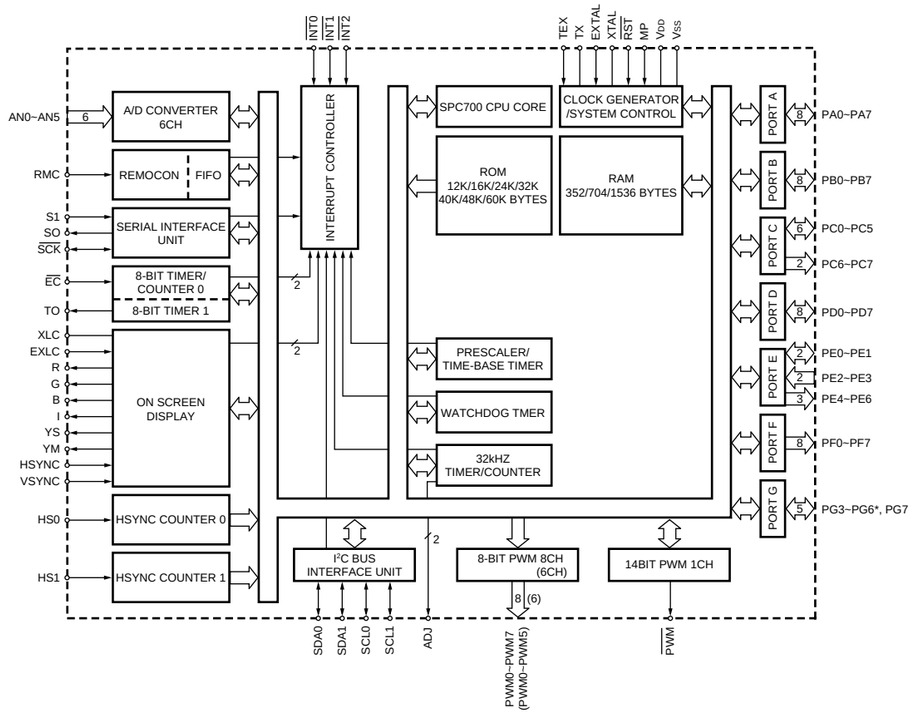


KV-XS29M80/XS29M97 RM-954 RM-953

5-3. CIRCUIT BOARDS LOCATION



A BOARD IC001 CXP750097-011S



5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

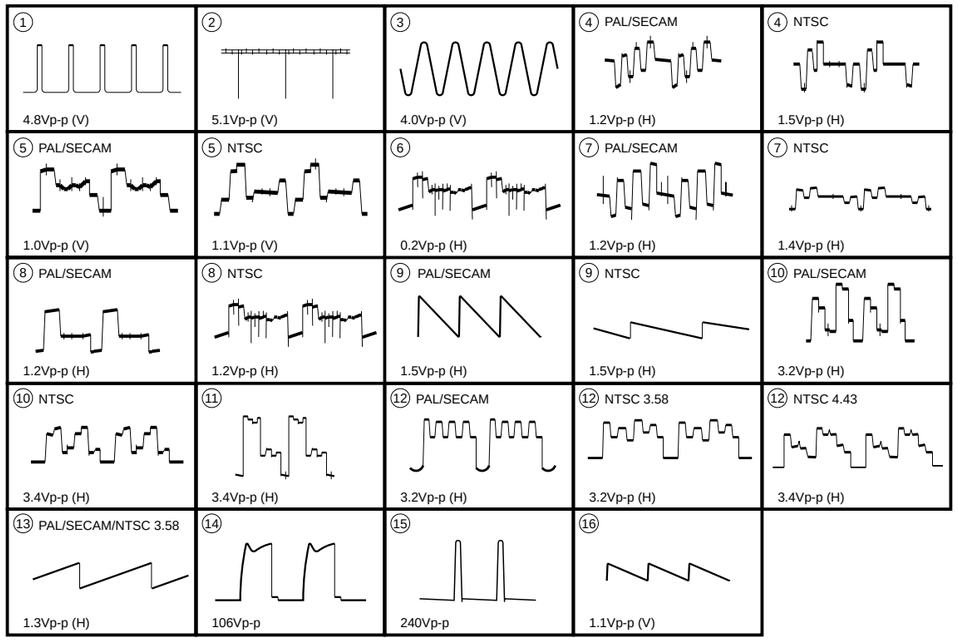
- All capacitors are in µF unless otherwise noted.
- All electrolytic capacitors are rated at 50V unless otherwise noted.
- All resistors are in ohms.
  kΩ = 1000Ω, MΩ = 1000kΩ
- Indication of resistance which does not have rating electrical power is as follows.
  Pitch: 5 mm
  Rating electrical power 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 3.58
  « » : NTSC 4.43
- **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.**
- *** : Cannot be measured.**
- **Circled numbers are waveform references.**
- **: B + bus.**
- **: B – bus.**
- **: signal path.**

Reference information

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

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

A BOARD WAVEFORMS



KV-XS29M80/XS29M97
RM-954 RM-953

A BOARD

IC

IC001	B-10
IC002	C-9
IC003	A-9
IC100	B-5
IC201	B-11
IC203	C-3
IC204	B-2
IC301	B-6
IC502	E-6
IC503	J-5
IC601	I-8
IC602	H-6
IC603	D-8
IC604	D-10
IC901	I-13
PH600	H-7

TRANSISTOR

Q001	B-8
Q002	B-8
Q003	C-9
Q004	C-9
Q101	A-4
Q201	A-11
Q202	A-11
Q203	C-11
Q204	C-11
Q205	A-12
Q206	A-11
Q207	A-11
Q301	B-8
Q302	A-6
Q303	A-6
Q304	B-6
Q305	B-5
Q306	B-5
Q307	C-7
Q308	C-7
Q309	C-7
Q310	D-7
Q311	D-9
Q312	B-7
Q313	B-8
Q315	B-5
Q401	D-2
Q402	D-1
Q403	D-2
Q404	C-3
Q501	D-6
Q502	E-7
Q503	F-6
Q505	D-6
Q506	D-2
Q507	H-6
Q509	F-6
Q511	F-1
Q600	C-12
Q601	F-11
Q602	J-7
Q603	I-7
Q604	H-6
Q605	E-12
Q606	F-11
Q607	H-13
Q901	H-13
Q902	H-13

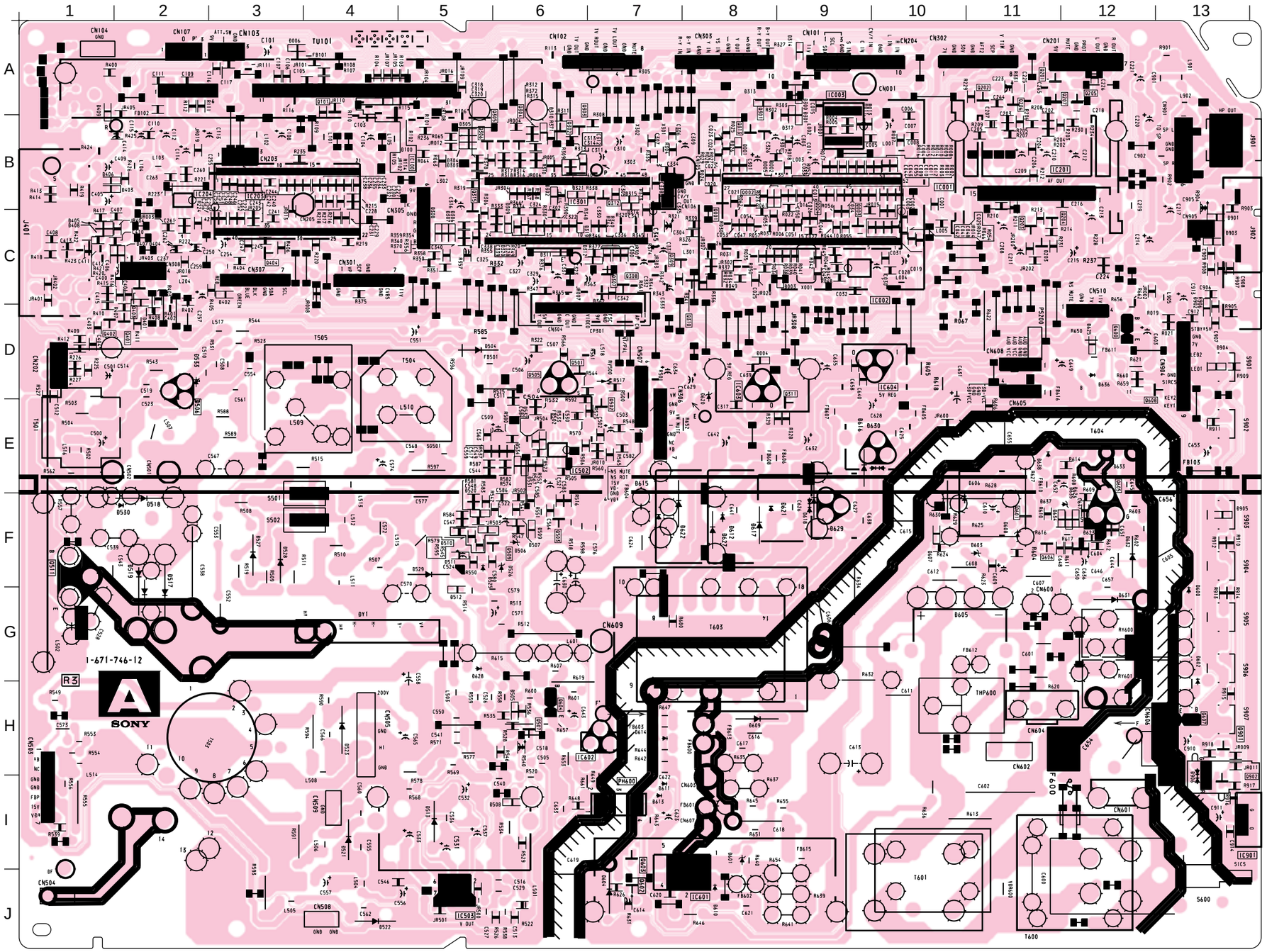
DIODE

D001	B-8
D002	C-8
D003	C-9
D004	D-8
D005	B-8
D006	A-3
D203	C-11
D300	A-9
D301	B-9
D302	B-6
D303	B-5
D304	B-5
D305	B-5
D306	C-5
D307	C-5
D308	B-5
D309	B-6
D310	A-6
D311	C-6
D312	C-6
D313	A-8
D315	B-7
D316	C-7
D317	B-9
D314	A-9
D319	C-6
D320	C-6
D321	B-6
D401	D-2
D402	C-3
D403	B-1
D404	C-2
D405	C-1
D406	B-1
D407	C-2
D408	C-1
D409	A-1
D504	D-5
D505	H-6
D506	F-6
D507	F-6
D508	I-5
D509	E-6
D510	F-5
D511	F-5
D512	G-5
D513	I-5
D517	F-2
D518	F-2
D519	F-2
D520	E-5
D521	I-4
D522	J-4
D525	F-5
D526	F-6
D527	F-3
D528	F-3
D529	F-5
D530	F-2
D531	E-6
D532	E-6
D533	D-2
D534	E-6
D600	G-13
D601	I-8
D602	G-13
D603	F-11
D604	J-7
D605	G-10
D606	E-11
D607	F-10
D608	E-11
D609	H-8
D610	J-8
D611	I-7
D612	F-8
D613	I-7
D614	H-7
D615	E-7
D616	E-9
D617	F-8
D618	F-9
D620	D-8
D621	F-8
D622	F-7
D623	F-12
D624	F-12
D625	D-12
D627	F-8
D628	G-5
D629	F-9
D630	E-9
D631	G-12
D632	F-12
D633	E-12
D634	F-11
D635	F-12
D636	D-12
D637	F-11
D638	E-11
D901	C-13
D902	D-13
D903	C-13
D904	D-13
D905	F-13
D906	I-13

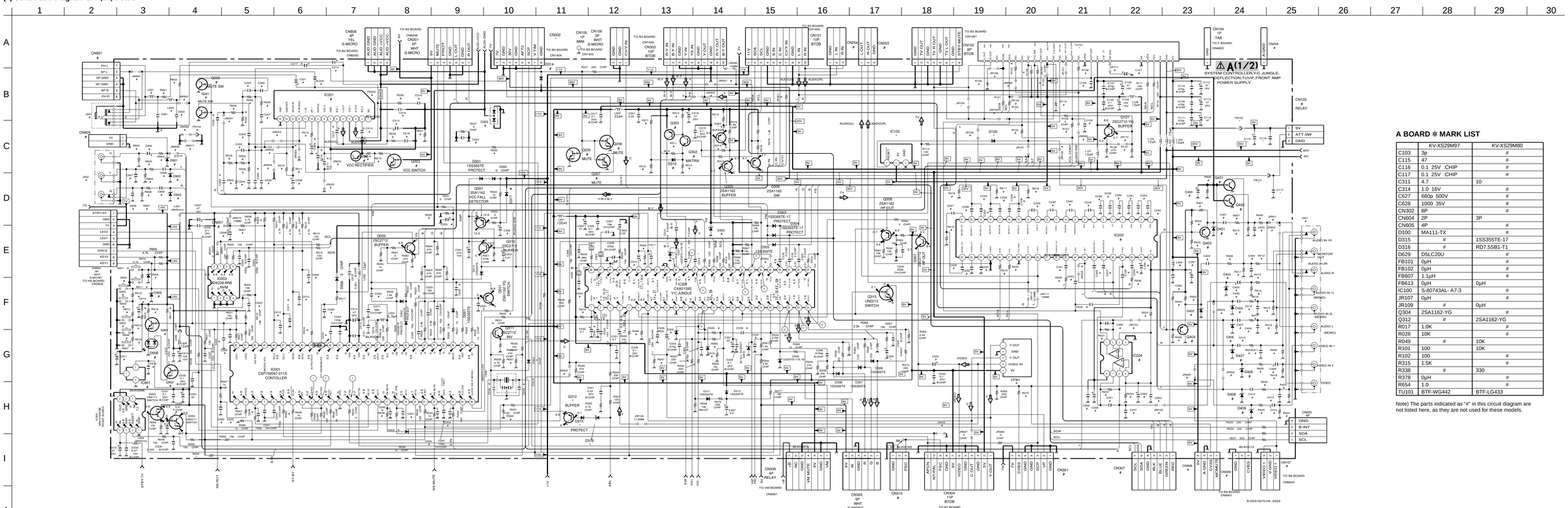
A [POWER SUPPLY, HV, MICON, Y/C JUNGLE]

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

– A Board –



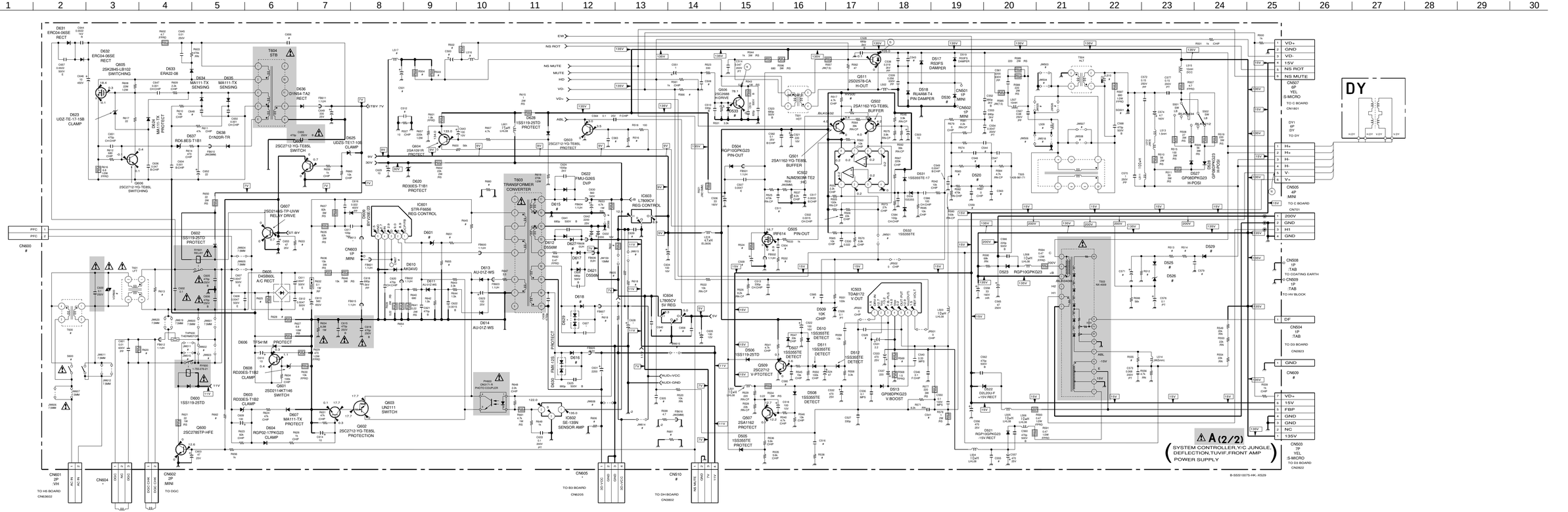
(1) Schematic Diagram of A(1/2) Board



A BOARD ✻ MARK LIST

	KV-XS29M97	KV-XS29M80
C103	3p	#
C115	47	#
C116	0.1 25V :CHIP	#
C117	0.1 25V :CHIP	#
C311	4.7	10
C314	1.0 16V	#
C627	680p 500V	#
C628	1000 35V	#
CN302	8P	#
CN604	2P	3P
CN605	4P	#
D100	MA111-TX	#
D315	#	1SS355TE-17
D316	#	RD7.5SB1-T1
D629	D5LC20U	#
FB101	0µH	#
FB102	0µH	#
FB607	1.1µH	#
FB613	0µH	0µH
IC100	S-80743AL- A7-3	#
JR107	0µH	#
JR109	#	0µH
Q304	2SA1162-YG	#
Q312	#	2SA1162-YG
R017	1.0K	#
R028	10K	#
R049	#	10K
R101	100	10K
R102	100	#
R315	1.5K	#
R338	#	330
R378	0µH	#
R654	1.0	#
TU101	BTF-WG442	BTF-LG433

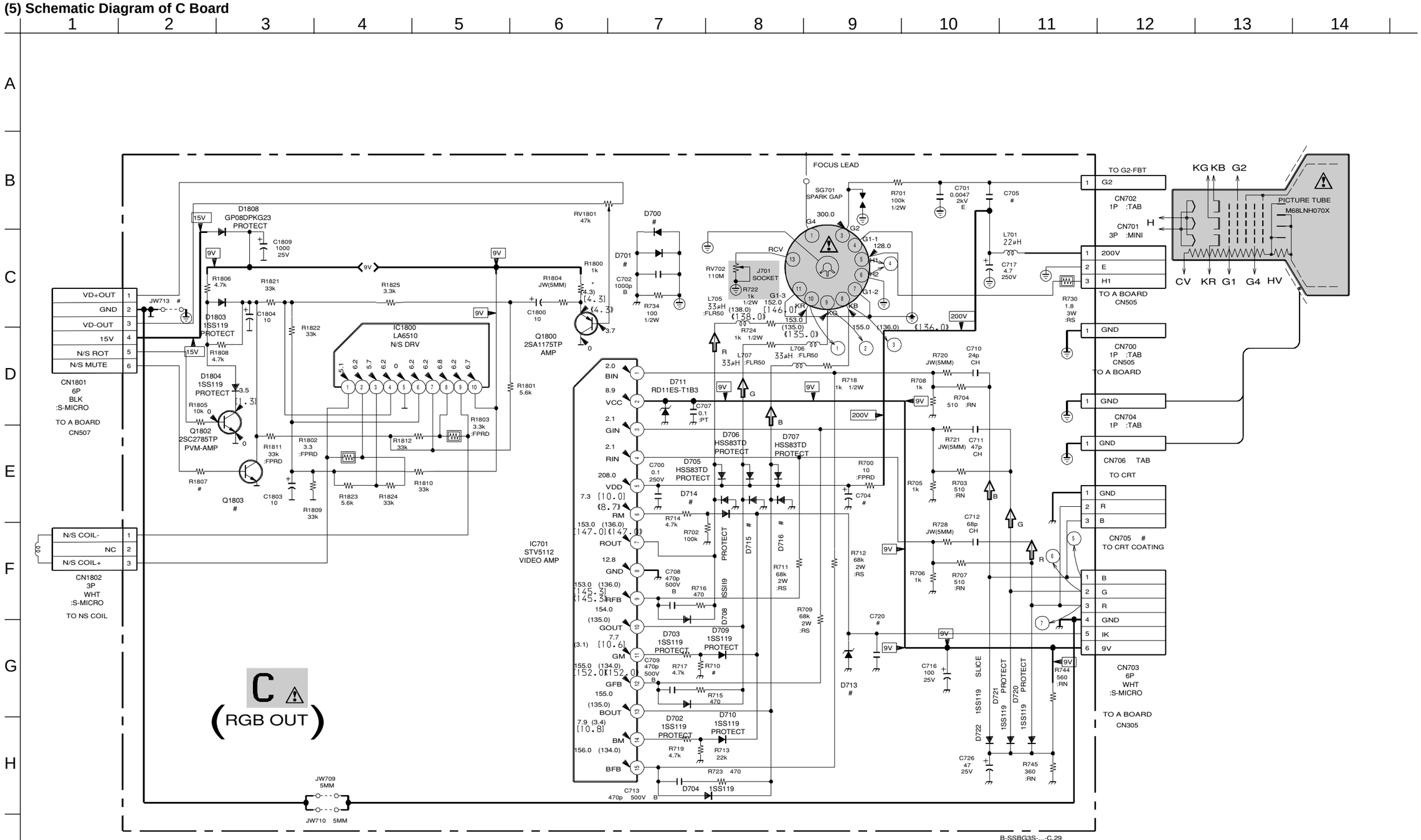
Note) The parts indicated as "#" in this circuit diagram are not listed here, as they are not used for these models.



