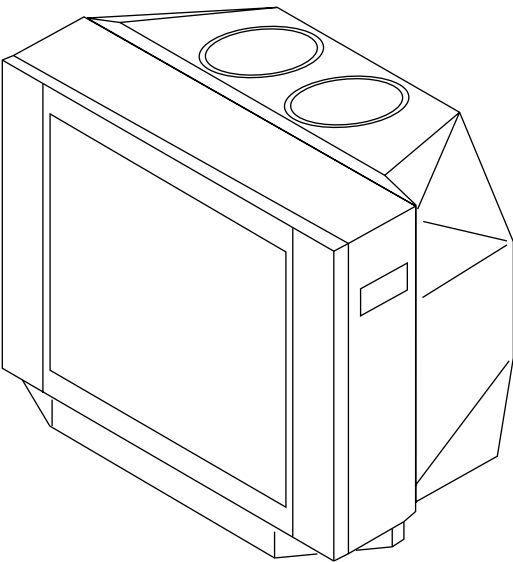
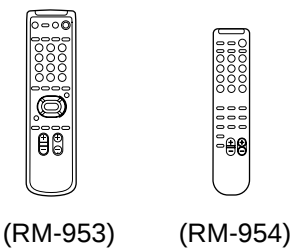


SERVICE MANUAL

BG-3S CHASSIS

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



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 mV _{rms}
📺 (S Video)	Input: 2	Y : 1 V _{P-P} , 75 ohms, unbalanced, sync negative C : 0.286 V _{P-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	
ㄗ (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 V _{P-P} , 75 ohms, unbalanced, sync negative C : 0.286 V _{P-P} , 75 ohms
Ⓢ (Component Video)	Input: 1	Phono jacks: Y : 1.0 V _{P-P} , 75 ohms, sync negative C _B : 0.7 V _{P-P} , 75 ohms C _R : 0.7 V _{P-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 occurred if the screen displays a "0".

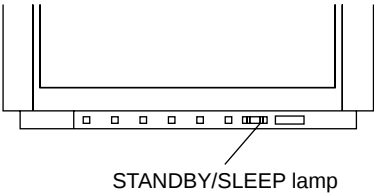
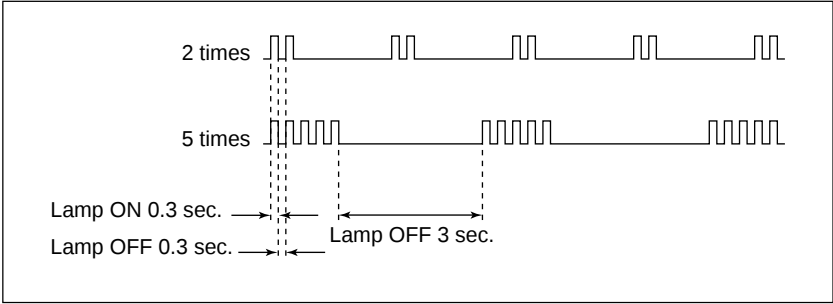
Diagnostic Item Description	No. of times STANDBY/TIMER lamp flashes	Self-diagnostic display/Diagnostic result	Probable Cause Location	Detected Symptoms
• Power does not turn on	Does not light	—	• Power cord is not plugged in. • Fuse is burned out F4601 (F)	• Power does not come on. • No power is supplied 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



<u>Diagnostic Item</u>	<u>Flash Count*</u>
+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 occurrences of failure for confirmation on the screen:

[To Bring Up Screen Test]

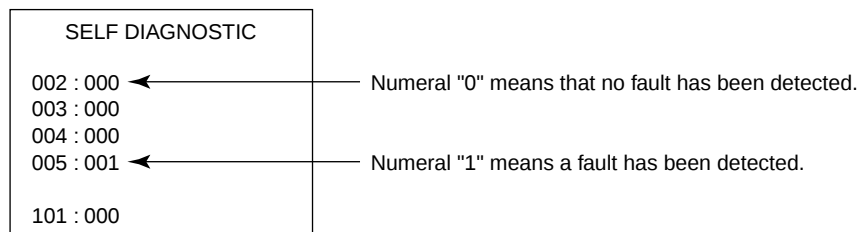
In standby mode, press buttons on the remote commander sequentially in rapid succession as shown below:

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]