Schematic diagram ← A (1/2) board

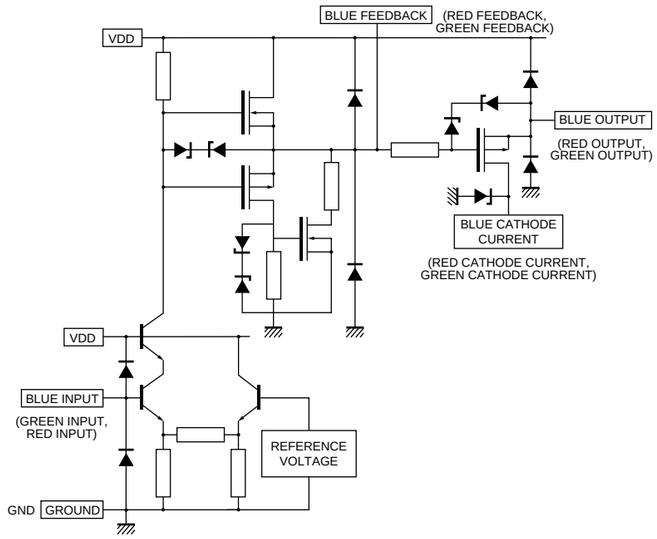
Schematic diagram A (2/2) board →

(5) Schematic Diagram of C Board



KV-XS29M80/XS29M97 RM-954 RM-953

C BOARD IC701 STV5112

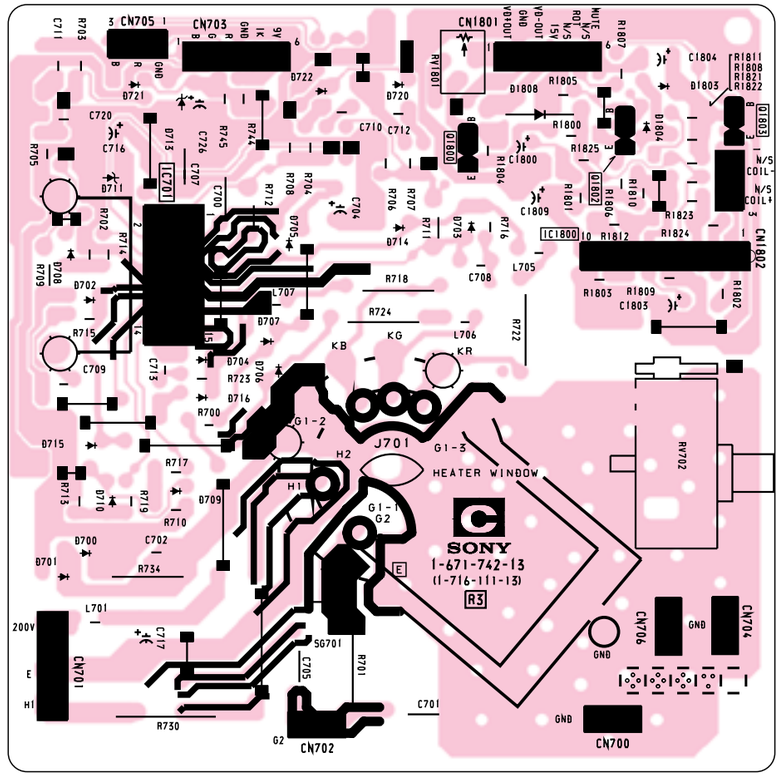


C BOARD WAVEFORMS

① 113Vp-p (H)	② PAL/SECAM 120Vp-p (H)	② NTSC 113Vp-p (H)
③ PAL/SECAM PAL : 116Vp-p (H) SECAM : 126Vp-p (H)	③ NTSC 117Vp-p (H)	④ 22Vp-p (H)

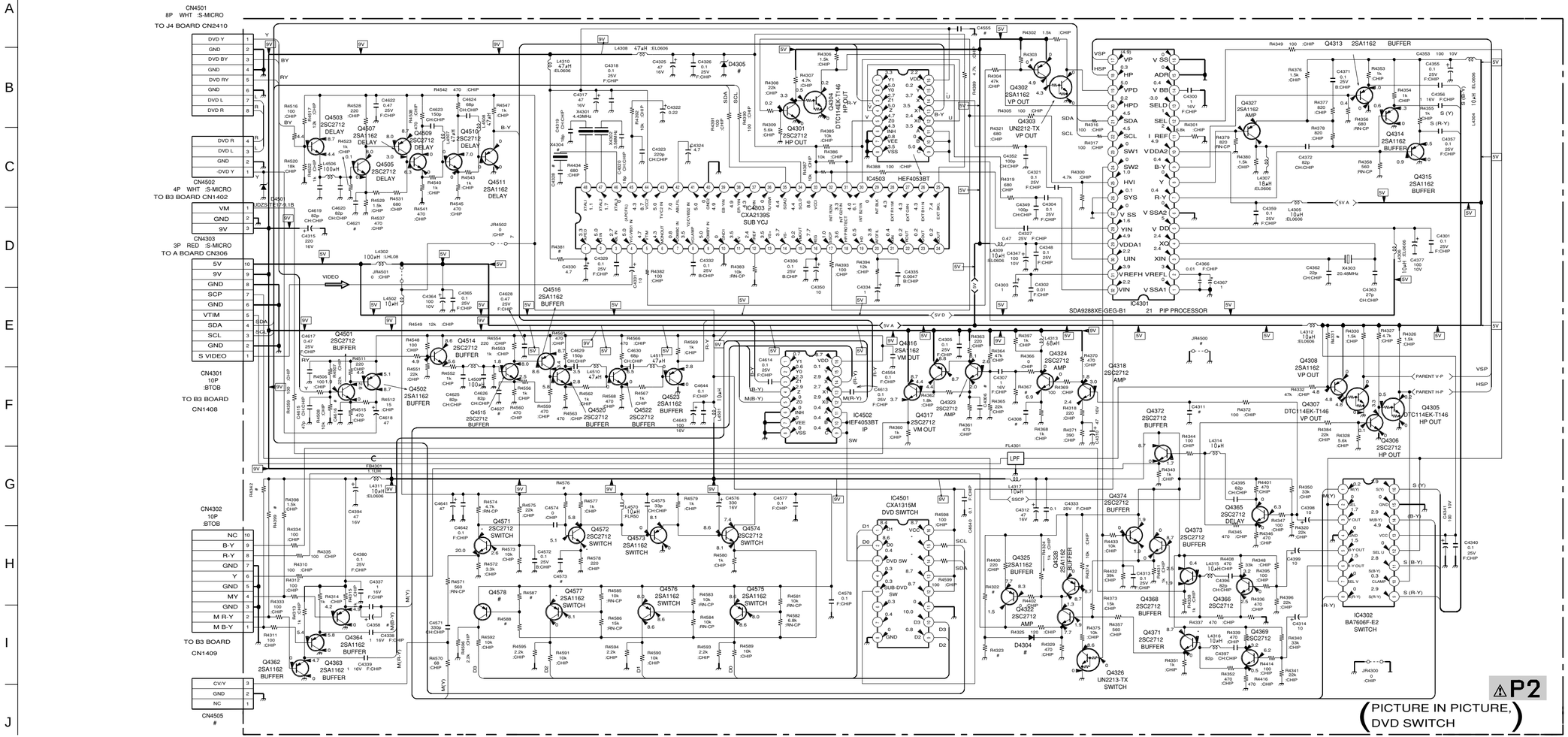
C [VIDEO AMP, ROTATION CIRCUIT] PRINTED WIRING BOARDS

– C Board –

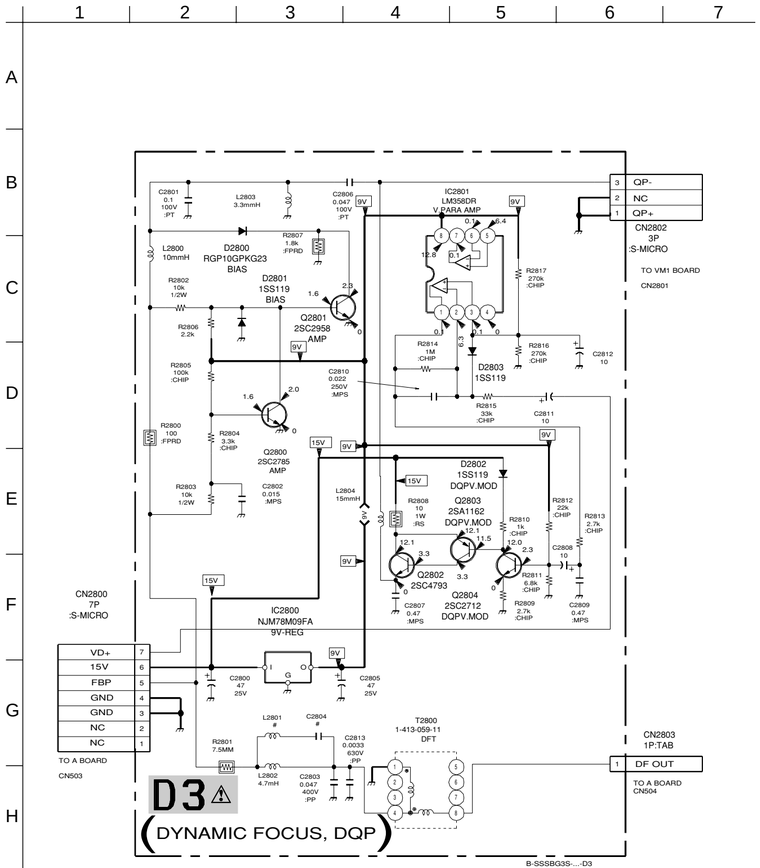


(6) Schematic Diagram of P2 Board

(KV-XS29M97 only)


CN4501
8P WHT :S-MICRO
TO J4 BOARD CN2410
DVD Y
GND
DVD BY
GND
DVD RY
GND
DVD L
DVD R
CN4502
4P WHT :S-MICRO
TO B3 BOARD CN1402
VM
GND
9V
CN4303
3P RED :S-MICRO
TO A BOARD CN3306
5V
9V
GND
SCP
GND
VTIM
SDA
SCL
GND
S VIDEO
CN4301
10P
:BTOB
TO B3 BOARD
CN1408
CN4302
10P
:BTOB
NC
B-Y
R-Y
GND
Y
GND
MY
GND
M R-Y
M B-Y
TO B3 BOARD
CN1409
CV/Y
GND
NC
CN4505
#
IC4303
CXA2139S
SUB YCJ
IC4503
HEF4053BT
IP
IC4502
HEF4053BT
SW
IC4501
CXA1315M
DVD SWITCH
IC4301
SDA9288XE-GEG-B1
21 PIP PROCESSOR
IC4302
BA706F-E2
SWITCH
Q4501 2SC2712 BUFFER
Q4502 2SA1162 BUFFER
Q4503 2SC2712 DELAY
Q4504 DTC114EK-T146 HP OUT
Q4505 2SC2712 DELAY
Q4506 100Ω
Q4507 2SA1162 DELAY
Q4508 100Ω
Q4509 2SC2712 DELAY
Q4510 2SC2712 DELAY
Q4511 2SA1162 DELAY
Q4512 15Ω
Q4513 1Ω
Q4514 2SC2712 BUFFER
Q4515 2SC2712 BUFFER
Q4516 2SA1162 BUFFER
Q4517 2SC2712 SWITCH
Q4518 2SA1162 SWITCH
Q4519 2SC2712 SWITCH
Q4520 2SC2712 BUFFER
Q4521 2SC2712 BUFFER
Q4522 2SC2712 BUFFER
Q4523 2SA1162 BUFFER
Q4524 2SC2712 SWITCH
Q4525 2SA1162 SWITCH
Q4526 2SC2712 SWITCH
Q4527 2SA1162 SWITCH
Q4528 2SC2712 SWITCH
Q4529 2SA1162 SWITCH
Q4530 2SC2712 SWITCH
Q4531 2SA1162 SWITCH
Q4532 2SC2712 SWITCH
Q4533 2SA1162 SWITCH
Q4534 2SC2712 SWITCH
Q4535 2SA1162 SWITCH
Q4536 2SC2712 SWITCH
Q4537 2SA1162 SWITCH
Q4538 2SC2712 SWITCH
Q4539 2SA1162 SWITCH
Q4540 2SC2712 SWITCH
Q4541 2SA1162 SWITCH
Q4542 2SC2712 SWITCH
Q4543 2SA1162 SWITCH
Q4544 2SC2712 SWITCH
Q4545 2SA1162 SWITCH
Q4546 2SC2712 SWITCH
Q4547 2SA1162 SWITCH
Q4548 2SC2712 SWITCH
Q4549 2SA1162 SWITCH
Q4550 2SC2712 SWITCH
Q4551 2SA1162 SWITCH
Q4552 2SC2712 SWITCH
Q4553 2SA1162 SWITCH
Q4554 2SC2712 SWITCH
Q4555 2SA1162 SWITCH
Q4556 2SC2712 SWITCH
Q4557 2SA1162 SWITCH
Q4558 2SC2712 SWITCH
Q4559 2SA1162 SWITCH
Q4560 2SC2712 SWITCH
Q4561 2SA1162 SWITCH
Q4562 2SC2712 SWITCH
Q4563 2SA1162 SWITCH
Q4564 2SA1162 BUFFER
Q4565 2SC2712 SWITCH
Q4566 2SA1162 SWITCH
Q4567 2SC2712 SWITCH
Q4568 2SA1162 SWITCH
Q4569 2SC2712 SWITCH
Q4570 2SA1162 SWITCH
Q4571 2SC2712 SWITCH
Q4572 2SC2712 SWITCH
Q4573 2SA1162 SWITCH
Q4574 2SC2712 SWITCH
Q4575 2SA1162 SWITCH
Q4576 2SA1162 SWITCH
Q4577 2SA1162 SWITCH
Q4578 #
Q4579 2SA1162 SWITCH
Q4580 2SC2712 SWITCH
Q4581 2SA1162 SWITCH
Q4582 2SA1162 SWITCH
Q4583 2SA1162 SWITCH
Q4584 2SA1162 SWITCH
Q4585 2SA1162 SWITCH
Q4586 2SA1162 SWITCH
Q4587 #
Q4588 #
Q4589 2SA1162 SWITCH
Q4590 2SA1162 SWITCH
Q4591 2SA1162 SWITCH
Q4592 2SA1162 SWITCH
Q4593 2SA1162 SWITCH
Q4594 2SA1162 SWITCH
Q4595 2SA1162 SWITCH
Q4596 2SA1162 SWITCH
Q4597 2SA1162 SWITCH
Q4598 2SA1162 SWITCH
Q4599 2SA1162 SWITCH
Q4600 2SA1162 SWITCH
Q4601 2SA1162 SWITCH

(7) Schematic Diagram of D3 Board



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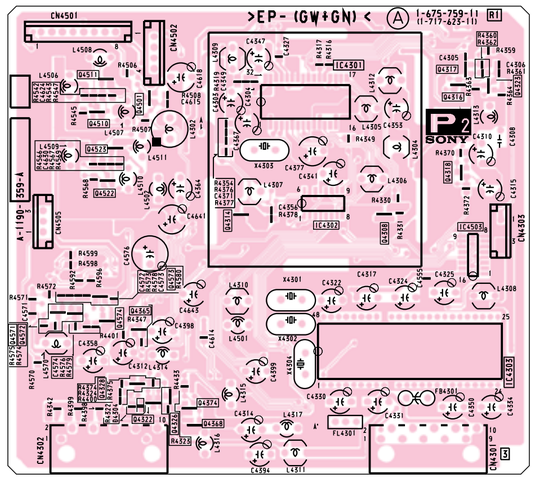
P2 [PICTURE IN PICTURE DVD SWITCH] **D3** [DF, DQP DRIVE]

PRINTED WIRING BOARDS

– P2 Board – (KV-XS29M97 only)



- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

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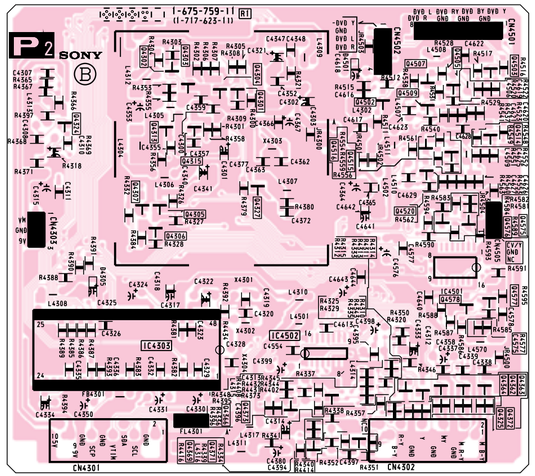
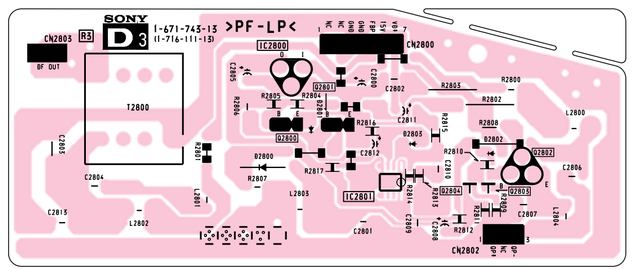


– D3 Board –



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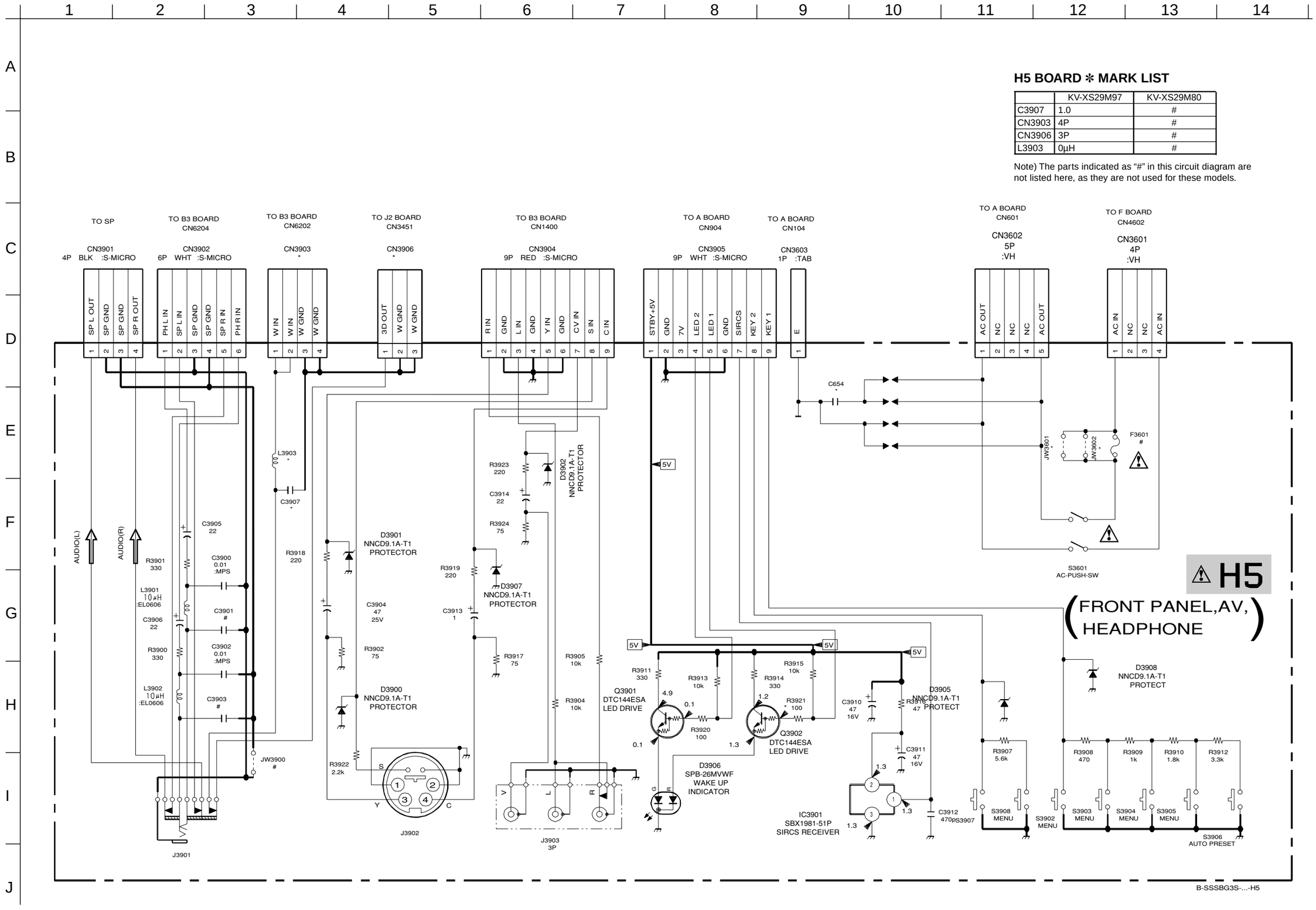
(8) Schematic Diagram of H5 Board

H5 BOARD ✻ MARK LIST

	KV-XS29M97	KV-XS29M80
C3907	1.0	#
CN3903	4P	#
CN3906	3P	#
L3903	0µH	#

Note) The parts indicated as "#" in this circuit diagram are not listed here, as they are not used for these models.



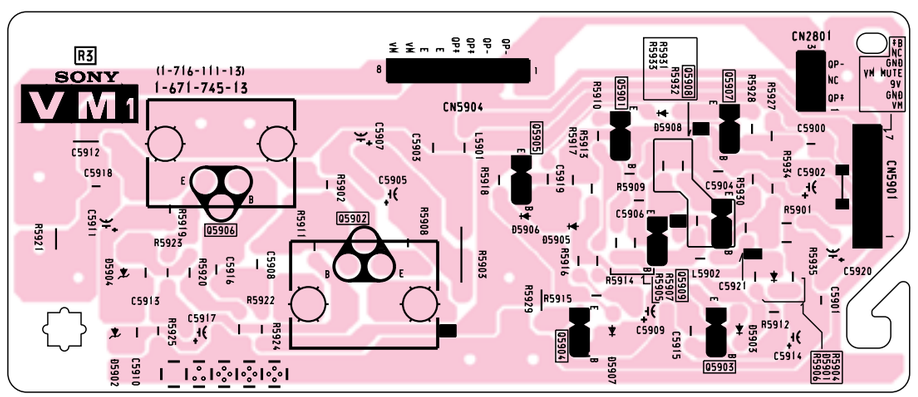
KV-XS29M80/XS29M97
RM-954 RM-953

PRINTED WIRING BOARDS

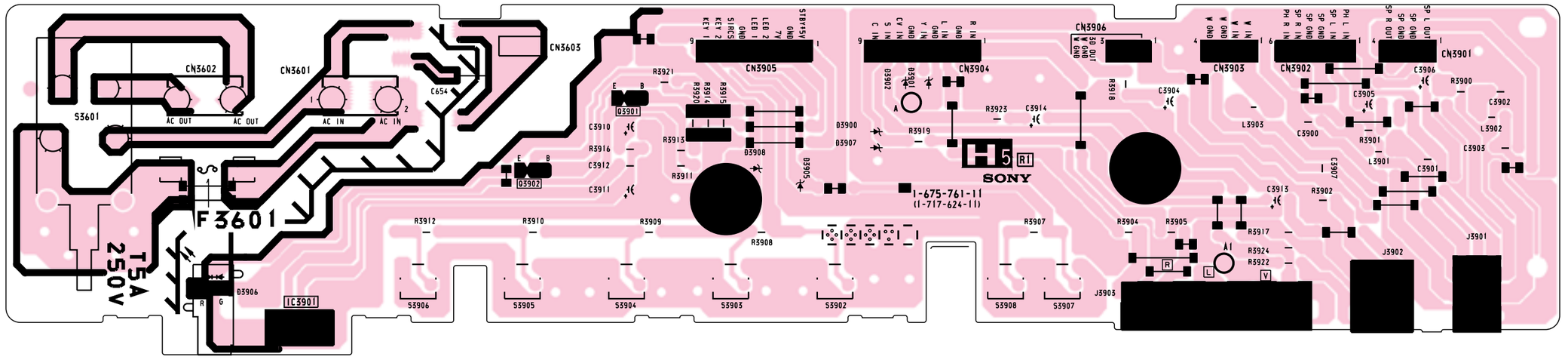
VM1 [VELOCITY MODULATION]

H5 [FRONT PANEL, AV, HEADPHONE]

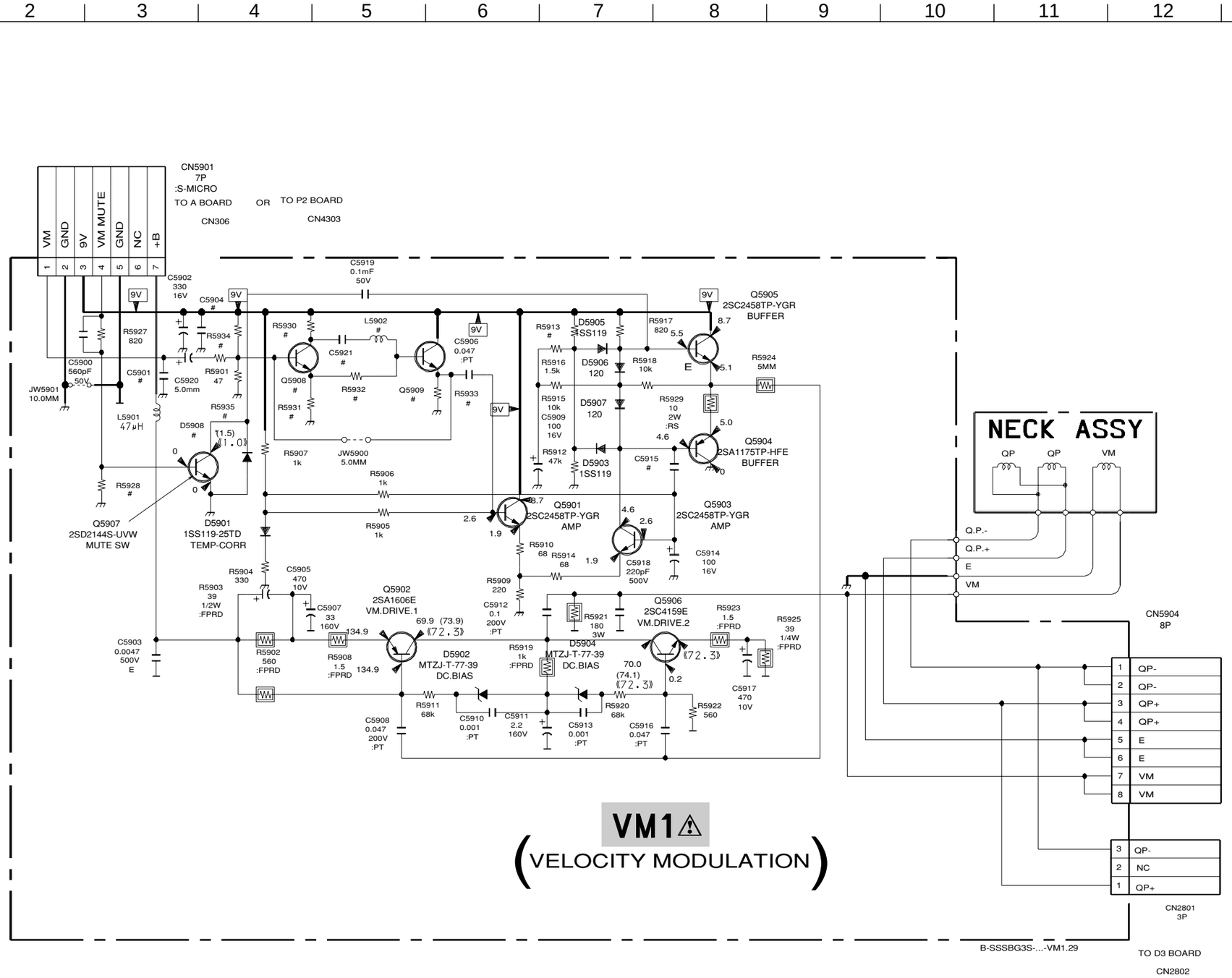
– VM1 Board –

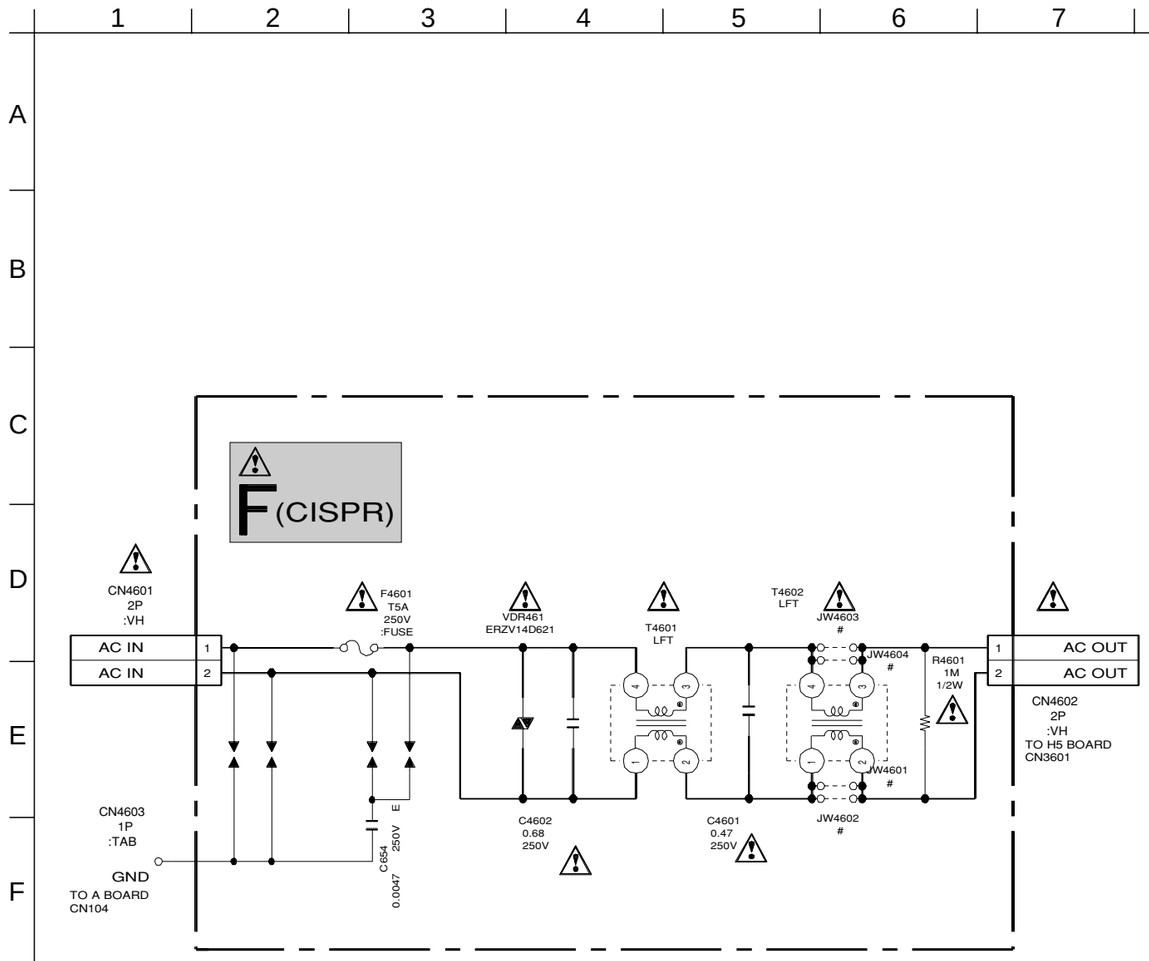


– H5 Board –

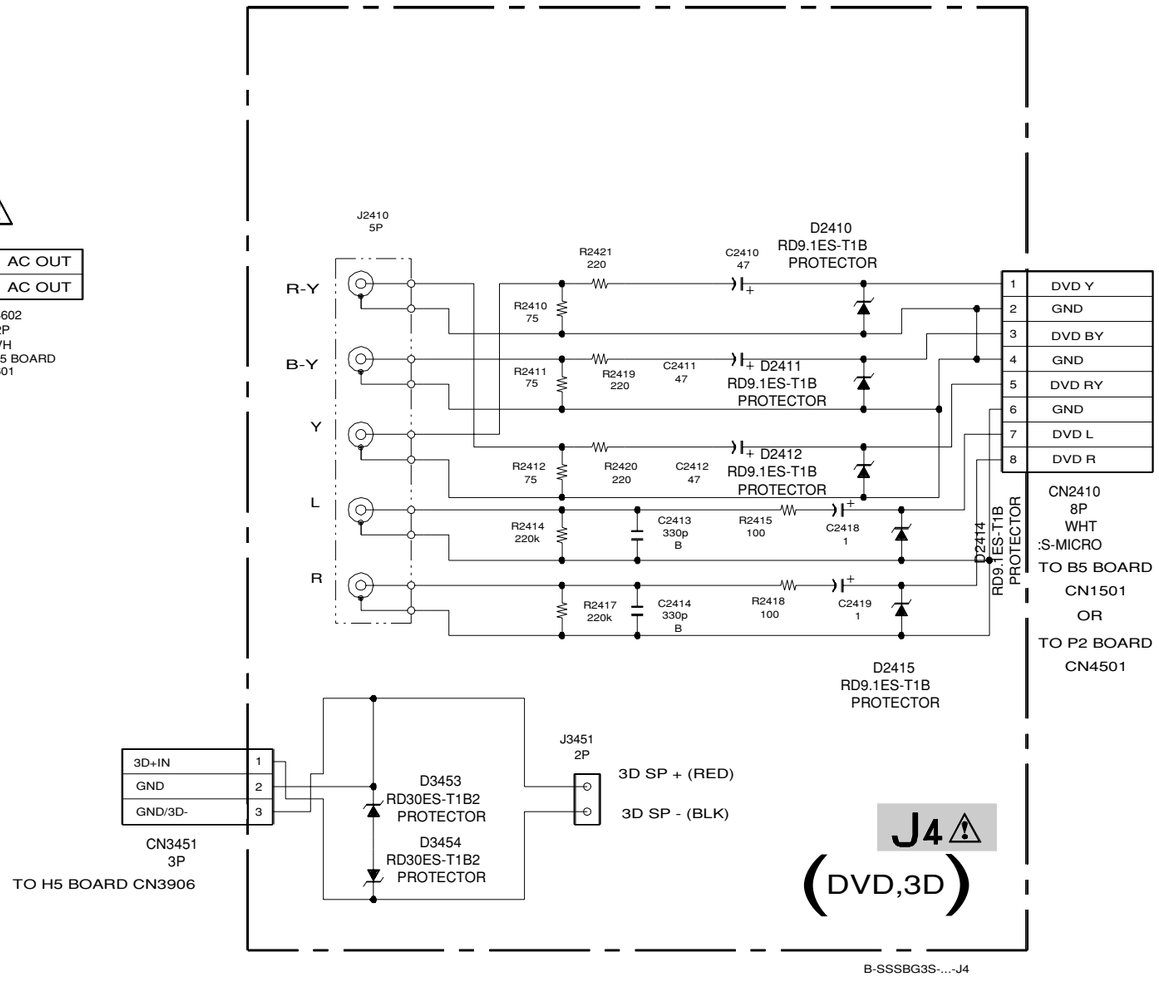


(9) Schematic Diagram of VM1 Board





(KV-XS29M97 only)

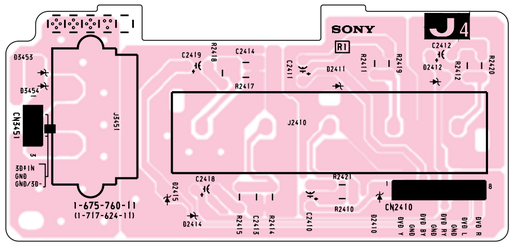


PRINTED WIRING BOARDS

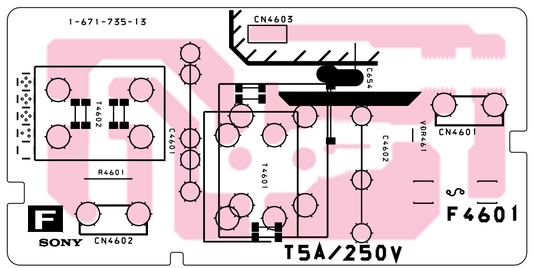
J4 [3D TERMINAL]

F [CISPR]

– J4 Board – (KV-XS29M97 only)



– F Board –

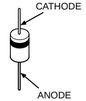


KV-XS29M80/XS29M97
RM-954 RM-953

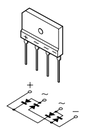
5-5. SEMICONDUCTORS

DIODE

AK04V0
AU-01Z-V1
EG20G
EL1Z
ERA22-08
GP08D
HSS83TD
NNCD9.1A-TI
RD33EB3T
RGP02-17EL-6433

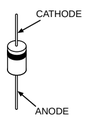


D4SB60L

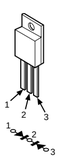


D5LC20U

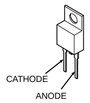
ERC04-06S
RS3FS
RU4AM-T4



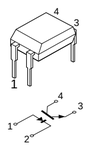
FMU-G26S
FMX-12S



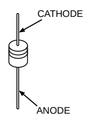
D5S6M



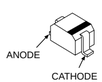
ON3171-R



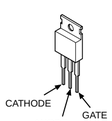
D1NS4
D1N20R
RD11ES-B3
RD20ES-B2
RD30ESB2
RD39ES-B2
RD5.1ES-B3
RD6.8ES-B1
RD7.5ES-B1
RD9.1ES-L2
1SS119-25



DTZ10B
DTZ-TT11-15B
DTZS-TE17-5.1B
DTZS-TE17-9.1B
MA111-(K8).SO
RD5.1SB-T2
RD9.1S-B
1SS355TE-17

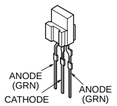


5P6M



LED

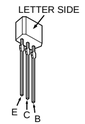
SPB-26MVWF



TRANSISTOR

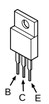
DTA114EKA-T146
UN2211
UN2213
UN2216
2SA1162-G
2SC2712-YG
2SD2114K

DTC144ESA
2SA1175-HFE
2SC2785-HFE

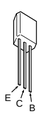


2SA1091-O

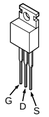
2SA1606-E
2SC4159-E
2SC4793



2SC2458-YGR
2SD2144S-UVW

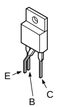


IRF614

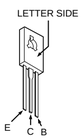


2SK246-GR

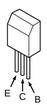
2SK2845-LB102



2SC2958

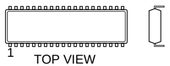


2SC2688-LK



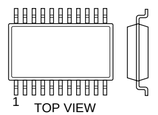
IC

CXA1315P (16PIN)
CXA1855S (48PIN)
CXA2139S (48PIN)
CXP750097-011S (64PIN)
NJM2150D (20PIN)
NJM2187L (30PIN)
M24C08-BN6 (8PIN)
SAA5261 (52PIN)
STV5112 (15PIN)
TDA7481 (15PIN)
TDA9181 (32PIN)



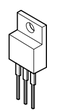
Dual In-line Package
Pin 6~98

BA7606F-E2 (16PIN)
CXA1315M (16PIN)
HEF4053BT (16PIN)
LM358D (8PIN)
MM1319AFBE (7PIN)
NJM2903M (8PIN)
NJU4066BM (14PIN)
SDA9288XE-GEG-B121
TDA7315D013TR (20PIN)
µPC4558G2 (8PIN)

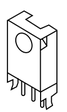


Single In -line Package
Pin 6~98

NJM78M09FA
TA7805S

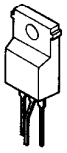


SBX1981-51

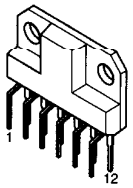


KV-XS29M80/XS29M97
RM-954 RM-953

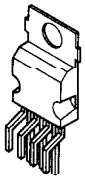
SE-135N



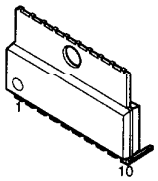
TA8200AH



TDA8172

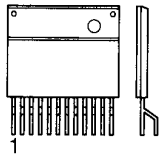


LA6510



STR-F6656

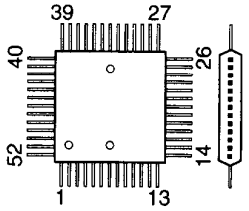
MARKING SIDE VIEW



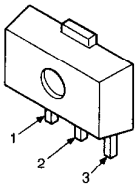
Zig-zag In -line Package
Pin 6~99

RU-1P

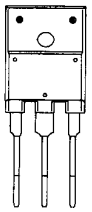
MARKING SIDE VIEW



S-80713AL-A7-S



2SD2578-RF



SECTION 6
EXPLODED VIEWS

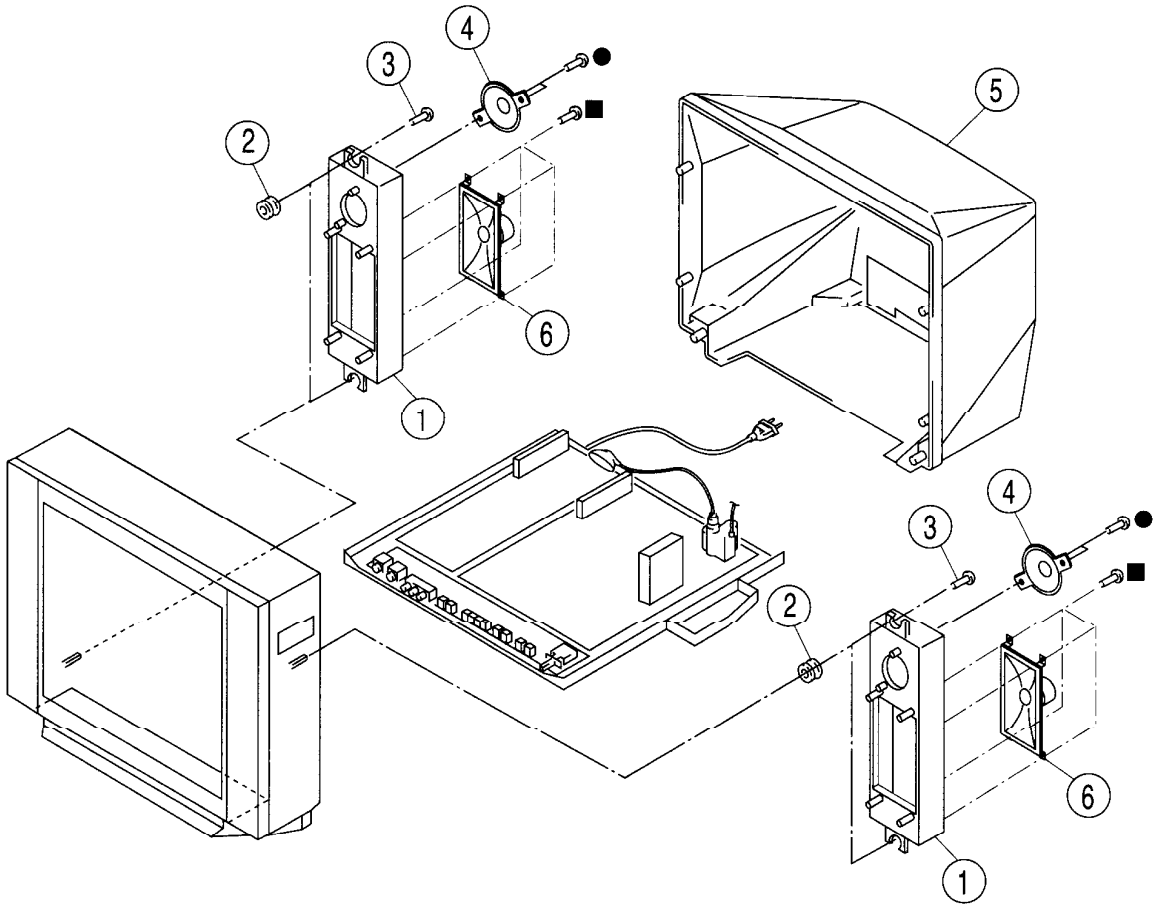
NOTE:

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

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

6-1. SPEAKER BRACKET

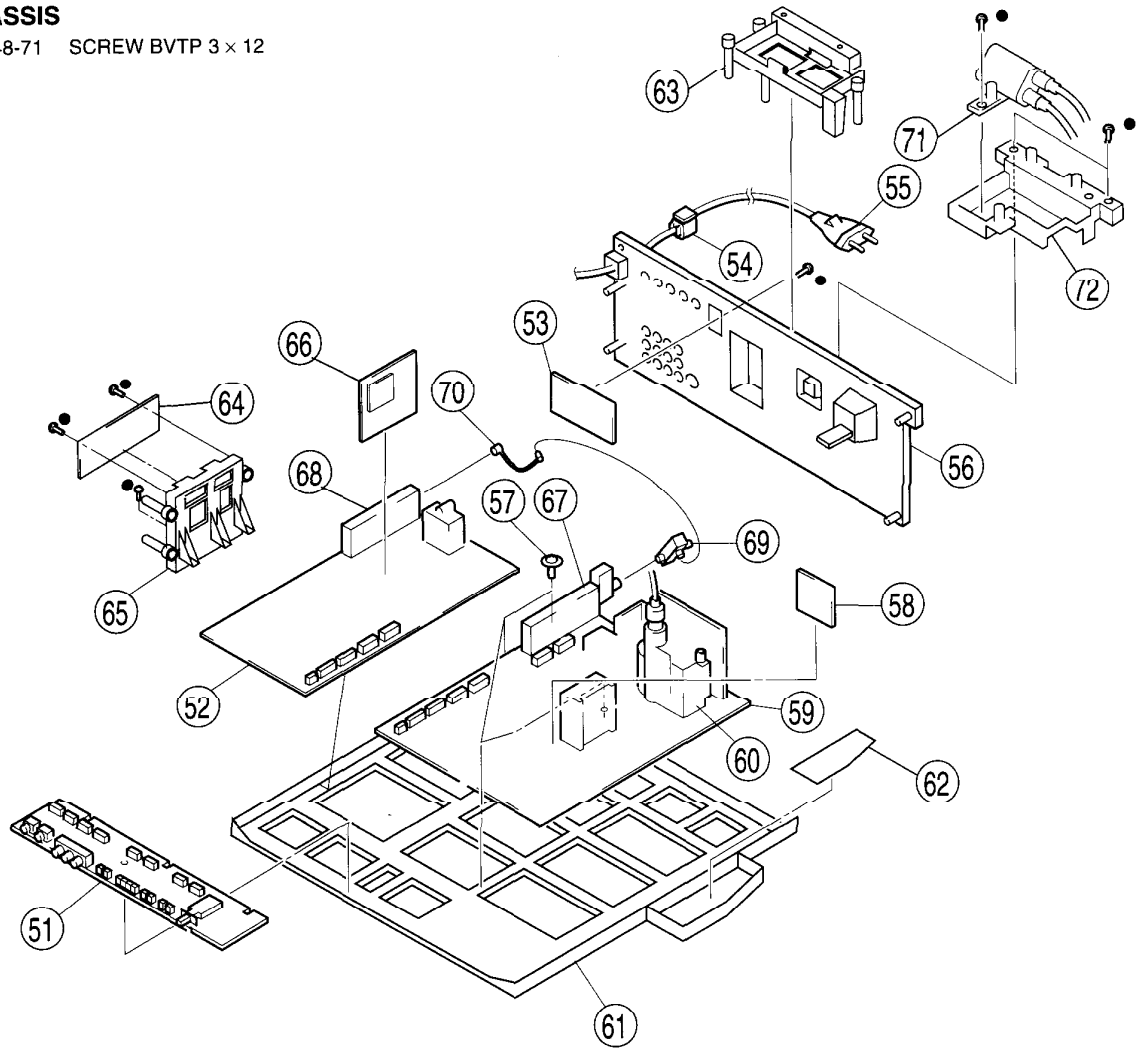
■: 7-685-663-71 SCREW +BVTP 4 × 16
●: 7 685 648 71 SCREW +BVTP 3 × 12



REF. NO.	PART NO.	DESCRIPTION	REMARK
1	* 4-070-757-01	BRACKET, SP	
2	4-374-745-21	CUSHION (A)	
3	4-302-404-03	SCREW (WASHER HEAD) (+P 4X16)	
4	1-529-190-11	SPEAKER (5CM)	
5	4-065-506-02	COVER, REAR	
6	1-505-503-11	SPEAKER (15X6.5CM)	

6-2. CHASSIS

●: 7-685-648-71 SCREW BVTP 3 × 12

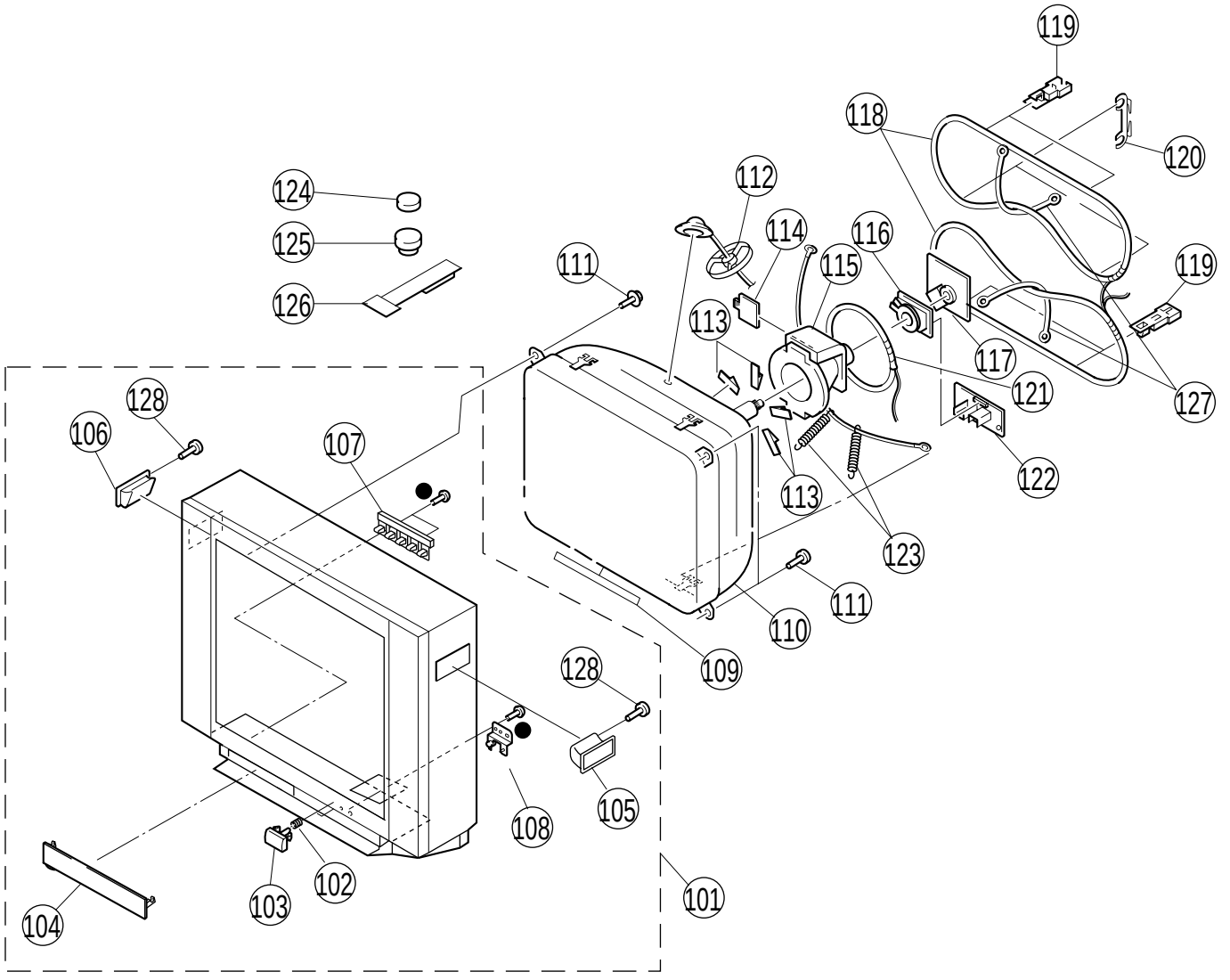


REF. NO.	PART NO.	DESCRIPTION	REMARK
51	* A-1372-717-A	H5 BOARD MOUNTED	
52	* A-1136-055-A	B3 BOARD COMPLETE (KV-XS29M80)	
	* A-1136-050-A	B3 BOARD COMPLETE (KV-XS29M97)	
53	* A-1388-266-A	J4 BOARD MOUNTED (KV-XS29M97 ONLY)	
54	4-022-115-00	HOLDER, AC CORD	
55	⚠ 1-574-062-61	CORD, POWER (WITH CONNECTOR) 2.5A/250V (KV-XS29M80)	
	⚠ 1-769-609-21	CORD, POWER (WITH CONNECTOR) (KV-XS29M97)	
56	* 4-066-684-21	BRACKET, TERMINAL (KV-XS29M80)	
	* 4-066-684-51	BRACKET, TERMINAL (KV-XS29M97)	
57	4-046-797-01	SCREW (3X12), (+)BVTAP	
58	* A-1131-500-A	B7 BOARD MOUNTED	
59	* A-1299-070-A	A BOARD COMPLETE (KV-XS29M80)	
	* A-1299-047-A	A BOARD COMPLETE (KV-XS29M97)	
60	⚠ 1-453-284-11	TRANSFORMER ASSY, FLYBACK (KV-XS29M80)	
	⚠ 1-453-305-11	TRANSFORMER ASSY, FLYBACK (KV-XS29M97)	

REF. NO.	PART NO.	DESCRIPTION	REMARK
61	* 4-066-681-04	BRACKET, MAIN	
62	* A-1343-745-A	D3 BOARD MOUNTED	
63	* 4-066-683-11	HOLDER, PWB	
64	* A-1241-346-A	F BOARD MOUNTED	
65	* 4-066-682-01	BRACKET, F PWB	
66	* A-1131-506-A	B5 BOARD MOUNTED (KV-XS29M80)	
	* A-1190-359-A	P2 BOARD MOUNTED (KV-XS29M97)	
67	8-598-449-10	TUNER, FSS BTF-LG433 (KV-XS29M80)	
	8-598-452-30	TUNER, FSS BTF-WG442 (KV-XS29M97)	
68	8-598-508-10	TUNER, FSS BTF-LG436 (KV-XS29M97 ONLY)	
69	1-251-658-21	SPLITTER RF (KV-XS29M97 ONLY)	
70	* 1-555-110-00	P-P CABLE (KV-XS29M97 ONLY)	
71	⚠ 1-467-525-31	CAP BLOCK, HIGH-VOLTAGE (KV-XS29M97 ONLY)	
72	4-066-680-02	BRACKET, HVC (KV-XS29M97 ONLY)	

6-3. PICTURE TUBE

●: 7-685-648-79 SCREW BVTP 3 × 12

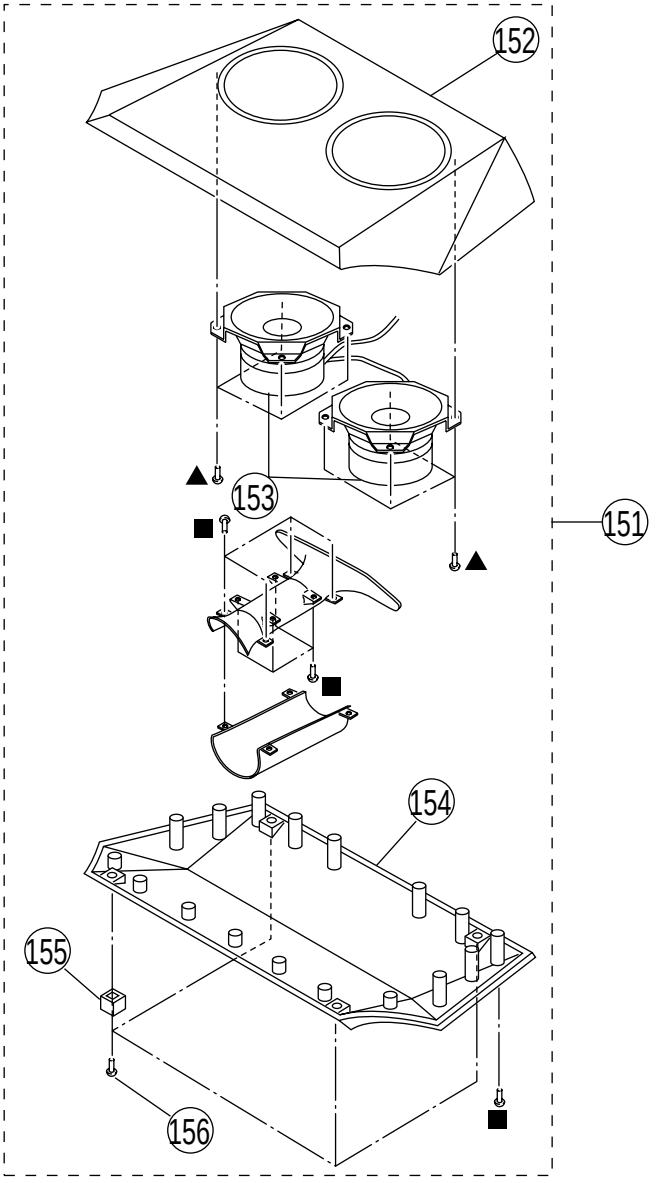


REF. NO.		PART NO.	DESCRIPTION	REMARK
101		X-4037-231-1	BEZNET,ASSY (KV-XS29M80)	102-108, 128
		X-4036-803-1	BEZNET,ASSY (KV-XS29M97)	102-108, 128
102		4-036-405-11	SPRING, COMPRESSION	
103		4-070-752-01	BUTTON, POWER	
104		4-070-754-31	DOOR, CONTROL (KV-XS29M80)	
		4-070-754-01	DOOR, CONTROL (KV-XS29M97)	
105		X-4035-862-4	HANDLE ASSY (R)	
106		X-4035-861-4	HANDLE ASSY (L)	
107		4-070-753-01	BUTTON, MULTI	
108	*	4-070-755-01	BAR, OPTICAL	
109		4-072-569-11	SHEET, BLOTTING	
110	⚠	8-735-057-05	PICTURE TUBE (M68LNH070X)	
111		4-046-765-12	SCREW, TAPPING 7+CROWN WASHER	
112	*	3-704-372-11	HOLDER, HV CABLE	
113		4-046-600-11	SPACER, DY	
114		2-163-920-01	PLATE, TLH CORRECTION	
115		8-451-494-31	DEFLECTION YOKE (Y29RSA-S)	

REF. NO.		PART NO.	DESCRIPTION	REMARK
116		8-453-011-11	NA299-M	
117	*	A-1331-999-A	C BOARD MOUNTED	
118	⚠	1-419-323-11	COIL, DEGAUSSING (HONG KONG)	
	⚠	1-419-294-11	COIL, DEGAUSSING (E)	
119	*	4-062-970-11	CLIP (29RSN), DGC	
120		4-061-369-01	HOLDER, DEGAUSE COIL	
121		1-452-896-11	COIL, NA ROTATION (RT200)	
122	*	A-1342-512-A	VM1 BOARD MOUNTED	
123		4-369-318-61	SPRING, TENSION	
124		1-452-032-00	MAGNET,DISC	
125		1-452-094-00	CIRCULAR DISC MAGNET B	
126		X-4387-214-3	PERMALOY ASSY, CORRECTION	
127		4-068-028-31	BAND, DGC	
128		4-058-870-01	SCREW, (4X16) W (+) P TAPPING	

6-4. 3D SPEAKER

▲: 7-685-661-71 SCREW BVTP 4 × 12
■: 7-685-663-71 SCREW BVTP 4 × 16



REF. NO.		PART NO.	DESCRIPTION	REMARK
151		A-1501-377-C	BOX ASSY, SPEAKER (3D)	
152	*	4-065-515-01	BOX (TP), 3D SPEAKER	
153		1-529-172-11	SPEAKER, LOUD (10CM)	
154	*	4-065-516-01	BOX (BT), 3D SPEAKER	
155	*	4-037-244-01	FOOT	
156		4-302-428-03	SCREW (WASHER HEAD) (+P 3X12)	

SECTION 7
ELECTRICAL PARTS LIST

A (KV-XS29M80)

NOTE:

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

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

- 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.
- All resistors are in ohms
- F : nonflammable

CAPACITORS
- MF : µF, PF : µµF

COILS
- MMH : mH, UH : µH

REF. NO.	PART NO.	DESCRIPTION			REMARK
*	A-1299-070-A	A BOARD COMPLETE (KV-XS29M80) **********			
	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	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C007	1-104-664-11	ELECT	47MF	20%	16V
C013	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C014	1-104-664-11	ELECT	47MF	20%	25V
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	1-104-664-11	ELECT	47MF	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	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C027	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C028	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C030	1-126-965-11	ELECT	22MF	20%	50V
C031	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
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
C044	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C047	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C103	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C104	1-104-665-11	ELECT	100MF	20%	10V
C107	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C108	1-104-664-11	ELECT	47MF	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	1-104-664-11	ELECT	47MF	20%	16V
C113	1-104-664-11	ELECT	47MF	20%	25V
C114	1-126-967-11	ELECT	47MF	20%	50V
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
C303	1-126-959-11	ELECT	0.47MF	20%	50V
C304	1-126-967-11	ELECT	47MF	20%	50V
C305	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

REF. NO.	PART NO.	DESCRIPTION			REMARK
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
C315	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C316	1-104-664-11	ELECT	47MF	20%	25V
C317	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
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
C324	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C325	1-126-960-11	ELECT	1MF	20%	50V
C327	1-126-965-11	ELECT	22MF	20%	50V
C328	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C330	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C331	1-126-963-11	ELECT	4.7MF	20%	50V
C332	1-126-963-11	ELECT	4.7MF	20%	50V
C335	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C336	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
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
C342	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C502	1-163-145-00	CERAMIC CHIP	0.0015MF	5%	50V
C503	1-126-964-11	ELECT	10MF	20%	50V
C506	1-107-638-11	ELECT	33MF	20%	160V
C507	1-161-830-00	CERAMIC	0.0047MF		500V
C510	1-102-112-00	CERAMIC	330PF	10%	50V
C513	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C514	1-106-383-00	MYLAR	0.047MF	10%	200V
C517	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C518	1-104-665-11	ELECT	100MF	20%	10V
C519	1-102-212-00	CERAMIC	820PF	10%	500V
C521	1-126-934-11	ELECT	220MF	20%	16V
C522	1-126-933-11	ELECT	100MF	20%	16V
C523	1-102-002-00	CERAMIC	680PF	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	1-126-941-11	ELECT	470MF	20%	25V

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

A (KV-XS29M80)

REF. NO.		PART NO.	DESCRIPTION			REMARK
C533		1-126-941-11	ELECT	470MF	20%	25V
C536		1-136-165-00	FILM	0.1MF	5%	50V
C537		1-126-969-11	ELECT	220MF	20%	50V
C538		1-136-617-11	FILM	0.019MF	3%	2KV
C539		1-129-723-00	FILM	0.056MF	5%	630V
C540		1-136-171-00	FILM	0.33MF	5%	50V
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
C552		1-162-116-00	CERAMIC	680PF	10%	2KV
C553		1-162-116-00	CERAMIC	680PF	10%	2KV
C554		1-137-417-11	MYLAR	0.0047MF	10%	200V
C556		1-126-941-11	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		1-129-898-00	FILM	0.0022MF	5%	630V
C562		1-102-228-00	CERAMIC	470PF	10%	500V
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		1-115-520-11	FILM	0.68MF	5%	250V
C568		1-102-228-00	CERAMIC	470PF	10%	500V
C570		1-115-522-11	FILM	1MF	5%	250V
C572		1-117-661-21	FILM	0.15MF	5%	250V
C573		1-106-387-00	MYLAR	0.068MF	10%	200V
C574		1-107-652-11	ELECT	10MF	20%	250V
C576		1-130-495-00	MYLAR	0.1MF	5%	50V
C577		1-106-395-00	MYLAR	0.15MF	10%	200V
C582		1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C584		1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C586		1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C600	⚠	1-104-705-11	FILM	0.1MF	20%	250V
C601		1-130-338-91	FILM	0.01MF	5%	630V
C602	⚠	1-104-705-11	FILM	0.1MF	20%	250V
C603		1-104-664-11	ELECT	47MF	20%	25V
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		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C608		1-161-830-00	CERAMIC	0.0047MF	99%	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	99%	500V
C612		1-161-830-00	CERAMIC	0.0047MF	99%	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	5%	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		1-102-114-00	CERAMIC	470PF	10%	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		1-128-339-11	ELECT	2200MF	20%	16V
C633		1-104-999-11	MYLAR	0.1MF	10%	200V
C634		1-126-933-11	ELECT	100MF	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		1-126-943-11	ELECT	2200MF	20%	25V
C643		1-104-665-11	ELECT	100MF	20%	10V
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		1-104-664-11	ELECT	47MF	20%	25V
C655	⚠	1-119-886-51	CERAMIC	470PF	10%	250V
C657		1-101-821-00	CERAMIC	0.0022MF		500V
C912		1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C913		1-104-665-11	ELECT	100MF	20%	10V

<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	*	1-564-508-11	PLUG, CONNECTOR 5P
CN202	*	1-508-847-00	PIN, CONNECTOR 4P
CN303	*	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P
CN304	*	1-766-955-11	CONNECTOR, BOARD TO BOARD 11P
CN305	*	1-564-509-11	PLUG, CONNECTOR 6P
CN501	*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P
CN502	*	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
CN507	*	1-564-509-11	PLUG, CONNECTOR 6P
CN508		1-695-915-11	TAB (CONTACT)
CN509		1-695-915-11	TAB (CONTACT)
CN601	*	1-580-843-11	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
CN608	*	1-564-507-11	PLUG, CONNECTOR 4P
CN904	*	1-564-512-11	PLUG, CONNECTOR 9P

A (KV-XS29M80)

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<DIODE>	
D001	8-719-988-61	DIODE 1SS355TE-17	
D002	8-719-988-61	DIODE 1SS355TE-17	
D004	1-216-295-91	SHORT 0	
D005	8-719-988-61	DIODE 1SS355TE-17	
D006	1-216-295-91	SHORT 0	
D300	1-216-295-91	SHORT 0	
D301	8-719-988-61	DIODE 1SS355TE-17	
D303	8-719-988-61	DIODE 1SS355TE-17	
D304	8-719-988-61	DIODE 1SS355TE-17	
D305	8-719-988-61	DIODE 1SS355TE-17	
D306	8-719-988-61	DIODE 1SS355TE-17	
D307	8-719-988-61	DIODE 1SS355TE-17	
D308	8-719-988-61	DIODE 1SS355TE-17	
D309	8-719-069-54	DIODE UDZS-TE17-5.1B	
D311	8-719-988-61	DIODE 1SS355TE-17	
D312	8-719-988-61	DIODE 1SS355TE-17	
D313	8-719-988-61	DIODE 1SS355TE-17	
D315	8-719-988-61	DIODE 1SS355TE-17	
D316	8-719-037-06	DIODE RD7.5SB1-T1	
D320	8-719-069-60	DIODE UDZS-TE17-9.1B	
D321	8-719-069-60	DIODE UDZS-TE17-9.1B	
D504	8-719-302-06	DIODE EU2A	
D504	8-719-302-43	DIODE EL1Z	
D505	8-719-988-61	DIODE 1SS355TE-17	
D506	8-719-911-19	DIODE 1SS119-25	
D507	8-719-988-61	DIODE 1SS355TE-17	
D508	8-719-988-61	DIODE 1SS355TE-17	
D509	1-216-073-00	RES,CHIP 10K 5%	1/10W
D510	8-719-988-61	DIODE 1SS355TE-17	
D511	8-719-988-61	DIODE 1SS355TE-17	
D512	8-719-988-61	DIODE 1SS355TE-17	
D513	8-719-908-03	DIODE GP08D	
D517	8-719-312-71	DIODE RS3FS	
D518	8-719-074-35	DIODE RU4AM-T4	
D519	8-719-312-71	DIODE RS3FS	
D521	8-719-302-43	DIODE EL1Z	
D522	8-719-028-45	DIODE D2L20U	
D523	8-719-302-43	DIODE EL1Z	
D527	8-719-908-03	DIODE GP08D	
D528	8-719-908-03	DIODE GP08D	
D531	8-719-988-61	DIODE 1SS355TE-17	
D532	8-719-988-61	DIODE 1SS355TE-17	
D534	8-719-988-61	DIODE 1SS355TE-17	
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	8-719-073-01	DIODE MA111-(K8).S0	
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	8-719-978-65	DIODE DTZ-TT11-15B	
D624	8-719-073-01	DIODE MA111-(K8).S0	
D625	8-719-977-28	DIODE DTZ10B	
D628	8-719-911-19	DIODE 1SS119-25	
D630	8-719-052-74	DIODE FMX-12S	
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	8-719-073-01	DIODE MA111-(K8).S0	
D635	8-719-073-01	DIODE MA111-(K8).S0	
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>	
FB501	1-410-397-21	FERRITE 1.1UH	
FB502	1-410-397-21	FERRITE 1.1UH	
FB600	1-410-397-21	FERRITE 1.1UH	
FB601	1-410-397-21	FERRITE 1.1UH	
FB602	1-410-397-21	FERRITE 1.1UH	
FB603	1-410-397-21	FERRITE 1.1UH	
FB604	1-412-911-31	FERRITE 0UH	
FB605	1-412-911-31	FERRITE 0UH	
FB606	1-412-911-31	FERRITE 0UH	
FB608	1-412-911-31	FERRITE 0UH	
FB611	1-410-397-21	FERRITE 1.1UH	
FB612	1-410-397-21	FERRITE 1.1UH	
FB613	1-412-911-11	FERRITE 0UH	
FB615	1-410-397-21	FERRITE 1.1UH	
		<IC>	
IC001	8-752-898-41	IC CXP750097-011S	
IC002	8-759-371-21	IC MM1319AFBE	
IC003	8-759-527-71	IC M24C08-BN6	
IC301	8-752-090-41	IC CXA2139S	
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>	
JR001	1-216-295-91	SHORT 0	
JR002	1-216-295-91	SHORT 0	
JR004	1-216-295-91	SHORT 0	

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

A (KV-XS29M80)

REF. NO.	PART NO.	DESCRIPTION		REMARK
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	
JR010	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	
JR109	1-216-295-91	SHORT	0	
JR301	1-216-295-91	SHORT	0	
JR303	1-216-295-91	SHORT	0	
JR308	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	
JR503	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	10MMH	
L508	1-412-525-31	INDUCTOR	10UH	
L511	1-406-977-21	INDUCTOR	100UH	
L512	1-412-549-31	INDUCTOR	1MMH	
L513	1-412-549-31	INDUCTOR	1MMH	
L515	1-459-104-00	COIL, WITH CORE		
L518	1-414-187-11	INDUCTOR	47UH	
L601	1-412-527-11	INDUCTOR	15UH	
L905	1-414-856-11	INDUCTOR	10UH	
		<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	8-729-424-08	TRANSISTOR UN2111		
Q004	8-729-421-22	TRANSISTOR UN2211		
Q101	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q301	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	8-729-421-19	TRANSISTOR UN2213		
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	8-729-119-80	TRANSISTOR 2SC2688-LK		
Q507	8-729-216-22	TRANSISTOR 2SA1162-G		
Q509	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q511	8-729-048-07	TRANSISTOR 2SD2578-CA		
Q600	8-729-119-78	TRANSISTOR 2SC2785-HFE		
Q601	8-729-023-22	TRANSISTOR 2SD2114K		
Q602	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q603	8-729-424-08	TRANSISTOR UN2111		
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
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
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

A (KV-XS29M80)

REF. NO.	PART NO.	DESCRIPTION			REMARK
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
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	1-216-049-91	RES,CHIP	1K	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
R049	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
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
R067	1-216-049-91	RES,CHIP	1K	5%	1/10W
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
R237	1-216-295-91	SHORT	0		
R301	1-216-113-00	RES,CHIP	470K	5%	1/10W
R302	1-216-295-91	SHORT	0		
R303	1-216-049-91	RES,CHIP	1K	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
R316	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R318	1-216-051-00	RES,CHIP	1.2K	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	1-216-129-00	RES,CHIP	2.2M	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	1-216-041-00	RES,CHIP	470	5%	1/10W
R340	1-216-025-91	RES,CHIP	100	5%	1/10W
R345	1-216-081-00	RES,CHIP	22K	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
R350	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R351	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R354	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R355	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R356	1-216-057-00	RES,CHIP	2.2K	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
R376	1-216-081-00	RES,CHIP	22K	5%	1/10W
R377	1-216-121-91	RES,CHIP	1M	5%	1/10W
R500	1-249-417-11	CARBON	1K	5%	1/4W
R501	1-216-049-91	RES,CHIP	1K	5%	1/10W
R505	1-216-699-91	METAL CHIP	100K	0.50%	1/10W
R506	1-216-081-00	RES,CHIP	22K	5%	1/10W
R507	1-249-389-11	CARBON	4.7	5%	1/4W F
R508	1-216-471-11	METAL OXIDE	27	5%	3W F
R509	1-216-473-11	METAL OXIDE	56	5%	3W F
R510	1-216-449-11	METAL OXIDE	56	5%	2W F
R511	1-215-908-00	METAL OXIDE	33	5%	3W F
R515	1-215-911-11	METAL OXIDE	100	5%	3W F
R517	1-208-798-11	RES,CHIP	4.7K	0.50%	1/10W
R518	1-247-807-31	CARBON	100	5%	1/4W
R519	1-215-913-11	METAL OXIDE	220	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	1-218-768-11	METAL CHIP	470K	0.50%	1/10W
R526	1-208-804-11	RES,CHIP	8.2K	0.50%	1/10W
R527	1-216-001-00	RES,CHIP	10	5%	1/10W
R528	1-208-814-91	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
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	1-216-073-00	RES,CHIP	10K	5%	1/10W

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

A (KV-XS29M80)

REF. NO.	PART NO.	DESCRIPTION				REMARK
R543	1-216-437-00	METAL OXIDE	5.6K	5%	1W	F
R544	1-215-917-11	METAL OXIDE	1K	5%	3W	F
R545	1-216-077-91	RES,CHIP	15K	5%	1/10W	
R546	1-216-077-91	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	1-215-452-00	METAL	20K	1%	1/4W	
R550	1-216-097-91	RES,CHIP	100K	5%	1/10W	
R551	1-249-441-11	CARBON	100K	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	
R556	1-215-437-00	METAL	4.7K	1%	1/4W	
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	1-208-820-11	RES,CHIP	39K	0.50%	1/10W	
R565	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R567	1-216-105-91	RES,CHIP	220K	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	1-215-443-00	METAL	8.2K	1%	1/4W	
R573	1-216-083-00	RES,CHIP	27K	5%	1/10W	
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	1-208-790-11	RES,CHIP	2.2K	0.50%	1/10W	
R582	1-208-846-11	RES,CHIP	470K	0.50%	1/10W	
R584	1-208-798-11	RES,CHIP	4.7K	0.50%	1/10W	
R587	1-216-295-91	SHORT	0			
R588	1-215-888-00	METAL OXIDE	220	5%	2W	F
R589	1-215-888-00	METAL OXIDE	220	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	1-208-820-11	RES,CHIP	39K	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
R595	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R596	1-215-916-00	METAL OXIDE	680	5%	3W	F
R597	1-247-750-11	CARBON	680	5%	1/2W	F
R598	1-249-438-11	CARBON	56K	5%	1/4W	
R599	1-249-389-11	CARBON	4.7	5%	1/4W	
R600	1-249-438-11	CARBON	56K	5%	1/4W	
R601	1-249-420-11	CARBON	1.8K	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	1-216-369-00	METAL OXIDE	1	5%	2W	F
R616	1-260-302-51	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	CEMENTED	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 ⚠	1-218-265-11	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	1-216-361-21	METAL OXIDE	0.22	5%	2W	F
R640	1-249-415-11	CARBON	680	5%	1/4W	
R641	1-216-361-21	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
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
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
R682	1-249-377-11	CARBON	0.47	5%	1/4W	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 ⚠	1-755-276-21	RELAY, POWER
RY601 ⚠	1-755-299-11	RELAY

<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 ⚠	8-598-831-00	FBT ASSY, NX-4009
T504	1-431-693-11	TRANSFORMER, HORIZONTAL LINEAR
T505	1-426-981-11	TRANSFORMER, FERRITE (PMT)
T601	1-431-536-11	TRANSFORMER, LINE FILTER

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

A (KV-XS29M80) A (KV-XS29M97)

REF. NO.		PART NO.	DESCRIPTION	REMARK
T603	⚠	1-431-976-11	TRANSFORMER, CONVERTER (SRT)	
T604	⚠	1-431-852-11	TRANSFORMER, CONVERTER (SRT)	
			<THERMISTOR>	
THP600		1-809-827-11	THERMISTOR, POSITIVE	
			<TUNER>	
TU101		8-598-449-10	TUNER, FSS BTF-LG433	
			<CRYSTAL>	
X001		1-781-174-21	VIBRATOR, CERAMIC	
X301		1-781-134-21	VIBRATOR, CRYSTAL	
X302		1-781-132-21	VIBRATOR, CRYSTAL	
**********				
	*	A-1299-047-A	A BOARD COMPLETE (KV-XS29M97) **********	
		X-4037-297-1	HEAT SINK ASSY	
		4-066-913-41	HEAT SINK	
		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		1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C007		1-104-664-11	ELECT 47MF 20% 16V	
C013		1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C014		1-104-664-11	ELECT 47MF 20% 25V	
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		1-104-664-11	ELECT 47MF 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		1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C027		1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C028		1-163-037-11	CERAMIC CHIP 0.022MF 10% 50V	
C030		1-126-965-11	ELECT 22MF 20% 50V	
C031		1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
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	
C044		1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C047		1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C103		1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C104		1-104-665-11	ELECT 100MF 20% 10V	
C107		1-163-005-11	CERAMIC CHIP 470PF 10% 50V	
C108		1-104-664-11	ELECT 47MF 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		1-104-664-11	ELECT 47MF 20% 16V	
C113		1-104-664-11	ELECT 47MF 20% 25V	
C114		1-126-967-11	ELECT 47MF 20% 50V	
C115		1-126-967-11	ELECT 47MF 20% 50V	
C116		1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C117		1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
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	
C303		1-126-959-11	ELECT 0.47MF 20% 50V	
C304		1-126-967-11	ELECT 47MF 20% 50V	
C305		1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
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		1-126-963-11	ELECT 4.7MF 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		1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C316		1-104-664-11	ELECT 47MF 20% 25V	
C317		1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
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	
C324		1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C325		1-126-960-11	ELECT 1MF 20% 50V	
C327		1-126-965-11	ELECT 22MF 20% 50V	
C328		1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C330		1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C331		1-126-963-11	ELECT 4.7MF 20% 50V	
C332		1-126-963-11	ELECT 4.7MF 20% 50V	
C335		1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C336		1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
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	
C342		1-163-259-91	CERAMIC CHIP 220PF 5% 50V	
C502		1-163-145-00	CERAMIC CHIP 0.0015MF 5% 50V	
C503		1-126-964-11	ELECT 10MF 20% 50V	
C506		1-107-638-11	ELECT 33MF 20% 160V	
C507		1-161-830-00	CERAMIC 0.0047MF 500V	
C510		1-102-112-00	CERAMIC 330PF 10% 50V	
C513		1-163-263-11	CERAMIC CHIP 330PF 5% 50V	
C514		1-106-383-00	MYLAR 0.047MF 10% 200V	
C517		1-164-182-11	CERAMIC CHIP 0.0033MF 10% 50V	
C518		1-104-665-11	ELECT 100MF 20% 10V	
C519		1-102-212-00	CERAMIC 820PF 10% 500V	
C521		1-126-934-11	ELECT 220MF 20% 16V	
C522		1-126-933-11	ELECT 100MF 20% 16V	
C523		1-102-002-00	CERAMIC 680PF 10% 500V	
C524		1-126-967-11	ELECT 47MF 20% 50V	

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REF. NO.		PART NO.	DESCRIPTION			REMARK
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		1-126-941-11	ELECT	470MF	20%	25V
C533		1-126-941-11	ELECT	470MF	20%	25V
C536		1-136-165-00	FILM	0.1MF	5%	50V
C537		1-126-969-11	ELECT	220MF	20%	50V
C538		1-136-617-11	FILM	0.019MF	3%	2KV
C539		1-129-723-00	FILM	0.056MF	5%	630V
C540		1-136-171-00	FILM	0.33MF	5%	50V
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
C552		1-162-116-00	CERAMIC	680PF	10%	2KV
C553		1-162-116-00	CERAMIC	680PF	10%	2KV
C554		1-137-417-11	MYLAR	0.0047MF	10%	200V
C556		1-126-941-11	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		1-129-898-00	FILM	0.0022MF	5%	630V
C562		1-102-228-00	CERAMIC	470PF	10%	500V
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		1-115-520-11	FILM	0.68MF	5%	250V
C568		1-102-228-00	CERAMIC	470PF	10%	500V
C570		1-115-522-11	FILM	1MF	5%	250V
C572		1-117-661-21	FILM	0.15MF	5%	250V
C573		1-106-387-00	MYLAR	0.068MF	10%	200V
C574		1-107-652-11	ELECT	10MF	20%	250V
C576		1-130-495-00	MYLAR	0.1MF	5%	50V
C577		1-106-395-00	MYLAR	0.15MF	10%	200V
C582		1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C584		1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C586		1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C600	⚠	1-104-705-11	FILM	0.1MF	20%	250V
C601		1-130-338-91	FILM	0.01MF	5%	630V
C602	⚠	1-104-705-11	FILM	0.1MF	20%	250V
C603		1-104-664-11	ELECT	47MF	20%	25V
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		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C608		1-161-830-00	CERAMIC	0.0047MF	99%	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	99%	500V
C612		1-161-830-00	CERAMIC	0.0047MF	99%	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	5%	400V
C617		1-107-792-11	CERAMIC	100PF	5%	1KV

REF. NO.		PART NO.	DESCRIPTION			REMARK
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		1-102-114-00	CERAMIC	470PF	10%	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
C627		1-102-002-00	CERAMIC	680PF	10%	500V
C628		1-126-952-11	ELECT	1000MF	20%	35V
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		1-128-339-11	ELECT	2200MF	20%	16V
C633		1-104-999-11	MYLAR	0.1MF	10%	200V
C634		1-126-933-11	ELECT	100MF	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		1-126-943-11	ELECT	2200MF	20%	25V
C643		1-104-665-11	ELECT	100MF	20%	10V
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		1-104-664-11	ELECT	47MF	20%	25V
C655	⚠	1-119-886-51	CERAMIC	470PF	10%	250V
C657		1-101-821-00	CERAMIC	0.0022MF		500V
C912		1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C913		1-104-665-11	ELECT	100MF	20%	10V

<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	*	1-564-508-11	PLUG, CONNECTOR 5P
CN202	*	1-508-847-00	PIN, CONNECTOR 4P
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
CN305	*	1-564-509-11	PLUG, CONNECTOR 6P
CN501	*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P
CN502	*	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
CN507	*	1-564-509-11	PLUG, CONNECTOR 6P
CN508		1-695-915-11	TAB (CONTACT)

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REF. NO.		PART NO.	DESCRIPTION	REMARK
CN509		1-695-915-11	TAB (CONTACT)	
CN601	*	1-580-843-11	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	
CN608	*	1-564-507-11	PLUG, CONNECTOR 4P	
CN904	*	1-564-512-11	PLUG, CONNECTOR 9P	
			<DIODE>	
D001		8-719-988-61	DIODE 1SS355TE-17	
D002		8-719-988-61	DIODE 1SS355TE-17	
D004		1-216-295-91	SHORT 0	
D005		8-719-988-61	DIODE 1SS355TE-17	
D006		1-216-295-91	SHORT 0	
D100		8-719-073-01	DIODE MA111-(K8).S0	
D300		1-216-295-91	SHORT 0	
D301		8-719-988-61	DIODE 1SS355TE-17	
D303		8-719-988-61	DIODE 1SS355TE-17	
D304		8-719-988-61	DIODE 1SS355TE-17	
D305		8-719-988-61	DIODE 1SS355TE-17	
D306		8-719-988-61	DIODE 1SS355TE-17	
D307		8-719-988-61	DIODE 1SS355TE-17	
D308		8-719-988-61	DIODE 1SS355TE-17	
D309		8-719-069-54	DIODE UDZS-TE17-5.1B	
D311		8-719-988-61	DIODE 1SS355TE-17	
D312		8-719-988-61	DIODE 1SS355TE-17	
D313		8-719-988-61	DIODE 1SS355TE-17	
D320		8-719-069-60	DIODE UDZS-TE17-9.1B	
D321		8-719-069-60	DIODE UDZS-TE17-9.1B	
D504		8-719-302-43	DIODE EL1Z	
D505		8-719-988-61	DIODE 1SS355TE-17	
D506		8-719-911-19	DIODE 1SS119-25	
D507		8-719-988-61	DIODE 1SS355TE-17	
D508		8-719-988-61	DIODE 1SS355TE-17	
D509		1-216-073-00	RES,CHIP 10K 5% 1/10W	
D510		8-719-988-61	DIODE 1SS355TE-17	
D511		8-719-988-61	DIODE 1SS355TE-17	
D512		8-719-988-61	DIODE 1SS355TE-17	
D513		8-719-908-03	DIODE GP08D	
D517		8-719-312-71	DIODE RS3FS	
D518		8-719-074-35	DIODE RU4AM-T4	
D519		8-719-312-71	DIODE RS3FS	
D521		8-719-302-43	DIODE EL1Z	
D522		8-719-028-45	DIODE D2L20U	
D523		8-719-302-43	DIODE EL1Z	
D527		8-719-908-03	DIODE GP08D	
D528		8-719-908-03	DIODE GP08D	
D531		8-719-988-61	DIODE 1SS355TE-17	
D532		8-719-988-61	DIODE 1SS355TE-17	
D534		8-719-988-61	DIODE 1SS355TE-17	
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		8-719-073-01	DIODE MA111-(K8).S0	
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		8-719-978-65	DIODE DTZ-TT11-15B	
D624		8-719-073-01	DIODE MA111-(K8).S0	
D625		8-719-977-28	DIODE DTZ10B	
D628		8-719-911-19	DIODE 1SS119-25	
D629		8-719-052-74	DIODE FMX-12S	
D630		8-719-052-74	DIODE FMX-12S	
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		8-719-073-01	DIODE MA111-(K8).S0	
D635		8-719-073-01	DIODE MA111-(K8).S0	
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		1-410-397-21	FERRITE 1.1UH	
FB601		1-410-397-21	FERRITE 1.1UH	
FB602		1-410-397-21	FERRITE 1.1UH	
FB603		1-410-397-21	FERRITE 1.1UH	
FB604		1-412-911-31	FERRITE 0UH	
FB605		1-412-911-31	FERRITE 0UH	
FB606		1-412-911-31	FERRITE 0UH	
FB607		1-410-397-21	FERRITE 1.1UH	
FB608		1-412-911-31	FERRITE 0UH	
FB611		1-410-397-21	FERRITE 1.1UH	
FB612		1-410-397-21	FERRITE 1.1UH	
FB615		1-410-397-21	FERRITE 1.1UH	
			<IC>	
IC001		8-752-898-41	IC CXP750097-011S	
IC002		8-759-371-21	IC MM1319AFBE	
IC003		8-759-527-71	IC M24C08-BN6	
IC100		8-759-042-02	IC S-80743AL-A7-S	
IC301		8-752-090-41	IC CXA2139S	

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

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REF. NO.	PART NO.	DESCRIPTION		REMARK
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>		
JR001	1-216-295-91	SHORT	0	
JR002	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	
JR010	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	
JR301	1-216-295-91	SHORT	0	
JR303	1-216-295-91	SHORT	0	
JR308	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	
JR503	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	10MMH	
L508	1-412-525-31	INDUCTOR	10UH	
L511	1-406-977-21	INDUCTOR	100UH	
L512	1-412-549-31	INDUCTOR	1MMH	
L513	1-412-549-31	INDUCTOR	1MMH	
L515	1-459-104-00	COIL, WITH CORE		
L518	1-414-187-11	INDUCTOR	47UH	
L601	1-412-527-11	INDUCTOR	15UH	
L905	1-414-856-11	INDUCTOR	10UH	
		<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	8-729-424-08	TRANSISTOR UN2111		
Q004	8-729-421-22	TRANSISTOR UN2211		
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		
Q313	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q315	8-729-421-19	TRANSISTOR UN2213		
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	8-729-119-80	TRANSISTOR 2SC2688-LK		
Q507	8-729-216-22	TRANSISTOR 2SA1162-G		
Q509	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q511	8-729-048-07	TRANSISTOR 2SD2578-CA		
Q600	8-729-119-78	TRANSISTOR 2SC2785-HFE		
Q601	8-729-023-22	TRANSISTOR 2SD2114K		
Q602	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q603	8-729-424-08	TRANSISTOR UN2111		
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
R017	1-216-049-91	RES,CHIP	1K	5% 1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
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
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
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	1-216-049-91	RES,CHIP	1K	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
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
R067	1-216-049-91	RES,CHIP	1K	5%	1/10W
R101	1-216-025-91	RES,CHIP	100	5%	1/10W
R102	1-216-025-91	RES,CHIP	100	5%	1/10W
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
R237	1-216-295-91	SHORT	0		
R301	1-216-113-00	RES,CHIP	470K	5%	1/10W
R302	1-216-295-91	SHORT	0		
R303	1-216-049-91	RES,CHIP	1K	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

REF. NO.	PART NO.	DESCRIPTION			REMARK
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	1-216-051-00	RES,CHIP	1.2K	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	1-216-129-00	RES,CHIP	2.2M	5%	1/10W
R335	1-216-045-00	RES,CHIP	680	5%	1/10W
R339	1-216-041-00	RES,CHIP	470	5%	1/10W
R340	1-216-025-91	RES,CHIP	100	5%	1/10W
R345	1-216-081-00	RES,CHIP	22K	5%	1/10W
R348	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R349	1-216-073-00	RES,CHIP	10K	5%	1/10W
R350	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R351	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R354	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R355	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R356	1-216-057-00	RES,CHIP	2.2K	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
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	1-216-699-91	METAL CHIP	100K	0.50%	1/10W
R506	1-216-081-00	RES,CHIP	22K	5%	1/10W
R507	1-249-389-11	CARBON	4.7	5%	1/4W F
R508	1-216-471-11	METAL OXIDE	27	5%	3W F
R509	1-216-473-11	METAL OXIDE	56	5%	3W F
R510	1-216-449-11	METAL OXIDE	56	5%	2W F
R511	1-215-908-00	METAL OXIDE	33	5%	3W F
R515	1-215-911-11	METAL OXIDE	100	5%	3W F
R517	1-208-798-11	METAL CHIP	4.7K	0.50%	1/10W
R518	1-247-807-31	CARBON	100	5%	1/4W
R519	1-215-913-11	METAL OXIDE	220	5%	3W F
R520	1-215-445-00	METAL	10K	1%	1/4W
R522	1-208-806-11	METAL CHIP	10K	0.50%	1/10W

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Replace only with part number specified.

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R523	1-249-411-11	CARBON	330	5% 1/4W	
R525	1-218-768-11	METAL CHIP	470K	0.50% 1/10W	
R526	1-208-804-11	METAL CHIP	8.2K	0.50% 1/10W	
R527	1-216-001-00	RES,CHIP	10	5% 1/10W	
R528	1-208-814-91	METAL CHIP	22K	0.50% 1/10W	
R529	1-208-766-11	METAL CHIP	220	0.50% 1/10W	
R531	1-247-843-11	CARBON	3.3K	5% 1/4W	
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	METAL 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	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R543	1-216-437-00	METAL OXIDE	5.6K	5% 1W	F
R544	1-215-917-11	METAL OXIDE	1K	5% 3W	F
R545	1-216-077-91	RES,CHIP	15K	5% 1/10W	
R546	1-216-077-91	RES,CHIP	15K	5% 1/10W	
R547	1-216-085-00	RES,CHIP	33K	5% 1/10W	
R548	1-208-796-11	METAL CHIP	3.9K	0.50% 1/10W	
R549	1-215-452-00	METAL	20K	1% 1/4W	
R550	1-216-097-91	RES,CHIP	100K	5% 1/10W	
R551	1-249-441-11	CARBON	100K	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	
R556	1-215-437-00	METAL	4.7K	1% 1/4W	
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	1-208-820-11	METAL CHIP	39K	0.50% 1/10W	
R565	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R567	1-216-105-91	RES,CHIP	220K	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	1-215-443-00	METAL	8.2K	1% 1/4W	
R573	1-216-083-00	RES,CHIP	27K	5% 1/10W	
R575	1-208-796-11	METAL 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	METAL CHIP	100K	0.50% 1/10W	
R581	1-208-790-11	METAL CHIP	2.2K	0.50% 1/10W	
R582	1-208-846-11	METAL CHIP	470K	0.50% 1/10W	
R584	1-208-798-11	METAL CHIP	4.7K	0.50% 1/10W	
R587	1-216-295-91	SHORT	0		
R588	1-215-888-00	METAL OXIDE	220	5% 2W	F
R589	1-215-888-00	METAL OXIDE	220	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	1-208-820-11	METAL CHIP	39K	0.50% 1/10W	
R593	1-260-288-11	CARBON	0.47	5% 1/2W	F

REF. NO.	PART NO.	DESCRIPTION			REMARK
R594	1-260-288-11	CARBON	0.47	5% 1/2W	F
R595	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R596	1-215-916-00	METAL OXIDE	680	5% 3W	F
R597	1-247-750-11	CARBON	680	5% 1/2W	F
R598	1-249-438-11	CARBON	56K	5% 1/4W	
R599	1-249-389-11	CARBON	4.7	5% 1/4W	
R600	1-249-438-11	CARBON	56K	5% 1/4W	
R601	1-249-420-11	CARBON	1.8K	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	1-216-369-00	METAL OXIDE	1	5% 2W	F
R616	1-260-302-51	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	CEMENTED	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	⚠ 1-218-265-11	METAL	8.2M	5% 1W	
R635	1-216-492-21	METAL OXIDE	82K	5% 3W	F
R636	1-215-924-00	METAL OXIDE	15K	5% 3W	F
R637	1-216-492-21	METAL OXIDE	82K	5% 3W	F
R639	1-216-361-21	METAL OXIDE	0.22	5% 2W	F
R640	1-249-415-11	CARBON	680	5% 1/4W	
R641	1-216-361-21	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
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
R682	1-249-377-11	CARBON	0.47	5% 1/4W	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	

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

A (KV-XS29M97) **B3 (KV-XS29M80)**

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<RELAY>			
RY600 ⚠	1-755-276-21	RELAY, POWER			
RY601 ⚠	1-755-299-11	RELAY			
		<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 ⚠	8-598-831-00	FBT ASSY, NX-4009			
T504	1-431-693-11	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	1-809-827-11	THERMISTOR, POSITIVE			
		<TUNER>			
TU101	8-598-452-30	TUNER, FSS BTF-WG442			
		<CRYSTAL>			
X001	1-781-174-21	VIBRATOR, CERAMIC			
X301	1-781-134-21	VIBRATOR, CRYSTAL			
X302	1-781-132-21	VIBRATOR, CRYSTAL			
**********					
*	A-1136-055-A	B3 BOARD COMPLETE (KV-XS29M80)			
		**********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C1402	1-104-664-11	ELECT	47MF	20%	25V
C1404	1-216-295-91	SHORT	0		
C1405	1-104-664-11	ELECT	47MF	20%	25V
C1410	1-104-664-11	ELECT	47MF	20%	25V
C1411	1-216-295-91	SHORT	0		
C1413	1-126-935-11	ELECT	470MF	20%	16V
C1414	1-164-346-11	CERAMIC CHIP	1MF		16V
C1415	1-104-664-11	ELECT	47MF	20%	25V
C1416	1-164-346-11	CERAMIC CHIP	1MF		16V
C1418	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1422	1-164-346-11	CERAMIC CHIP	1MF		16V
C1423	1-164-346-11	CERAMIC CHIP	1MF		16V
C1425	1-164-346-11	CERAMIC CHIP	1MF		16V
C1426	1-164-346-11	CERAMIC CHIP	1MF		16V
C1428	1-104-665-11	ELECT	100MF	20%	25V
C1429	1-104-663-11	ELECT	33MF	20%	25V
C1431	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1433	1-104-664-11	ELECT	47MF	20%	16V
C1434	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1435	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1436	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1440	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1441	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1443	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1444	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1445	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1446	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1447	1-126-964-11	ELECT	10MF	20%	50V
C1448	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1449	1-104-664-11	ELECT	47MF	20%	16V
C1459	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1460	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1461	1-164-346-11	CERAMIC CHIP	1MF		16V
C1462	1-164-346-11	CERAMIC CHIP	1MF		16V
C3201	1-126-964-11	ELECT	10MF	20%	50V
C3202	1-136-171-00	FILM	0.33MF	5%	50V
C3203	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C3206	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C3207	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3208	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3209	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C3210	1-126-964-11	ELECT	10MF	20%	50V
C3211	1-126-964-11	ELECT	10MF	20%	50V
C3212	1-126-964-11	ELECT	10MF	20%	50V
C3213	1-104-664-11	ELECT	47MF	20%	25V
C3214	1-104-664-11	ELECT	47MF	20%	25V
C3215	1-117-720-11	CERAMIC CHIP	4.7MF		10V
C3216	1-117-720-11	CERAMIC CHIP	4.7MF		10V
C3217	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C3218	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C3219	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C3220	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C3221	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C3222	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C3223	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C3224	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C3225	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3226	1-126-964-11	ELECT	10MF	20%	50V
C3227	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C3228	1-107-698-11	ELECT	10MF	20%	25V
C3229	1-107-698-11	ELECT	10MF	20%	25V
C3238	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C3239	1-136-171-00	FILM	0.33MF	5%	50V
C3240	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C3243	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C3244	1-164-346-11	CERAMIC CHIP	1MF		16V
C3245	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C3246	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C3247	1-126-963-11	ELECT	4.7MF	20%	50V
C3248	1-163-251-11	CERAMIC CHIP	100PF	5%	50V

B3 (KV-XS29M80)

REF. NO.	PART NO.	DESCRIPTION			REMARK
C3249	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C3250	1-164-346-11	CERAMIC CHIP	1MF		16V
C3251	1-126-964-11	ELECT	10MF	20%	50V
C3252	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3253	1-126-933-11	ELECT	100MF	20%	16V
C3254	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C3255	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C3256	1-126-963-11	ELECT	4.7MF	20%	50V
C3257	1-164-346-11	CERAMIC CHIP	1MF		16V
C3258	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C3259	1-126-963-11	ELECT	4.7MF	20%	50V
C3260	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3262	1-104-664-11	ELECT	47MF	20%	16V
C3264	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3265	1-126-964-11	ELECT	10MF	20%	50V
C3266	1-126-964-11	ELECT	10MF	20%	50V
C3268	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3269	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3270	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C3271	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C3272	1-126-965-11	ELECT	22MF	20%	50V
C3273	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C3274	1-126-964-11	ELECT	10MF	20%	50V
C3276	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V
C3277	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V
C3278	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V
C3279	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V
C3280	1-163-018-00	CERAMIC CHIP	0.0056MF	10%	50V
C3281	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C3282	1-126-964-11	ELECT	10MF	20%	50V
C3283	1-126-964-11	ELECT	10MF	20%	50V
C3284	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C3285	1-126-964-11	ELECT	10MF	20%	50V
C3286	1-126-964-11	ELECT	10MF	20%	50V
C3287	1-126-964-11	ELECT	10MF	20%	50V
C3288	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C3289	1-163-018-00	CERAMIC CHIP	0.0056MF	10%	50V
C3290	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C3291	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C6200	1-216-295-91	SHORT	0		
C6202	1-128-550-11	ELECT	2200MF	20%	50V
C6203	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C6204	1-128-550-11	ELECT	2200MF	20%	50V
C6205	1-130-495-00	MYLAR	0.1MF	5%	50V
C6206	1-128-550-11	ELECT	2200MF	20%	50V
C6209	1-130-495-00	MYLAR	0.1MF	5%	50V
C6210	1-126-924-11	ELECT	330MF	20%	10V
C6211	1-126-924-11	ELECT	330MF	20%	10V
C6212	1-104-664-11	ELECT	47MF	20%	25V
C6213	1-126-964-11	ELECT	10MF	20%	50V
C6217	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6220	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C6222	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C6223	1-126-960-11	ELECT	1MF	20%	50V
C6241	1-126-964-11	ELECT	10MF	20%	50V
C6244	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C6245	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C6249	1-216-295-91	SHORT	0		

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<CONNECTOR>	
CN1400*	1-564-512-11	PLUG, CONNECTOR 9P	
CN1401*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P	
CN1402*	1-564-507-11	PLUG, CONNECTOR 4P	
CN1403*	1-564-506-11	PLUG, CONNECTOR 3P	
CN1405*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
CN1406*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
CN1407*	1-779-891-11	CONNECTOR, BOARD TO BOARD 8P	
CN1408	1-764-818-11	CONNECTOR, BOARD TO BOARD 10P	
CN1409	1-764-818-11	CONNECTOR, BOARD TO BOARD 10P	
CN6200*	1-564-507-11	PLUG, CONNECTOR 4P	
CN6204*	1-564-509-11	PLUG, CONNECTOR 6P	
CN6206*	1-564-508-11	PLUG, CONNECTOR 5P	
		<DIODE>	
D1401	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1402	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1403	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1404	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1405	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1406	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1407	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1408	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1409	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1410	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1411	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1412	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1415	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1416	8-719-069-60	DIODE UDZS-TE17-9.1B	
D3201	8-719-988-61	DIODE 1SS355TE-17	
D3203	8-719-988-61	DIODE 1SS355TE-17	
D6211	8-719-073-01	DIODE MA111-(K8).S0	
D6212	8-719-073-01	DIODE MA111-(K8).S0	
		<IC>	
IC1401	8-752-068-46	IC CXA1855S	
IC1404	8-759-701-59	IC NJM78M09FA	
IC3200	8-759-100-96	IC UPC4558G2	
IC3201	8-759-553-44	IC NJM2187L	
IC3202	8-759-100-96	IC UPC4558G2	
IC3203	8-759-711-10	IC NJU4066BM	
IC3204	8-759-100-96	IC UPC4558G2	
IC3205	8-752-057-18	IC CXA1315P	
IC3206	8-759-496-02	IC NJM2150D	
IC3207	8-759-273-12	IC TDA7315D013TR	
IC6200	8-759-168-24	IC TA8200AH	
		<JACK>	
J1401	1-784-646-11	TERMINAL, S	
J1402	1-778-388-11	JACK BLOCK, PIN 9P	

B3 (KV-XS29M80)

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<CHIP CONDUCTOR>			
JR1405	1-216-295-91	SHORT	0		
JR1406	1-216-295-91	SHORT	0		
JR1407	1-216-295-91	SHORT	0		
JR1408	1-216-295-91	SHORT	0		
JR1411	1-216-295-91	SHORT	0		
JR3200	1-216-295-91	SHORT	0		
JR3201	1-216-295-91	SHORT	0		
JR3202	1-216-295-91	SHORT	0		
JR3203	1-216-295-91	SHORT	0		
JR3204	1-216-295-91	SHORT	0		
JR3207	1-216-295-91	SHORT	0		
JR3208	1-216-295-91	SHORT	0		
JR3209	1-216-295-91	SHORT	0		
JR6200	1-216-295-91	SHORT	0		
JR6202	1-216-295-91	SHORT	0		
JR6203	1-216-295-91	SHORT	0		
JR6204	1-216-295-91	SHORT	0		
		<COIL>			
L1404	1-412-537-31	INDUCTOR	100UH		
L3202	1-414-856-11	INDUCTOR	10UH		
		<TRANSISTOR>			
Q1402	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1403	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1404	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q3201	8-729-224-62	TRANSISTOR 2SK246-GR			
Q3202	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q3203	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q3204	8-729-224-62	TRANSISTOR 2SK246-GR			
Q6201	8-729-421-19	TRANSISTOR UN2213			
Q6203	8-729-421-19	TRANSISTOR UN2213			
Q6204	8-729-421-19	TRANSISTOR UN2213			
Q6208	8-729-421-19	TRANSISTOR UN2213			
		<RESISTOR>			
R1403	1-216-033-00	RES,CHIP	220	5%	1/10W
R1404	1-216-295-91	SHORT	0		
R1406	1-216-017-91	RES,CHIP	47	5%	1/10W
R1407	1-216-033-00	RES,CHIP	220	5%	1/10W
R1408	1-216-031-00	RES,CHIP	180	5%	1/10W
R1409	1-216-105-91	RES,CHIP	220K	5%	1/10W
R1410	1-216-105-91	RES,CHIP	220K	5%	1/10W
R1411	1-216-295-91	SHORT	0		
R1412	1-216-295-91	SHORT	0		
R1414	1-216-025-91	RES,CHIP	100	5%	1/10W
R1417	1-216-025-91	RES,CHIP	100	5%	1/10W
R1418	1-216-025-91	RES,CHIP	100	5%	1/10W
R1426	1-216-025-91	RES,CHIP	100	5%	1/10W
R1428	1-216-025-91	RES,CHIP	100	5%	1/10W
R1429	1-216-295-91	SHORT	0		

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1430	1-216-025-91	RES,CHIP	100	5%	1/10W
R1431	1-216-025-91	RES,CHIP	100	5%	1/10W
R1433	1-216-025-91	RES,CHIP	100	5%	1/10W
R1435	1-216-022-00	RES,CHIP	75	5%	1/10W
R1436	1-216-025-91	RES,CHIP	100	5%	1/10W
R1437	1-216-022-00	RES,CHIP	75	5%	1/10W
R1438	1-216-025-91	RES,CHIP	100	5%	1/10W
R1441	1-216-025-91	RES,CHIP	100	5%	1/10W
R1442	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1443	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1445	1-216-025-91	RES,CHIP	100	5%	1/10W
R1446	1-216-105-91	RES,CHIP	220K	5%	1/10W
R1447	1-216-025-91	RES,CHIP	100	5%	1/10W
R1449	1-249-429-11	CARBON	10K	5%	1/4W
R1450	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1451	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1452	1-216-295-91	SHORT	0		
R1453	1-216-025-91	RES,CHIP	100	5%	1/10W
R1455	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1456	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1457	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1458	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1459	1-216-025-91	RES,CHIP	100	5%	1/10W
R1460	1-216-033-00	RES,CHIP	220	5%	1/10W
R1461	1-216-025-91	RES,CHIP	100	5%	1/10W
R1463	1-249-429-11	CARBON	10K	5%	1/4W
R1464	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1465	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1466	1-216-033-00	RES,CHIP	220	5%	1/10W
R1467	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1468	1-216-093-91	RES,CHIP	68K	5%	1/10W
R1469	1-216-105-91	RES,CHIP	220K	5%	1/10W
R1470	1-216-105-91	RES,CHIP	220K	5%	1/10W
R1471	1-216-022-00	RES,CHIP	75	5%	1/10W
R1472	1-216-033-00	RES,CHIP	220	5%	1/10W
R1473	1-216-033-00	RES,CHIP	220	5%	1/10W
R1477	1-216-047-91	RES,CHIP	820	5%	1/10W
R1478	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1479	1-216-105-91	RES,CHIP	220K	5%	1/10W
R1480	1-216-105-91	RES,CHIP	220K	5%	1/10W
R1481	1-216-022-00	RES,CHIP	75	5%	1/10W
R1482	1-216-025-91	RES,CHIP	100	5%	1/10W
R1483	1-216-025-91	RES,CHIP	100	5%	1/10W
R1484	1-216-025-91	RES,CHIP	100	5%	1/10W
R1485	1-216-025-91	RES,CHIP	100	5%	1/10W
R1486	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1490	1-216-025-91	RES,CHIP	100	5%	1/10W
R1491	1-216-025-91	RES,CHIP	100	5%	1/10W
R1492	1-216-021-00	RES,CHIP	68	5%	1/10W
R1493	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1496	1-216-041-00	RES,CHIP	470	5%	1/10W
R1497	1-216-041-00	RES,CHIP	470	5%	1/10W
R1498	1-216-025-91	RES,CHIP	100	5%	1/10W
R1499	1-216-025-91	RES,CHIP	100	5%	1/10W
R1500	1-216-025-91	RES,CHIP	100	5%	1/10W
R1502	1-216-025-91	RES,CHIP	100	5%	1/10W
R1503	1-216-025-91	RES,CHIP	100	5%	1/10W
R1504	1-216-025-91	RES,CHIP	100	5%	1/10W

B3 (KV-XS29M80)

REF. NO.	PART NO.	DESCRIPTION			REMARK
R3200	1-216-121-91	RES,CHIP	1M	5%	1/10W
R3201	1-216-121-91	RES,CHIP	1M	5%	1/10W
R3202	1-216-097-91	RES,CHIP	100K	5%	1/10W
R3203	1-216-121-91	RES,CHIP	1M	5%	1/10W
R3204	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R3205	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R3206	1-216-039-00	RES,CHIP	390	5%	1/10W
R3207	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3208	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R3209	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R3210	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R3211	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R3212	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3213	1-216-091-00	RES,CHIP	56K	5%	1/10W
R3214	1-216-295-91	SHORT	0		
R3215	1-216-295-91	SHORT	0		
R3216	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3217	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3218	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3219	1-216-077-91	RES,CHIP	15K	5%	1/10W
R3220	1-216-097-91	RES,CHIP	100K	5%	1/10W
R3221	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3222	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3223	1-216-045-00	RES,CHIP	680	5%	1/10W
R3224	1-216-115-00	RES,CHIP	560K	5%	1/10W
R3225	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3226	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3227	1-216-129-00	RES,CHIP	2.2M	5%	1/10W
R3228	1-216-085-00	RES,CHIP	33K	5%	1/10W
R3229	1-216-095-00	RES,CHIP	82K	5%	1/10W
R3230	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R3231	1-216-091-00	RES,CHIP	56K	5%	1/10W
R3232	1-216-089-91	RES,CHIP	47K	5%	1/10W
R3233	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R3234	1-216-039-00	RES,CHIP	390	5%	1/10W
R3235	1-216-101-00	RES,CHIP	150K	5%	1/10W
R3236	1-216-113-00	RES,CHIP	470K	5%	1/10W
R3237	1-216-045-00	RES,CHIP	680	5%	1/10W
R3238	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3239	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3240	1-216-081-00	RES,CHIP	22K	5%	1/10W
R3241	1-216-093-91	RES,CHIP	68K	5%	1/10W
R3242	1-216-081-00	RES,CHIP	22K	5%	1/10W
R3243	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3244	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3245	1-216-097-91	RES,CHIP	100K	5%	1/10W
R3246	1-216-045-00	RES,CHIP	680	5%	1/10W
R3247	1-216-101-00	RES,CHIP	150K	5%	1/10W
R3248	1-216-081-00	RES,CHIP	22K	5%	1/10W
R3249	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3250	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3251	1-216-101-00	RES,CHIP	150K	5%	1/10W
R3252	1-216-113-00	RES,CHIP	470K	5%	1/10W
R3253	1-216-045-00	RES,CHIP	680	5%	1/10W
R3254	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3255	1-216-121-91	RES,CHIP	1M	5%	1/10W
R3256	1-216-121-91	RES,CHIP	1M	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R3257	1-216-097-91	RES,CHIP	100K	5%	1/10W
R3258	1-216-121-91	RES,CHIP	1M	5%	1/10W
R3259	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R3260	1-216-025-91	RES,CHIP	100	5%	1/10W
R3261	1-216-025-91	RES,CHIP	100	5%	1/10W
R3262	1-216-115-00	RES,CHIP	560K	5%	1/10W
R3263	1-216-093-91	RES,CHIP	68K	5%	1/10W
R3264	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R3266	1-216-295-91	SHORT	0		
R3267	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3268	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3269	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3270	1-216-295-91	SHORT	0		
R3271	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R3272	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R3273	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3274	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R3277	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3278	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R3279	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R3280	1-216-033-00	RES,CHIP	220	5%	1/10W
R3281	1-216-033-00	RES,CHIP	220	5%	1/10W
R3282	1-216-079-00	RES,CHIP	18K	5%	1/10W
R3283	1-216-081-00	RES,CHIP	22K	5%	1/10W
R3284	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3285	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3286	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3287	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3288	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3289	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3290	1-216-081-00	RES,CHIP	22K	5%	1/10W
R3291	1-216-079-00	RES,CHIP	18K	5%	1/10W
R3294	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3295	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3296	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3297	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R3298	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R3299	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R6201	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R6202	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R6203	1-216-295-91	SHORT	0		
R6209	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6213	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6214	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6219	1-216-089-91	RES,CHIP	47K	5%	1/10W
R6245	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R6246	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R6254	1-216-017-91	RES,CHIP	47	5%	1/10W
R6255	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R6258	1-216-017-91	RES,CHIP	47	5%	1/10W
R6259	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R6278	1-216-295-91	SHORT	0		

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B3 (KV-XS29M97)

REF. NO.	PART NO.	DESCRIPTION			REMARK
*	A-1136-050-A	B3 BOARD COMPLETE (KV-XS29M97) **********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C1401	1-126-933-11	ELECT	100MF	20%	16V
C1402	1-104-664-11	ELECT	47MF	20%	25V
C1403	1-104-664-11	ELECT	47MF	20%	25V
C1404	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1405	1-104-664-11	ELECT	47MF	20%	25V
C1406	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1407	1-126-933-11	ELECT	100MF	20%	16V
C1408	1-126-964-11	ELECT	10MF	20%	50V
C1410	1-104-664-11	ELECT	47MF	20%	25V
C1411	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1412	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1413	1-126-935-11	ELECT	470MF	20%	16V
C1414	1-164-346-11	CERAMIC CHIP	1MF		16V
C1415	1-104-664-11	ELECT	47MF	20%	25V
C1416	1-164-346-11	CERAMIC CHIP	1MF		16V
C1417	1-126-933-11	ELECT	100MF	20%	16V
C1418	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1419	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1420	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1421	1-164-346-11	CERAMIC CHIP	1MF		16V
C1422	1-164-346-11	CERAMIC CHIP	1MF		16V
C1423	1-164-346-11	CERAMIC CHIP	1MF		16V
C1425	1-164-346-11	CERAMIC CHIP	1MF		16V
C1426	1-164-346-11	CERAMIC CHIP	1MF		16V
C1428	1-104-665-11	ELECT	100MF	20%	25V
C1429	1-104-663-11	ELECT	33MF	20%	25V
C1430	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1431	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1432	1-104-664-11	ELECT	47MF	20%	25V
C1433	1-104-664-11	ELECT	47MF	20%	16V
C1434	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1435	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1436	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1438	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C1439	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1440	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1441	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1442	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1443	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1444	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1445	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1446	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1447	1-126-964-11	ELECT	10MF	20%	50V
C1448	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1449	1-104-664-11	ELECT	47MF	20%	16V
C1450	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C1451	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C1452	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C1453	1-126-933-11	ELECT	100MF	20%	16V
C1454	1-126-967-11	ELECT	47MF	20%	50V
C1455	1-126-967-11	ELECT	47MF	20%	50V
C1456	1-126-933-11	ELECT	100MF	20%	16V
C1457	1-164-346-11	CERAMIC CHIP	1MF		16V
C1458	1-126-933-11	ELECT	100MF	20%	16V
C1459	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1460	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1461	1-164-346-11	CERAMIC CHIP	1MF		16V
C1462	1-164-346-11	CERAMIC CHIP	1MF		16V
C3201	1-126-964-11	ELECT	10MF	20%	50V
C3203	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C3206	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C3207	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3208	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3209	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C3210	1-126-964-11	ELECT	10MF	20%	50V
C3211	1-126-964-11	ELECT	10MF	20%	50V
C3212	1-126-964-11	ELECT	10MF	20%	50V
C3213	1-104-664-11	ELECT	47MF	20%	25V
C3214	1-104-664-11	ELECT	47MF	20%	25V
C3215	1-117-720-11	CERAMIC CHIP	4.7MF		10V
C3216	1-117-720-11	CERAMIC CHIP	4.7MF		10V
C3217	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C3218	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C3219	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C3220	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C3221	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C3222	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C3223	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C3224	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C3225	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3226	1-126-964-11	ELECT	10MF	20%	50V
C3227	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C3228	1-107-698-11	ELECT	10MF	20%	25V
C3229	1-107-698-11	ELECT	10MF	20%	25V
C3240	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C3249	1-216-295-91	SHORT	0		
C3254	1-216-295-91	SHORT	0		
C3259	1-104-664-11	ELECT	47MF	20%	16V
C3260	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3262	1-104-664-11	ELECT	47MF	20%	16V
C3264	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3265	1-126-964-11	ELECT	10MF	20%	50V
C3266	1-126-964-11	ELECT	10MF	20%	50V
C3268	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3269	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3270	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C3271	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C3272	1-126-965-11	ELECT	22MF	20%	50V
C3273	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C3274	1-126-964-11	ELECT	10MF	20%	50V
C3276	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C3277	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3278	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C3279	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3280	1-163-018-00	CERAMIC CHIP	0.0056MF	10%	50V
C3281	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C3282	1-126-964-11	ELECT	10MF	20%	50V

B3 (KV-XS29M97)

REF. NO.	PART NO.	DESCRIPTION			REMARK
C3283	1-126-964-11	ELECT	10MF	20%	50V
C3284	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C3285	1-126-964-11	ELECT	10MF	20%	50V
C3286	1-126-964-11	ELECT	10MF	20%	50V
C3287	1-126-964-11	ELECT	10MF	20%	50V
C3288	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C3289	1-163-018-00	CERAMIC CHIP	0.0056MF	10%	50V
C3290	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C3291	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C6200	1-216-295-91	SHORT	0		
C6201	1-126-964-11	ELECT	10MF	20%	50V
C6202	1-126-953-11	ELECT	2200MF	20%	35V
C6203	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C6204	1-128-550-11	ELECT	2200MF	20%	50V
C6205	1-130-495-00	MYLAR	0.1MF	5%	50V
C6206	1-128-550-11	ELECT	2200MF	20%	50V
C6207	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C6208	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C6209	1-130-495-00	MYLAR	0.1MF	5%	50V
C6210	1-126-924-11	ELECT	330MF	20%	10V
C6211	1-126-924-11	ELECT	330MF	20%	10V
C6212	1-104-664-11	ELECT	47MF	20%	25V
C6213	1-136-161-00	FILM	0.047MF	5%	50V
C6215	1-126-933-11	ELECT	100MF	20%	16V
C6216	1-126-960-11	ELECT	1MF	20%	50V
C6217	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6218	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C6219	1-126-961-11	ELECT	2.2MF	20%	50V
C6220	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C6221	1-126-960-11	ELECT	1MF	20%	50V
C6222	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C6223	1-126-960-11	ELECT	1MF	20%	50V
C6225	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C6226	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C6227	1-128-550-11	ELECT	2200MF	20%	50V
C6228	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C6229	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C6230	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C6231	1-128-550-11	ELECT	2200MF	20%	50V
C6232	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C6233	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C6234	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C6235	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C6236	1-115-339-11	CERAMIC CHIP	0.1MF	10%	50V
C6237	1-136-177-00	FILM	1MF	5%	50V
C6238	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C6239	1-127-682-51	ELECT MELF	2200MF	20%	25V
C6240	1-130-495-00	MYLAR	0.1MF	5%	50V
C6241	1-136-161-00	FILM	0.047MF	5%	50V
C6244	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C6245	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C6249	1-216-295-91	SHORT	0		
C6251	1-126-965-11	ELECT	22MF	20%	50V
C6252	1-126-965-11	ELECT	22MF	20%	50V
C6253	1-126-960-11	ELECT	1MF	20%	50V

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<CONNECTOR>	
CN1400*	1-564-512-11	PLUG, CONNECTOR 9P	
CN1401*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P	
CN1402*	1-564-507-11	PLUG, CONNECTOR 4P	
CN1403*	1-564-506-11	PLUG, CONNECTOR 3P	
CN1404*	1-779-891-11	CONNECTOR, BOARD TO BOARD 8P	
CN1405*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
CN1406*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
CN1407*	1-779-891-11	CONNECTOR, BOARD TO BOARD 8P	
CN1408	1-764-818-11	CONNECTOR, BOARD TO BOARD 10P	
CN1409	1-764-818-11	CONNECTOR, BOARD TO BOARD 10P	
CN6200*	1-564-507-11	PLUG, CONNECTOR 4P	
CN6202*	1-564-507-11	PLUG, CONNECTOR 4P	
CN6204*	1-564-509-11	PLUG, CONNECTOR 6P	
CN6205*	1-564-507-11	PLUG, CONNECTOR 4P	
CN6206*	1-564-508-11	PLUG, CONNECTOR 5P	
		<DIODE>	
D1401	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1402	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1403	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1404	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1405	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1406	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1407	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1408	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1409	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1410	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1411	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1412	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1415	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1416	8-719-069-60	DIODE UDZS-TE17-9.1B	
D1417	8-719-069-60	DIODE UDZS-TE17-9.1B	
D6200	8-719-109-86	DIODE RD5.1ESB3	
D6205	8-719-988-61	DIODE 1SS355TE-17	
D6211	8-719-073-01	DIODE MA111-(K8).S0	
D6212	8-719-073-01	DIODE MA111-(K8).S0	
		<FERRITE BEAD>	
FB6201	1-410-397-21	FERRITE 1.1UH	
FB6202	1-410-397-21	FERRITE 1.1UH	
		<IC>	
IC1401	8-752-068-46	IC CXA1855S	
IC1402	8-759-100-96	IC UPC4558G2	
IC1403	8-759-231-53	IC TA7805S	
IC1404	8-759-701-59	IC NJM78M09FA	
IC3200	8-759-100-96	IC UPC4558G2	
IC3200	8-759-100-96	IC UPC4558G2	
IC3201	8-759-553-44	IC NJM2187L	
IC3202	8-759-100-96	IC UPC4558G2	
IC3203	8-759-711-10	IC NJU4066BM	
IC3205	8-752-057-18	IC CXA1315P	

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REF. NO.	PART NO.	DESCRIPTION		REMARK
IC3206	8-759-496-02	IC NJM2150D		
IC3207	8-759-273-12	IC TDA7315D013TR		
IC6200	8-759-168-24	IC TA8200AH		
IC6201	8-759-553-45	IC TDA7481		
		<JACK>		
J1401	1-784-646-11	TERMINAL, S		
J1402	1-778-387-11	JACK BLOCK, PIN 12P		
		<CHIP CONDUCTOR>		
JR1401	1-216-295-91	SHORT	0	
JR1402	1-216-295-91	SHORT	0	
JR1405	1-216-295-91	SHORT	0	
JR1406	1-216-295-91	SHORT	0	
JR1407	1-216-295-91	SHORT	0	
JR1409	1-216-295-91	SHORT	0	
JR1410	1-216-295-91	SHORT	0	
JR1411	1-216-295-91	SHORT	0	
JR3200	1-216-295-91	SHORT	0	
JR3201	1-216-295-91	SHORT	0	
JR3202	1-216-295-91	SHORT	0	
JR3203	1-216-295-91	SHORT	0	
JR3204	1-216-295-91	SHORT	0	
JR3207	1-216-295-91	SHORT	0	
JR3208	1-216-295-91	SHORT	0	
JR3209	1-216-295-91	SHORT	0	
JR6200	1-216-295-91	SHORT	0	
JR6201	1-216-295-91	SHORT	0	
JR6202	1-216-295-91	SHORT	0	
JR6203	1-216-295-91	SHORT	0	
JR6204	1-216-295-91	SHORT	0	
		<COIL>		
L1400	1-414-856-11	INDUCTOR	10UH	
L1402	1-412-537-31	INDUCTOR	100UH	
L1403	1-414-856-11	INDUCTOR	10UH	
L1404	1-412-537-31	INDUCTOR	100UH	
L1405	1-414-856-11	INDUCTOR	10UH	
L1406	1-414-856-11	INDUCTOR	10UH	
L1407	1-414-856-11	INDUCTOR	10UH	
L3202	1-414-856-11	INDUCTOR	10UH	
L6202	1-416-857-11	INDUCTOR	65UH	
		<IC LINK>		
PS6200	1-532-686-21	LINK, IC 2.7A/150V		
PS6201	1-532-686-21	LINK, IC 2.7A/150V		
		<TRANSISTOR>		
Q1401	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q1402	8-729-216-22	TRANSISTOR 2SA1162-G		
Q1403	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q1404	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q1408	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q1409	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q1410	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q6200	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q6201	8-729-421-19	TRANSISTOR UN2213		
Q6202	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q6203	8-729-421-19	TRANSISTOR UN2213		
Q6204	8-729-421-19	TRANSISTOR UN2213		
Q6205	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q6206	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q6207	8-729-224-62	TRANSISTOR 2SK246-GR		
Q6208	8-729-421-19	TRANSISTOR UN2213		
		<RESISTOR>		
R1400	1-216-105-91	RES,CHIP	220K	5% 1/10W
R1401	1-216-031-00	RES,CHIP	180	5% 1/10W
R1402	1-216-033-00	RES,CHIP	220	5% 1/10W
R1403	1-216-033-00	RES,CHIP	220	5% 1/10W
R1404	1-216-295-91	SHORT	0	
R1406	1-216-017-91	RES,CHIP	47	5% 1/10W
R1407	1-216-033-00	RES,CHIP	220	5% 1/10W
R1408	1-216-031-00	RES,CHIP	180	5% 1/10W
R1409	1-216-105-91	RES,CHIP	220K	5% 1/10W
R1410	1-216-105-91	RES,CHIP	220K	5% 1/10W
R1411	1-216-089-91	RES,CHIP	47K	5% 1/10W
R1412	1-216-089-91	RES,CHIP	47K	5% 1/10W
R1413	1-216-105-91	RES,CHIP	220K	5% 1/10W
R1414	1-216-025-91	RES,CHIP	100	5% 1/10W
R1417	1-216-025-91	RES,CHIP	100	5% 1/10W
R1418	1-216-025-91	RES,CHIP	100	5% 1/10W
R1419	1-216-025-91	RES,CHIP	100	5% 1/10W
R1420	1-216-073-00	RES,CHIP	10K	5% 1/10W
R1421	1-216-057-00	RES,CHIP	2.2K	5% 1/10W
R1423	1-216-025-91	RES,CHIP	100	5% 1/10W
R1424	1-216-073-00	RES,CHIP	10K	5% 1/10W
R1425	1-216-047-91	RES,CHIP	820	5% 1/10W
R1426	1-216-025-91	RES,CHIP	100	5% 1/10W
R1427	1-216-063-91	RES,CHIP	3.9K	5% 1/10W
R1428	1-216-025-91	RES,CHIP	100	5% 1/10W
R1429	1-216-089-91	RES,CHIP	47K	5% 1/10W
R1430	1-216-025-91	RES,CHIP	100	5% 1/10W
R1431	1-216-025-91	RES,CHIP	100	5% 1/10W
R1432	1-216-041-00	RES,CHIP	470	5% 1/10W
R1433	1-216-025-91	RES,CHIP	100	5% 1/10W
R1434	1-216-025-91	RES,CHIP	100	5% 1/10W
R1435	1-216-022-00	RES,CHIP	75	5% 1/10W
R1436	1-216-025-91	RES,CHIP	100	5% 1/10W
R1437	1-216-022-00	RES,CHIP	75	5% 1/10W
R1438	1-216-025-91	RES,CHIP	100	5% 1/10W
R1439	1-216-295-91	SHORT	0	
R1441	1-216-025-91	RES,CHIP	100	5% 1/10W
R1442	1-216-049-91	RES,CHIP	1K	5% 1/10W
R1443	1-216-049-91	RES,CHIP	1K	5% 1/10W
R1444	1-216-089-91	RES,CHIP	47K	5% 1/10W
R1445	1-216-025-91	RES,CHIP	100	5% 1/10W
R1446	1-216-105-91	RES,CHIP	220K	5% 1/10W
R1447	1-216-025-91	RES,CHIP	100	5% 1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R1448	1-216-043-91	RES,CHIP	560	5%	1/10W
R1449	1-249-429-11	CARBON	10K	5%	1/4W
R1450	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1451	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1452	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1453	1-216-025-91	RES,CHIP	100	5%	1/10W
R1454	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1455	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1456	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1457	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1458	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1459	1-216-025-91	RES,CHIP	100	5%	1/10W
R1460	1-216-033-00	RES,CHIP	220	5%	1/10W
R1461	1-216-025-91	RES,CHIP	100	5%	1/10W
R1463	1-249-429-11	CARBON	10K	5%	1/4W
R1464	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1465	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1466	1-216-033-00	RES,CHIP	220	5%	1/10W
R1467	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1468	1-216-093-91	RES,CHIP	68K	5%	1/10W
R1469	1-216-105-91	RES,CHIP	220K	5%	1/10W
R1470	1-216-105-91	RES,CHIP	220K	5%	1/10W
R1471	1-216-022-00	RES,CHIP	75	5%	1/10W
R1472	1-216-033-00	RES,CHIP	220	5%	1/10W
R1473	1-216-033-00	RES,CHIP	220	5%	1/10W
R1474	1-216-295-91	SHORT	0		
R1475	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1476	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1477	1-216-047-91	RES,CHIP	820	5%	1/10W
R1478	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1479	1-216-105-91	RES,CHIP	220K	5%	1/10W
R1480	1-216-105-91	RES,CHIP	220K	5%	1/10W
R1481	1-216-022-00	RES,CHIP	75	5%	1/10W
R1482	1-216-025-91	RES,CHIP	100	5%	1/10W
R1483	1-216-025-91	RES,CHIP	100	5%	1/10W
R1484	1-216-025-91	RES,CHIP	100	5%	1/10W
R1485	1-216-025-91	RES,CHIP	100	5%	1/10W
R1486	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1487	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1488	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1489	1-216-022-00	RES,CHIP	75	5%	1/10W
R1490	1-216-025-91	RES,CHIP	100	5%	1/10W
R1491	1-216-025-91	RES,CHIP	100	5%	1/10W
R1492	1-216-021-00	RES,CHIP	68	5%	1/10W
R1493	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1494	1-216-031-00	RES,CHIP	180	5%	1/10W
R1495	1-216-033-00	RES,CHIP	220	5%	1/10W
R1496	1-216-041-00	RES,CHIP	470	5%	1/10W
R1497	1-216-041-00	RES,CHIP	470	5%	1/10W
R1498	1-216-025-91	RES,CHIP	100	5%	1/10W
R1499	1-216-025-91	RES,CHIP	100	5%	1/10W
R1500	1-216-025-91	RES,CHIP	100	5%	1/10W
R1501	1-216-045-00	RES,CHIP	680	5%	1/10W
R1502	1-216-025-91	RES,CHIP	100	5%	1/10W
R1503	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1504	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3208	1-216-053-00	RES,CHIP	1.5K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R3209	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R3210	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R3211	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R3212	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3213	1-216-091-00	RES,CHIP	56K	5%	1/10W
R3214	1-216-295-91	SHORT	0		
R3215	1-216-295-91	SHORT	0		
R3216	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3217	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3218	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3219	1-216-077-91	RES,CHIP	15K	5%	1/10W
R3224	1-216-101-00	RES,CHIP	150K	5%	1/10W
R3225	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3226	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3227	1-216-129-00	RES,CHIP	2.2M	5%	1/10W
R3228	1-216-085-00	RES,CHIP	33K	5%	1/10W
R3229	1-216-095-00	RES,CHIP	82K	5%	1/10W
R3230	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R3231	1-216-091-00	RES,CHIP	56K	5%	1/10W
R3232	1-216-089-91	RES,CHIP	47K	5%	1/10W
R3238	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3239	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3240	1-216-081-00	RES,CHIP	22K	5%	1/10W
R3241	1-216-093-91	RES,CHIP	68K	5%	1/10W
R3242	1-216-081-00	RES,CHIP	22K	5%	1/10W
R3243	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3244	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3247	1-216-101-00	RES,CHIP	150K	5%	1/10W
R3248	1-216-081-00	RES,CHIP	22K	5%	1/10W
R3249	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3250	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3260	1-216-025-91	RES,CHIP	100	5%	1/10W
R3261	1-216-025-91	RES,CHIP	100	5%	1/10W
R3262	1-216-101-00	RES,CHIP	150K	5%	1/10W
R3263	1-216-093-91	RES,CHIP	68K	5%	1/10W
R3264	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R3266	1-216-295-91	SHORT	0		
R3267	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3268	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3269	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3270	1-216-295-91	SHORT	0		
R3271	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R3272	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R3273	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3274	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R3275	1-216-295-91	SHORT	0		
R3276	1-216-295-91	SHORT	0		
R3277	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3278	1-216-081-00	RES,CHIP	22K	5%	1/10W
R3279	1-216-081-00	RES,CHIP	22K	5%	1/10W
R3280	1-216-033-00	RES,CHIP	220	5%	1/10W
R3281	1-216-033-00	RES,CHIP	220	5%	1/10W
R3282	1-216-079-00	RES,CHIP	18K	5%	1/10W
R3283	1-216-081-00	RES,CHIP	22K	5%	1/10W
R3284	1-216-073-00	RES,CHIP	10K	5%	1/10W

B3 (KV-XS29M97) **B5 (KV-XS29M80)**

REF. NO.	PART NO.	DESCRIPTION			REMARK
R3285	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3286	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3287	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3288	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3289	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3290	1-216-081-00	RES,CHIP	22K	5%	1/10W
R3291	1-216-079-00	RES,CHIP	18K	5%	1/10W
R3294	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3295	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3296	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3297	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R3298	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R3299	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R6200	1-216-089-91	RES,CHIP	47K	5%	1/10W
R6201	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R6202	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R6203	1-216-295-91	SHORT	0		
R6205	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6207	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6209	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6213	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6214	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6219	1-216-089-91	RES,CHIP	47K	5%	1/10W
R6235	1-216-029-00	RES,CHIP	150	5%	1/10W
R6236	1-216-075-00	RES,CHIP	12K	5%	1/10W
R6237	1-216-089-91	RES,CHIP	47K	5%	1/10W
R6239	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R6240	1-249-429-11	CARBON	10K	5%	1/4W
R6241	1-215-915-11	METAL OXIDE	470	5%	3W F
R6242	1-215-915-11	METAL OXIDE	470	5%	3W F
R6243	1-249-392-11	CARBON	8.2	5%	1/4W F
R6244	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6245	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R6246	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R6248	1-216-041-00	RES,CHIP	470	5%	1/10W
R6249	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R6250	1-216-295-91	SHORT	0		
R6251	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6252	1-216-097-91	RES,CHIP	100K	5%	1/10W
R6253	1-216-041-00	RES,CHIP	470	5%	1/10W
R6254	1-216-009-91	RES,CHIP	22	5%	1/10W
R6255	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R6256	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R6257	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R6258	1-216-009-91	RES,CHIP	22	5%	1/10W
R6259	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R6260	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6262	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R6263	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R6266	1-216-089-91	RES,CHIP	47K	5%	1/10W
R6268	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R6278	1-216-295-91	SHORT	0		

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<TUNER>			
TU1401	8-598-508-10	TUNER, FSS BTF-LG436			
**********					
*	A-1131-506-A	B5 BOARD MOUNTED (KV-XS29M80)			
		**********			
		<CAPACITOR>			
C1540	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C1541	1-126-967-11	ELECT	47MF	20%	50V
C1542	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C1543	1-126-933-11	ELECT	100MF	20%	16V
C1544	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C1554	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C1571	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C1572	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1574	1-216-295-91	SHORT	0		
C1575	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C1576	1-104-661-91	ELECT	330MF	20%	16V
C1577	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C1578	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5801	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C5802	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5803	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5804	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C5805	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5806	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C5808	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5810	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C5811	1-126-934-11	ELECT	220MF	20%	16V
C5813	1-126-964-11	ELECT	10MF	20%	50V
C5814	1-104-664-11	ELECT	47MF	20%	16V
C5817	1-104-664-11	ELECT	47MF	20%	16V
C5818	1-126-933-11	ELECT	100MF	20%	16V
		<CONNECTOR>			
CN1503	1-764-811-11	CONNECTOR, BOARD TO BOARD 10P			
CN1504	1-764-811-11	CONNECTOR, BOARD TO BOARD 10P			
CN5800*	1-564-506-11	PLUG, CONNECTOR 3P			
		<IC>			
IC1501	8-752-058-68	IC CXA1315M			
		<CHIP CONDUCTOR>			
JR5800	1-216-295-91	SHORT	0		
JR5801	1-216-295-91	SHORT	0		
		<COIL>			
L1501	1-414-856-11	INDUCTOR	10UH		
L1502	1-414-856-11	INDUCTOR	10UH		

B5 (KV-XS29M80)

REF. NO.	PART NO.	DESCRIPTION			REMARK
L1570	1-410-470-11	INDUCTOR	10UH		
L5800	1-414-856-11	INDUCTOR	10UH		
L5801	1-414-856-11	INDUCTOR	10UH		
L5802	1-414-189-31	INDUCTOR	100UH		
L5803	1-414-188-41	INDUCTOR	68UH		
L5804	1-414-856-11	INDUCTOR	10UH		
L5805	1-414-856-11	INDUCTOR	10UH		
L5806	1-414-189-31	INDUCTOR	100UH		
		<TRANSISTOR>			
Q1571	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1572	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1573	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1574	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1575	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1576	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1577	8-729-216-22	TRANSISTOR 2SA1162-G			
Q5801	8-729-216-22	TRANSISTOR 2SA1162-G			
Q5802	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5803	8-729-216-22	TRANSISTOR 2SA1162-G			
Q5804	8-729-421-19	TRANSISTOR UN2213			
Q5805	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5806	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5807	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5808	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5809	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5810	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5811	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5812	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5813	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5814	8-729-216-22	TRANSISTOR 2SA1162-G			
Q5815	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5816	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5817	8-729-230-49	TRANSISTOR 2SC2712-YG			
		<RESISTOR>			
R1570	1-216-021-00	RES,CHIP	68	5% 1/10W	
R1571	1-216-645-11	METAL CHIP	560	0.50% 1/10W	
R1572	1-216-061-00	RES,CHIP	3.3K	5% 1/10W	
R1573	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R1574	1-216-667-11	METAL CHIP	4.7K	0.50% 1/10W	
R1575	1-216-081-00	RES,CHIP	22K	5% 1/10W	
R1577	1-216-049-91	RES,CHIP	1K	5% 1/10W	
R1578	1-216-033-00	RES,CHIP	220	5% 1/10W	
R1579	1-216-049-91	RES,CHIP	1K	5% 1/10W	
R1580	1-216-049-91	RES,CHIP	1K	5% 1/10W	
R1581	1-216-675-91	METAL CHIP	10K	0.50% 1/10W	
R1582	1-216-671-11	METAL CHIP	6.8K	0.50% 1/10W	
R1583	1-216-675-91	METAL CHIP	10K	0.50% 1/10W	
R1584	1-216-675-91	METAL CHIP	10K	0.50% 1/10W	
R1585	1-216-675-91	METAL CHIP	10K	0.50% 1/10W	
R1586	1-216-679-11	METAL CHIP	15K	0.50% 1/10W	
R1589	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R1590	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R1591	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R1592	1-216-073-00	RES,CHIP	10K	5% 1/10W	

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1593	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	
R1594	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	
R1595	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	
R1596	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	
R1598	1-216-025-91	RES,CHIP	100	5% 1/10W	
R1599	1-216-025-91	RES,CHIP	100	5% 1/10W	
R5801	1-216-025-91	RES,CHIP	100	5% 1/10W	
R5803	1-216-033-00	RES,CHIP	220	5% 1/10W	
R5804	1-216-295-91	SHORT	0		
R5805	1-216-027-00	RES,CHIP	120	5% 1/10W	
R5806	1-216-041-00	RES,CHIP	470	5% 1/10W	
R5807	1-216-049-91	RES,CHIP	1K	5% 1/10W	
R5808	1-216-043-91	RES,CHIP	560	5% 1/10W	
R5809	1-216-025-91	RES,CHIP	100	5% 1/10W	
R5810	1-216-077-91	RES,CHIP	15K	5% 1/10W	
R5811	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R5812	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R5813	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R5814	1-216-689-11	RES,CHIP	39K	5% 1/10W	
R5815	1-216-049-91	RES,CHIP	1K	5% 1/10W	
R5816	1-216-025-91	RES,CHIP	100	5% 1/10W	
R5817	1-216-085-00	RES,CHIP	33K	5% 1/10W	
R5818	1-216-081-00	RES,CHIP	22K	5% 1/10W	
R5819	1-216-041-00	RES,CHIP	470	5% 1/10W	
R5820	1-216-041-00	RES,CHIP	470	5% 1/10W	
R5821	1-216-041-00	RES,CHIP	470	5% 1/10W	
R5822	1-216-049-91	RES,CHIP	1K	5% 1/10W	
R5823	1-216-085-00	RES,CHIP	33K	5% 1/10W	
R5824	1-216-081-00	RES,CHIP	22K	5% 1/10W	
R5825	1-216-041-00	RES,CHIP	470	5% 1/10W	
R5826	1-216-041-00	RES,CHIP	470	5% 1/10W	
R5827	1-216-041-00	RES,CHIP	470	5% 1/10W	
R5829	1-216-049-91	RES,CHIP	1K	5% 1/10W	
R5830	1-216-041-00	RES,CHIP	470	5% 1/10W	
R5831	1-216-041-00	RES,CHIP	470	5% 1/10W	
R5832	1-216-041-00	RES,CHIP	470	5% 1/10W	
R5833	1-216-049-91	RES,CHIP	1K	5% 1/10W	
R5834	1-216-085-00	RES,CHIP	33K	5% 1/10W	
R5835	1-216-081-00	RES,CHIP	22K	5% 1/10W	
R5836	1-216-041-00	RES,CHIP	470	5% 1/10W	
R5837	1-216-033-00	RES,CHIP	220	5% 1/10W	
R5838	1-216-039-00	RES,CHIP	390	5% 1/10W	
R5839	1-216-049-91	RES,CHIP	1K	5% 1/10W	
R5840	1-216-049-91	RES,CHIP	1K	5% 1/10W	
R5841	1-216-089-91	RES,CHIP	47K	5% 1/10W	
R5842	1-216-081-00	RES,CHIP	22K	5% 1/10W	
R5843	1-216-033-00	RES,CHIP	220	5% 1/10W	
R5844	1-216-055-00	RES,CHIP	1.8K	5% 1/10W	
R5845	1-216-041-00	RES,CHIP	470	5% 1/10W	
R5846	1-216-025-91	RES,CHIP	100	5% 1/10W	
R5847	1-216-049-91	RES,CHIP	1K	5% 1/10W	

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B7 C

REF. NO.	PART NO.	DESCRIPTION			REMARK
*	A-1131-500-A	B7 BOARD MOUNTED			
		**********			
		<CAPACITOR>			
C2301	1-126-965-11	ELECT	22MF	20%	50V
C2302	1-126-964-11	ELECT	10MF	20%	50V
C2303	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2304	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2305	1-216-295-91	SHORT	0		
C2307	1-126-959-11	ELECT	0.47MF	20%	50V
C2308	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C2309	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2312	1-126-964-11	ELECT	10MF	20%	50V
C2313	1-126-964-11	ELECT	10MF	20%	50V
		<CONNECTOR>			
CN2300 *	1-766-952-11	CONNECTOR, BOARD TO BOARD 11P			
		<IC>			
IC2300	8-759-639-32	IC TDA9181			
		<CHIP CONDUCTOR>			
JR2300	1-216-295-91	SHORT	0		
JR2301	1-216-295-91	SHORT	0		
		<COIL>			
L2300	1-414-856-11	INDUCTOR	10UH		
L2301	1-414-856-11	INDUCTOR	10UH		
		<TRANSISTOR>			
Q2300	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q2301	8-729-216-22	TRANSISTOR 2SA1162-G			
Q2302	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q2303	8-729-216-22	TRANSISTOR 2SA1162-G			
Q2304	8-729-421-19	TRANSISTOR UN2213			
Q2305	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q2306	8-729-230-49	TRANSISTOR 2SC2712-YG			
		<RESISTOR>			
R2300	1-216-083-00	RES,CHIP	27K	5%	1/10W
R2301	1-216-091-00	RES,CHIP	56K	5%	1/10W
R2302	1-216-041-00	RES,CHIP	470	5%	1/10W
R2303	1-216-039-00	RES,CHIP	390	5%	1/10W
R2304	1-216-037-00	RES,CHIP	330	5%	1/10W
R2305	1-216-083-00	RES,CHIP	27K	5%	1/10W
R2306	1-216-091-00	RES,CHIP	56K	5%	1/10W
R2307	1-216-041-00	RES,CHIP	470	5%	1/10W
R2308	1-216-039-00	RES,CHIP	390	5%	1/10W
R2309	1-216-037-00	RES,CHIP	330	5%	1/10W
R2310	1-216-295-91	SHORT	0		
R2311	1-216-041-00	RES,CHIP	470	5%	1/10W
R2312	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R2313	1-216-041-00	RES,CHIP	470	5%	1/10W
R2314	1-216-029-00	RES,CHIP	150	5%	1/10W
R2315	1-216-041-00	RES,CHIP	470	5%	1/10W

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*	A-1331-999-A	C BOARD MOUNTED			
		**********			
	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
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	1-104-665-11	ELECT	100MF	20%	25V
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)			
CN706	1-695-915-11	TAB (CONTACT)			
CN1801 *	1-564-509-11	PLUG, CONNECTOR 6P			
CN1802 *	1-564-506-11	PLUG, CONNECTOR 3P			
		<DIODE>			
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			

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

C D3

REF. NO.		PART NO.	DESCRIPTION				REMARK
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, CRT				
			<COIL>				
L701		1-410-667-31	INDUCTOR	22UH			
L705		1-414-186-31	INDUCTOR	33UH			
L706		1-414-186-31	INDUCTOR	33UH			
L707		1-414-186-31	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		1-215-469-00	METAL	100K	1%	1/4W	
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		1-215-467-00	METAL	82K	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		1-249-387-11	CARBON	3.3	5%	1/4W	F
R1803		1-249-387-11	CARBON	3.3	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		1-249-435-11	CARBON	33K	5%	1/4W	
R1812		1-249-435-11	CARBON	33K	5%	1/4W	
R1821		1-249-435-11	CARBON	33K	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		1-241-656-11	RES, ADJ, METAL FILM 110M				
RV1801		1-223-241-11	RES, ADJ, CARBON 47K				
			<SPARK GAP>				
SG701		1-519-422-11	GAP, SPARK				

****

* A-1343-745-A D3 BOARD MOUNTED
****

<CAPACITOR>

C2800	1-104-664-11	ELECT	47MF	20%	25V
C2801	1-106-220-00	MYLAR	0.1MF	10%	100V
C2802	1-136-155-00	FILM	0.015MF	5%	50V
C2803	1-130-959-61	FILM	0.047MF	5%	400V
C2805	1-104-664-11	ELECT	47MF	20%	25V
C2806	1-106-383-00	MYLAR	0.047MF	5%	100V
C2807	1-137-194-81	FILM	0.47MF	5%	50V
C2808	1-126-964-11	ELECT	10MF	20%	50V
C2809	1-137-194-81	FILM	0.47MF	5%	50V
C2810	1-106-375-12	MYLAR	0.022MF	10%	250V
C2811	1-126-964-11	ELECT	10MF	20%	50V
C2812	1-126-964-11	ELECT	10MF	20%	50V
C2813	1-129-708-61	FILM	0.0033MF	5%	630V

<CONNECTOR>

CN2800*	1-564-510-11	PLUG, CONNECTOR 7P
CN2801	1-695-915-11	TAB (CONTACT)
CN2802*	1-564-506-11	PLUG, CONNECTOR 3P

<DIODE>

D2800	8-719-302-43	DIODE EL1Z
D2801	8-719-988-61	DIODE 1SS355TE-17

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

D3 F H5 (KV-XS29M97)

REF. NO.	PART NO.	DESCRIPTION				REMARK
D2802	8-719-988-61	DIODE 1SS355TE-17				
D2803	8-719-988-61	DIODE 1SS355TE-17				
		<IC>				
IC2800	8-759-701-59	IC NJM78M09FA				
IC2801	8-759-998-98	IC LM358D				
		<COIL>				
L2800	1-406-989-21	INDUCTOR	10MMH			
L2802	1-406-987-21	INDUCTOR	4.7MMH			
L2803	1-406-986-21	INDUCTOR	3.3UH			
L2804	1-406-678-11	INDUCTOR	15MMH			
		<TRANSISTOR>				
Q2800	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q2801	8-729-195-82	TRANSISTOR 2SC2958-L				
Q2802	8-729-017-06	TRANSISTOR 2SC4793				
Q2803	8-729-216-22	TRANSISTOR 2SA1162-G				
Q2804	8-729-230-49	TRANSISTOR 2SC2712-YG				
		<RESISTOR>				
R2800	1-249-405-11	CARBON	100	5%	1/4W	F
R2802	1-260-111-11	CARBON	10K	5%	1/2W	
R2803	1-260-111-11	CARBON	10K	5%	1/2W	
R2804	1-216-061-00	RES,CHIP	3.3K	5%	1/10W	
R2805	1-216-097-91	RES,CHIP	100K	5%	1/10W	
R2806	1-249-421-11	CARBON	2.2K	5%	1/4W	
R2807	1-249-420-11	CARBON	1.8K	5%	1/4W	F
R2808	1-215-857-11	METAL OXIDE	10	5%	1W	F
R2809	1-216-059-00	RES,CHIP	2.7K	5%	1/10W	
R2810	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R2811	1-216-069-00	RES,CHIP	6.8K	5%	1/10W	
R2812	1-216-081-00	RES,CHIP	22K	5%	1/10W	
R2813	1-216-059-00	RES,CHIP	2.7K	5%	1/10W	
R2814	1-216-121-91	RES,CHIP	1M	5%	1/10W	
R2815	1-216-085-00	RES,CHIP	33K	5%	1/10W	
R2816	1-216-107-00	RES,CHIP	270K	5%	1/10W	
R2817	1-216-107-00	RES,CHIP	270K	5%	1/10W	
		<TRANSFORMER>				
T2800	1-413-059-00	TRANSFORMER, FERRITE (DFT)				

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REF. NO.	PART NO.	DESCRIPTION				REMARK
*	A-1241-346-A	F BOARD MOUNTED				
		**********				
	1-533-223-11	CLIP, FUSE				
		<CAPACITOR>				
C654	1-117-703-11	CERAMIC	0.0047MF	99%	250V	
C4601 ⚠	1-104-708-11	FILM	0.47MF	20%	250V	
C4602 ⚠	1-109-835-11	FILM	0.68MF	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 ⚠	1-532-299-00	FUSE, TIME-LAG 5A/250V				
		<RESISTOR>				
R4601 ⚠	1-202-719-00	SOLID	1M	10%	1/2W	
		<TRANSFORMER>				
T4601	1-431-536-11	TRANSFORMER, LINE FILTER				
T4602	1-431-182-11	TRANSFORMER, LINE FILTER				
		<VARISTOR>				
VDR461⚠	1-803-830-31	VARISTOR (ERZV14D621)				
VDR461* ⚠	4-374-846-01	COVER, CAPACITOR, CAP TYPE				

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*	A-1372-756-A	H5 BOARD MOUNTED (KV-XS29M97)				
		**********				
*	4-055-304-01	HOLDER, LED				
		<CAPACITOR>				
C3900	1-136-153-00	FILM	0.01MF	5%	50V	
C3902	1-136-153-00	FILM	0.01MF	5%	50V	
C3904	1-104-664-11	ELECT	47MF	20%	25V	
C3905	1-126-965-11	ELECT	22MF	20%	50V	
C3906	1-126-965-11	ELECT	22MF	20%	50V	
C3907	1-136-177-00	FILM	1MF	5%	50V	
C3910	1-104-664-11	ELECT	47MF	20%	16V	
C3911	1-104-664-11	ELECT	47MF	20%	16V	
C3912	1-102-114-00	CERAMIC	470PF	10%	50V	
C3913	1-126-960-11	ELECT	1MF	20%	50V	
C3914	1-126-965-11	ELECT	22MF	20%	50V	

H5 (KV-XS29M97)

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<CONNECTOR>			
CN3601*	1-580-844-11	PIN, CONNECTOR (POWER)			
CN3602*	1-695-292-11	PIN, CONNECTOR (POWER)			
CN3603	1-695-915-11	TAB (CONTACT)			
CN3901*	1-564-507-11	PLUG, CONNECTOR 4P			
CN3902*	1-564-509-11	PLUG, CONNECTOR 6P			
CN3903*	1-564-507-11	PLUG, CONNECTOR 4P			
CN3904*	1-564-512-11	PLUG, CONNECTOR 9P			
CN3905*	1-564-512-11	PLUG, CONNECTOR 9P			
CN3906*	1-564-506-11	PLUG, CONNECTOR 3P			
		<DIODE>			
D3900	8-719-070-16	DIODE NNCD9.1A-T1			
D3901	8-719-070-16	DIODE NNCD9.1A-T1			
D3902	8-719-070-16	DIODE NNCD9.1A-T1			
D3905	8-719-070-16	DIODE NNCD9.1A-T1			
D3906	8-719-045-19	DIODE SPB-26MVWF			
D3907	8-719-070-16	DIODE NNCD9.1A-T1			
D3908	8-719-070-16	DIODE NNCD9.1A-T1			
		<IC>			
IC3901	8-742-014-11	HYB IC SBX1981-51			
		<JACK>			
J3901	1-750-264-11	JACK			
J3902	1-784-646-11	TERMINAL, S			
J3903	1-770-329-11	JACK, PIN 3P			
		<COIL>			
L3901	1-414-183-41	INDUCTOR	10UH		
L3902	1-414-183-41	INDUCTOR	10UH		
L3903	1-416-966-11	INDUCTOR	0UH		
		<TRANSISTOR>			
Q3901	8-729-030-02	TRANSISTOR DTC144ESA			
Q3902	8-729-030-02	TRANSISTOR DTC144ESA			
		<RESISTOR>			
R3900	1-249-411-11	CARBON	330	5%	1/4W
R3901	1-249-411-11	CARBON	330	5%	1/4W
R3902	1-247-804-11	CARBON	75	5%	1/4W
R3904	1-249-429-11	CARBON	10K	5%	1/4W
R3905	1-249-429-11	CARBON	10K	5%	1/4W
R3907	1-249-426-11	CARBON	5.6K	5%	1/4W
R3908	1-249-413-11	CARBON	470	5%	1/4W
R3909	1-249-417-11	CARBON	1K	5%	1/4W
R3910	1-249-420-11	CARBON	1.8K	5%	1/4W
R3911	1-249-411-11	CARBON	330	5%	1/4W
R3912	1-247-843-11	CARBON	3.3K	5%	1/4W
R3913	1-249-429-11	CARBON	10K	5%	1/4W
R3914	1-249-411-11	CARBON	330	5%	1/4W
R3915	1-249-429-11	CARBON	10K	5%	1/4W
R3916	1-249-401-11	CARBON	47	5%	1/4W
R3917	1-247-804-11	CARBON	75	5%	1/4W
R3918	1-247-815-91	CARBON	220	5%	1/4W
R3919	1-247-815-91	CARBON	220	5%	1/4W
R3920	1-247-807-31	CARBON	100	5%	1/4W
R3921	1-247-807-31	CARBON	100	5%	1/4W
R3922	1-249-421-11	CARBON	2.2K	5%	1/4W
R3923	1-247-815-91	CARBON	220	5%	1/4W
R3924	1-247-804-11	CARBON	75	5%	1/4W
		<SWITCH>			
S3601	1-571-433-21	SWITCH, PUSH (AC POWER)			
S3902	1-692-431-21	SWITCH, TACTILE			
S3903	1-692-431-21	SWITCH, TACTILE			
S3904	1-692-431-21	SWITCH, TACTILE			
S3905	1-692-431-21	SWITCH, TACTILE			
S3906	1-692-431-21	SWITCH, TACTILE			
S3907	1-692-431-21	SWITCH, TACTILE			
S3908	1-692-431-21	SWITCH, TACTILE			

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H5 (KV-XS29M80)

REF. NO.	PART NO.	DESCRIPTION			REMARK
*	A-1372-755-A	H5 BOARD MOUNTED (KV-XS29M80)			
		**********			
*	4-055-304-01	HOLDER, LED			
		<CAPACITOR>			
C3900	1-136-153-00	FILM	0.01MF	5%	50V
C3902	1-136-153-00	FILM	0.01MF	5%	50V
C3904	1-104-664-11	ELECT	47MF	20%	25V
C3905	1-126-965-11	ELECT	22MF	20%	50V
C3906	1-126-965-11	ELECT	22MF	20%	50V
C3910	1-104-664-11	ELECT	47MF	20%	16V
C3911	1-104-664-11	ELECT	47MF	20%	16V
C3912	1-102-114-00	CERAMIC	470PF	10%	50V
C3913	1-126-960-11	ELECT	1MF	20%	50V
C3914	1-126-965-11	ELECT	22MF	20%	50V
		<CONNECTOR>			
CN3601*	1-580-844-11	PIN, CONNECTOR (POWER)			
CN3602*	1-695-292-11	PIN, CONNECTOR (POWER)			
CN3603	1-695-915-11	TAB (CONTACT)			
CN3901*	1-564-507-11	PLUG, CONNECTOR 4P			
CN3902*	1-564-509-11	PLUG, CONNECTOR 6P			
CN3904*	1-564-512-11	PLUG, CONNECTOR 9P			
CN3905*	1-564-512-11	PLUG, CONNECTOR 9P			
		<DIODE>			
D3900	8-719-070-16	DIODE NNCD9.1A-T1			
D3901	8-719-070-16	DIODE NNCD9.1A-T1			

H5 (KV-XS29M80) **J4 (KV-XS29M97)**

REF. NO.	PART NO.	DESCRIPTION			REMARK
D3902	8-719-070-16	DIODE NNCD9.1A-T1			
D3905	8-719-070-16	DIODE NNCD9.1A-T1			
D3906	8-719-045-19	DIODE SPB-26MVWF			
D3907	8-719-121-26	DIODE RD9.1ESL2			
D3908	8-719-070-16	DIODE NNCD9.1A-T1			
		<IC>			
IC3901	8-742-014-11	HYB IC SBX1981-51			
		<JACK>			
J3901	1-750-264-11	JACK			
J3902	1-784-646-11	TERMINAL, S			
J3903	1-770-329-11	JACK, PIN 3P			
		<COIL>			
L3901	1-414-183-41	INDUCTOR	10UH		
L3902	1-414-183-41	INDUCTOR	10UH		
		<TRANSISTOR>			
Q3901	8-729-030-02	TRANSISTOR DTC144ESA			
Q3902	8-729-030-02	TRANSISTOR DTC144ESA			
		<RESISTOR>			
R3900	1-249-411-11	CARBON	330	5% 1/4W	
R3901	1-249-411-11	CARBON	330	5% 1/4W	
R3902	1-247-804-11	CARBON	75	5% 1/4W	
R3904	1-249-429-11	CARBON	10K	5% 1/4W	
R3905	1-249-429-11	CARBON	10K	5% 1/4W	
R3907	1-249-426-11	CARBON	5.6K	5% 1/4W	
R3908	1-249-413-11	CARBON	470	5% 1/4W	
R3909	1-249-417-11	CARBON	1K	5% 1/4W	
R3910	1-249-420-11	CARBON	1.8K	5% 1/4W	
R3911	1-249-411-11	CARBON	330	5% 1/4W	
R3912	1-247-843-11	CARBON	3.3K	5% 1/4W	
R3913	1-249-429-11	CARBON	10K	5% 1/4W	
R3914	1-249-411-11	CARBON	330	5% 1/4W	
R3915	1-249-429-11	CARBON	10K	5% 1/4W	
R3916	1-249-401-11	CARBON	47	5% 1/4W	
R3917	1-247-804-11	CARBON	75	5% 1/4W	
R3918	1-247-815-91	CARBON	220	5% 1/4W	
R3919	1-247-815-91	CARBON	220	5% 1/4W	
R3920	1-247-807-31	CARBON	100	5% 1/4W	
R3921	1-247-807-31	CARBON	100	5% 1/4W	
R3922	1-249-421-11	CARBON	2.2K	5% 1/4W	
R3923	1-247-815-91	CARBON	220	5% 1/4W	
R3924	1-247-804-11	CARBON	75	5% 1/4W	
		<SWITCH>			
S3601	1-571-433-21	SWITCH, PUSH (AC POWER)			
S3902	1-692-431-21	SWITCH, TACTILE			
S3903	1-692-431-21	SWITCH, TACTILE			
S3904	1-692-431-21	SWITCH, TACTILE			
S3905	1-692-431-21	SWITCH, TACTILE			
S3906	1-692-431-21	SWITCH, TACTILE			
S3907	1-692-431-21	SWITCH, TACTILE			
S3908	1-692-431-21	SWITCH, TACTILE			

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* A-1388-266-A J4 BOARD MOUNTED (KV-XS29M97)
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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
CN3451*	1-564-518-11	PLUG, CONNECTOR 3P

<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
D3453	8-719-110-72	DIODE RD30ESB2
D3454	8-719-110-72	DIODE RD30ESB2

<JACK>

J2410	1-784-623-11	BLOCK, PIN JACK 5P
J3451	1-694-467-11	TERMINAL, PUSH (2P)

<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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P2 (KV-XS29M97)

REF. NO.	PART NO.	DESCRIPTION			REMARK
*	A-1190-359-A	P2 BOARD MOUNTED (KV-XS29M97)			
		**********			
		<CAPACITOR>			
C4300	1-164-346-11	CERAMIC CHIP	1MF		16V
C4301	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4302	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4303	1-126-960-11	ELECT	1MF	20%	50V
C4304	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4305	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4307	1-164-346-11	CERAMIC CHIP	1MF		16V
C4310	1-104-664-11	ELECT	47MF	20%	16V
C4312	1-104-664-11	ELECT	47MF	20%	16V
C4313	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4314	1-126-964-11	ELECT	10MF	20%	50V
C4315	1-126-934-11	ELECT	220MF	20%	16V
C4317	1-104-664-11	ELECT	47MF	20%	16V
C4318	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4319	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C4320	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C4321	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4322	1-126-957-11	ELECT	0.22MF	20%	50V
C4323	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C4324	1-126-963-11	ELECT	4.7MF	20%	50V
C4325	1-104-664-11	ELECT	47MF	20%	16V
C4326	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4327	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C4329	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4330	1-126-963-11	ELECT	4.7MF	20%	50V
C4331	1-126-964-11	ELECT	10MF	20%	50V
C4332	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4333	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4334	1-126-960-11	ELECT	1MF	20%	50V
C4335	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C4336	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4337	1-164-346-11	CERAMIC CHIP	1MF		16V
C4338	1-164-346-11	CERAMIC CHIP	1MF		16V
C4339	1-164-346-11	CERAMIC CHIP	1MF		16V
C4340	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4341	1-104-665-11	ELECT	100MF	20%	10V
C4347	1-104-665-11	ELECT	100MF	20%	10V
C4348	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4349	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4350	1-126-964-11	ELECT	10MF	20%	50V
C4352	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4353	1-104-665-11	ELECT	100MF	20%	10V
C4355	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4356	1-164-346-11	CERAMIC CHIP	1MF		16V
C4357	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4359	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4362	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C4363	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C4364	1-104-665-11	ELECT	100MF	20%	10V
C4365	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4366	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4367	1-126-960-11	ELECT	1MF	20%	50V
C4371	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4372	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C4377	1-104-665-11	ELECT	100MF	20%	10V
C4380	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4394	1-104-664-11	ELECT	47MF	20%	16V
C4395	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C4396	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C4397	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C4398	1-126-964-11	ELECT	10MF	20%	50V
C4399	1-126-964-11	ELECT	10MF	20%	50V
C4554	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4571	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C4572	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4574	1-216-295-91	SHORT	0		
C4575	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C4576	1-104-661-91	ELECT	330MF	20%	16V
C4577	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4578	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4613	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4614	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4615	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C4617	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C4618	1-126-967-11	ELECT	47MF	20%	50V
C4619	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C4620	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C4622	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C4623	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C4624	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C4625	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C4626	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C4628	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C4629	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C4630	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C4640	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4641	1-126-967-11	ELECT	47MF	20%	50V
C4642	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4643	1-126-933-11	ELECT	100MF	20%	16V
C4644	1-165-319-11	CERAMIC CHIP	0.1MF		50V
		<CONNECTOR>			
CN4301	1-764-811-11	CONNECTOR, BOARD TO BOARD 10P			
CN4302	1-764-811-11	CONNECTOR, BOARD TO BOARD 10P			
CN4303*	1-564-506-11	PLUG, CONNECTOR 3P			
CN4501*	1-564-511-11	PLUG, CONNECTOR 8P			
CN4502*	1-564-507-11	PLUG, CONNECTOR 4P			
		<FERRITE BEAD>			
FB4301	1-410-397-21	FERRITE	1.1UH		
		<FILTER>			
FL4301	1-236-728-41	ENCAPSULATED COMPONENT			
		<IC>			
IC4301	8-759-533-89	IC SDA9288XE-GEG-B121			
IC4302	8-759-568-62	IC BA7606F-E2			
IC4303	8-752-090-41	IC CXA2139S			

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REF. NO.	PART NO.	DESCRIPTION		REMARK
IC4501	8-752-057-18	IC CXA1315P		
IC4502	8-759-439-64	IC HEF4053BT		
IC4503	8-759-439-64	IC HEF4053BT		
		<CHIP CONDUCTOR>		
JR4300	1-216-295-91	SHORT	0	
JR4502	1-216-295-91	SHORT	0	
JR4504	1-216-295-91	SHORT	0	
		<COIL>		
L4302	1-412-537-31	INDUCTOR	100UH	
L4304	1-408-603-31	INDUCTOR	10UH	
L4305	1-408-603-31	INDUCTOR	10UH	
L4306	1-408-603-31	INDUCTOR	10UH	
L4307	1-408-412-00	INDUCTOR	18UH	
L4308	1-408-611-31	INDUCTOR	47UH	
L4309	1-408-603-31	INDUCTOR	10UH	
L4310	1-408-611-31	INDUCTOR	47UH	
L4311	1-408-603-31	INDUCTOR	10UH	
L4312	1-408-603-31	INDUCTOR	10UH	
L4313	1-414-188-41	INDUCTOR	68UH	
L4314	1-414-856-11	INDUCTOR	10UH	
L4315	1-414-856-11	INDUCTOR	10UH	
L4316	1-414-856-11	INDUCTOR	10UH	
L4317	1-414-856-11	INDUCTOR	10UH	
L4501	1-414-856-11	INDUCTOR	10UH	
L4502	1-414-856-11	INDUCTOR	10UH	
L4506	1-414-857-11	INDUCTOR	100UH	
L4507	1-414-187-11	INDUCTOR	47UH	
L4508	1-414-187-11	INDUCTOR	47UH	
L4509	1-414-857-11	INDUCTOR	100UH	
L4510	1-414-187-11	INDUCTOR	47UH	
L4511	1-414-187-11	INDUCTOR	47UH	
L4570	1-410-470-11	INDUCTOR	10UH	
		<TRANSISTOR>		
Q4301	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4302	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4303	8-729-424-59	TRANSISTOR UN2212		
Q4304	8-729-027-43	TRANSISTOR DTC114EKA-T146		
Q4305	8-729-027-43	TRANSISTOR DTC114EKA-T146		
Q4306	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4307	8-729-027-43	TRANSISTOR DTC114EKA-T146		
Q4308	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4313	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4314	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4315	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4316	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4317	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4318	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4322	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4323	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4324	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4325	8-729-216-22	TRANSISTOR 2SA1162-G		

REF. NO.	PART NO.	DESCRIPTION		REMARK
Q4326	8-729-421-19	TRANSISTOR UN2213		
Q4327	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4328	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4362	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4363	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4364	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4365	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4366	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4368	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4369	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4371	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4372	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4373	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4374	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4501	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4502	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4503	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4505	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4507	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4509	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4510	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4511	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4514	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4515	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4515	8-729-422-27	TRANSISTOR 2SD601A-Q		
Q4516	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4520	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4522	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4523	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4571	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4572	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4573	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4574	8-729-230-49	TRANSISTOR 2SC2712-YG		
Q4575	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4576	8-729-216-22	TRANSISTOR 2SA1162-G		
Q4577	8-729-216-22	TRANSISTOR 2SA1162-G		
		<RESISTOR>		
R4300	1-216-065-91	RES,CHIP	4.7K	5% 1/10W
R4301	1-216-069-00	RES,CHIP	6.8K	5% 1/10W
R4302	1-216-053-00	RES,CHIP	1.5K	5% 1/10W
R4304	1-216-089-91	RES,CHIP	47K	5% 1/10W
R4305	1-216-025-91	RES,CHIP	100	5% 1/10W
R4306	1-216-053-00	RES,CHIP	1.5K	5% 1/10W
R4307	1-216-065-91	RES,CHIP	4.7K	5% 1/10W
R4308	1-216-081-00	RES,CHIP	22K	5% 1/10W
R4309	1-216-067-00	RES,CHIP	5.6K	5% 1/10W
R4310	1-216-025-91	RES,CHIP	100	5% 1/10W
R4311	1-216-025-91	RES,CHIP	100	5% 1/10W
R4312	1-216-025-91	RES,CHIP	100	5% 1/10W
R4313	1-216-049-91	RES,CHIP	1K	5% 1/10W
R4314	1-216-049-91	RES,CHIP	1K	5% 1/10W
R4315	1-216-049-91	RES,CHIP	1K	5% 1/10W
R4316	1-216-025-91	RES,CHIP	100	5% 1/10W
R4317	1-216-025-91	RES,CHIP	100	5% 1/10W
R4318	1-216-033-00	RES,CHIP	220	5% 1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R4319	1-216-045-00	RES,CHIP	680	5%	1/10W
R4320	1-216-081-00	RES,CHIP	22K	5%	1/10W
R4321	1-216-045-00	RES,CHIP	680	5%	1/10W
R4324	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4325	1-216-027-00	RES,CHIP	120	5%	1/10W
R4326	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R4327	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R4328	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R4329	1-216-041-00	RES,CHIP	470	5%	1/10W
R4330	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R4332	1-216-089-91	RES,CHIP	47K	5%	1/10W
R4333	1-216-025-91	RES,CHIP	100	5%	1/10W
R4334	1-216-025-91	RES,CHIP	100	5%	1/10W
R4335	1-216-025-91	RES,CHIP	100	5%	1/10W
R4336	1-216-041-00	RES,CHIP	470	5%	1/10W
R4337	1-216-041-00	RES,CHIP	470	5%	1/10W
R4338	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4339	1-216-041-00	RES,CHIP	470	5%	1/10W
R4340	1-216-085-00	RES,CHIP	33K	5%	1/10W
R4341	1-216-081-00	RES,CHIP	22K	5%	1/10W
R4343	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4344	1-216-025-91	RES,CHIP	100	5%	1/10W
R4345	1-216-041-00	RES,CHIP	470	5%	1/10W
R4346	1-216-041-00	RES,CHIP	470	5%	1/10W
R4347	1-216-025-91	RES,CHIP	100	5%	1/10W
R4348	1-216-085-00	RES,CHIP	33K	5%	1/10W
R4349	1-216-025-91	RES,CHIP	100	5%	1/10W
R4350	1-216-085-00	RES,CHIP	33K	5%	1/10W
R4351	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4352	1-216-041-00	RES,CHIP	470	5%	1/10W
R4353	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4354	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4355	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4356	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R4357	1-216-043-91	RES,CHIP	560	5%	1/10W
R4358	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R4359	1-216-025-91	RES,CHIP	100	5%	1/10W
R4360	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4361	1-216-041-00	RES,CHIP	470	5%	1/10W
R4362	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R4363	1-216-033-00	RES,CHIP	220	5%	1/10W
R4364	1-216-089-91	RES,CHIP	47K	5%	1/10W
R4365	1-216-081-00	RES,CHIP	22K	5%	1/10W
R4366	1-216-295-91	SHORT	0		
R4368	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4369	1-216-025-91	RES,CHIP	100	5%	1/10W
R4370	1-216-041-00	RES,CHIP	470	5%	1/10W
R4371	1-216-039-00	RES,CHIP	390	5%	1/10W
R4372	1-216-025-91	RES,CHIP	100	5%	1/10W
R4373	1-216-077-91	RES,CHIP	15K	5%	1/10W
R4374	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4375	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4376	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R4377	1-216-047-91	RES,CHIP	820	5%	1/10W
R4378	1-216-047-91	RES,CHIP	820	5%	1/10W
R4379	1-216-649-11	METAL CHIP	820	0.50%	1/10W
R4380	1-216-053-00	RES,CHIP	1.5K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R4382	1-216-025-91	RES,CHIP	100	5%	1/10W
R4383	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R4384	1-216-081-00	RES,CHIP	22K	5%	1/10W
R4385	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4386	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4387	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4388	1-216-025-91	RES,CHIP	100	5%	1/10W
R4389	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R4390	1-216-025-91	RES,CHIP	100	5%	1/10W
R4391	1-216-025-91	RES,CHIP	100	5%	1/10W
R4392	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4393	1-216-025-91	RES,CHIP	100	5%	1/10W
R4394	1-216-075-00	RES,CHIP	12K	5%	1/10W
R4395	1-216-025-91	RES,CHIP	100	5%	1/10W
R4396	1-216-081-00	RES,CHIP	22K	5%	1/10W
R4397	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4398	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R4400	1-216-033-00	RES,CHIP	220	5%	1/10W
R4401	1-216-041-00	RES,CHIP	470	5%	1/10W
R4402	1-216-295-91	SHORT	0		
R4408	1-216-041-00	RES,CHIP	470	5%	1/10W
R4414	1-216-025-91	RES,CHIP	100	5%	1/10W
R4416	1-216-041-00	RES,CHIP	470	5%	1/10W
R4431	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4432	1-216-689-11	RES,CHIP	39K	5%	1/10W
R4433	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4434	1-216-045-00	RES,CHIP	680	5%	1/10W
R4506	1-216-025-91	RES,CHIP	100	5%	1/10W
R4507	1-216-081-00	RES,CHIP	22K	5%	1/10W
R4508	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4511	1-216-033-00	RES,CHIP	220	5%	1/10W
R4512	1-216-005-00	RES,CHIP	15	5%	1/10W
R4515	1-216-041-00	RES,CHIP	470	5%	1/10W
R4516	1-216-025-91	RES,CHIP	100	5%	1/10W
R4517	1-216-075-00	RES,CHIP	12K	5%	1/10W
R4520	1-216-079-00	RES,CHIP	18K	5%	1/10W
R4522	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4523	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4528	1-216-033-00	RES,CHIP	220	5%	1/10W
R4529	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R4531	1-216-045-00	RES,CHIP	680	5%	1/10W
R4537	1-216-041-00	RES,CHIP	470	5%	1/10W
R4538	1-216-041-00	RES,CHIP	470	5%	1/10W
R4540	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4541	1-216-041-00	RES,CHIP	470	5%	1/10W
R4542	1-216-041-00	RES,CHIP	470	5%	1/10W
R4543	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4545	1-216-041-00	RES,CHIP	470	5%	1/10W
R4547	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4548	1-216-025-91	RES,CHIP	100	5%	1/10W
R4549	1-216-075-00	RES,CHIP	12K	5%	1/10W
R4551	1-216-081-00	RES,CHIP	22K	5%	1/10W
R4552	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4553	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4554	1-216-033-00	RES,CHIP	220	5%	1/10W
R4556	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4559	1-216-041-00	RES,CHIP	470	5%	1/10W

P2 (KV-XS29M97) VM1

REF. NO.	PART NO.	DESCRIPTION			REMARK
R4560	1-216-041-00	RES,CHIP	470	5%	1/10W
R4561	1-216-041-00	RES,CHIP	470	5%	1/10W
R4562	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4563	1-216-041-00	RES,CHIP	470	5%	1/10W
R4566	1-216-041-00	RES,CHIP	470	5%	1/10W
R4567	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4568	1-216-041-00	RES,CHIP	470	5%	1/10W
R4569	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4570	1-216-021-00	RES,CHIP	68	5%	1/10W
R4571	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R4572	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R4573	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4574	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R4575	1-216-081-00	RES,CHIP	22K	5%	1/10W
R4577	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4578	1-216-033-00	RES,CHIP	220	5%	1/10W
R4579	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4580	1-216-049-91	RES,CHIP	1K	5%	1/10W
R4581	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R4582	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R4583	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R4584	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R4585	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R4586	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R4589	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4590	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4591	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4592	1-216-073-00	RES,CHIP	10K	5%	1/10W
R4593	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4594	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4595	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4596	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R4598	1-216-025-91	RES,CHIP	100	5%	1/10W
R4599	1-216-025-91	RES,CHIP	100	5%	1/10W
		<CRYSTAL>			
X4301	1-781-134-21	VIBRATOR, CRYSTAL			
X4302	1-781-132-21	VIBRATOR, CRYSTAL			
X4303	1-760-095-21	VIBRATOR, CRYSTAL			

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* A-1342-512-A VM1 BOARD MOUNTED
****

4-073-258-01 HEAT SINK, V.OUT
4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

C5900	1-102-115-00	CERAMIC	560PF	10%	50V
C5902	1-104-661-91	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
C5909	1-126-933-11	ELECT	100MF	20%	16V
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
C5918	1-102-244-00	CERAMIC	220PF	10%	500V
C5919	1-136-165-00	FILM	0.1MF	5%	50V

<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			
D5901	8-719-991-33	DIODE 1SS133T-77			
D5902	8-719-110-88	DIODE RD39ESB2			
D5903	8-719-911-19	DIODE 1SS119-25			
D5903	8-719-991-33	DIODE 1SS133T-77			
D5904	8-719-110-88	DIODE RD39ESB2			
D5905	8-719-911-19	DIODE 1SS119-25			
D5905	8-719-991-33	DIODE 1SS133T-77			
D5906	1-249-406-11	CARBON	120	5%	1/4W
D5907	1-249-406-11	CARBON	120	5%	1/4W

<COIL>

L5901	1-414-187-11	INDUCTOR	47UH		

<TRANSISTOR>

Q5901	8-729-230-45	TRANSISTOR 2SC2458-YGR
Q5902	8-729-809-26	TRANSISTOR 2SA1606-E
Q5903	8-729-230-45	TRANSISTOR 2SC2458-YGR
Q5904	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q5905	8-729-230-45	TRANSISTOR 2SC2458-YGR
Q5906	8-729-809-29	TRANSISTOR 2SC4159-E
Q5907	8-729-922-37	TRANSISTOR 2SD2144S-UVW

<RESISTOR>

R5901	1-249-401-11	CARBON	47	5%	1/4W
R5902	1-249-414-11	CARBON	560	5%	1/4W F
R5903	1-247-734-11	CARBON	39	5%	1/2W F
R5904	1-249-411-11	CARBON	330	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

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

VM1

REF. NO.	PART NO.	DESCRIPTION			REMARK	
R5911	1-249-439-11	CARBON	68K	5%	1/4W	
R5912	1-249-437-11	CARBON	47K	5%	1/4W	
R5914	1-249-403-11	CARBON	68	5%	1/4W	
R5915	1-249-429-11	CARBON	10K	5%	1/4W	
R5916	1-249-419-11	CARBON	1.5K	5%	1/4W	
R5917	1-249-416-11	CARBON	820	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	1-249-439-11	CARBON	68K	5%	1/4W	
R5921	1-216-476-11	METAL OXIDE	180	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
R5925	1-249-400-11	CARBON	39	5%	1/4W	F
R5927	1-249-416-11	CARBON	820	5%	1/4W	
R5929	1-215-880-00	METAL OXIDE	10	5%	2W	F

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MISCELLANEOUS
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	1-202-818-00	RES, SOLID 1.0K (KV-XS29M97 ONLY)
	1-251-658-21	SPLITTER RF (KV-XS29M97 ONLY)
	1-452-094-00	CIRCULAR DISC MAGNET B
	1-452-032-00	MAGNET,DISC
	1-452-896-11	COIL, NA ROTATION (RT200)
	1-505-503-11	SPEAKER (15X6.5CM)
	1-529-172-11	SPEAKER, LOUD (10CM) (KV-XS29M97 ONLY)
	1-529-190-11	SPEAKER (5CM)
*	1-555-110-00	P-P CABLE
⚠	1-574-062-61	CORD, POWER (WITH CONNECTOR) 2.5A/250V (KV-XS29M80)
⚠	1-769-609-21	CORD, POWER (WITH CONNECTOR) (KV-XS29M97)
	8-451-494-31	DEFLECTION YOKE (Y29RSA-S)
⚠	8-735-057-05	PICTURE TUBE (M68LNH070X)

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REF. NO.	PART NO.	DESCRIPTION	REMARK
		ACCESSORIES AND PACKING MATERIALS	
		**********	
	A-1501-377-C	BOX ASSY, SPEAKER (3D)	
	1-529-172-11	SPEAKER, LOUD (10CM)	
	3-701-910-00	SCREW, SPECIAL (DIA. 3.8X20)	
	3-867-874-11	MANUAL, INSTRUCTION (KV-XS29M97)	
	3-867-874-21	MANUAL, INSTRUCTION (KV-XS29M80)	
	4-392-004-11	CLIP	
	4-392-003-11	BAND, HOLD	
*	4-037-244-01	FOOT	
*	4-065-515-01	BOX (TP), 3D SPEAKER	
*	4-065-516-01	BOX (BT), 3D SPEAKER	
*	4-067-018-01	CUSHION (1), SEAL	
*	4-067-019-01	CUSHION (2), SEAL	
*	4-067-020-02	CUSHION (3), SEAL	
*	4-067-021-02	CUSHION (4), SEAL	
*	4-067-022-01	CUSHION (5), SEAL	
	4-302-428-03	SCREW (WASHER HEAD) (+P 3X12)	
*	4-029-168-01	BAG, PROTECTION	
*	4-054-319-01	TRAY	
	4-065-210-01	JOINT	
*	4-071-224-01	CUSHION (LOWER)(ASSY)	
*	4-071-225-01	CUSHION (UPPER)(ASSY)	
*	4-072-935-01	INDIVIDUAL CARTON	

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ACCESSORIES AND PACKING MATERIALS
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	1-418-040-11	REMOTE COMMANDER (RM-953)(KV-XS29M97)
	1-418-040-11	REMOTE COMMANDER (RM-954)(KV-XS29M80)
	4-978-977-01	BATTERY COVER, REMOTE COMMANDER (RM-953)
	4-933-895-01	BATTERY COVER, REMOTE COMMANDER (RM-954)

9-965-761-01

Sony Corporation
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TV Business of General Area

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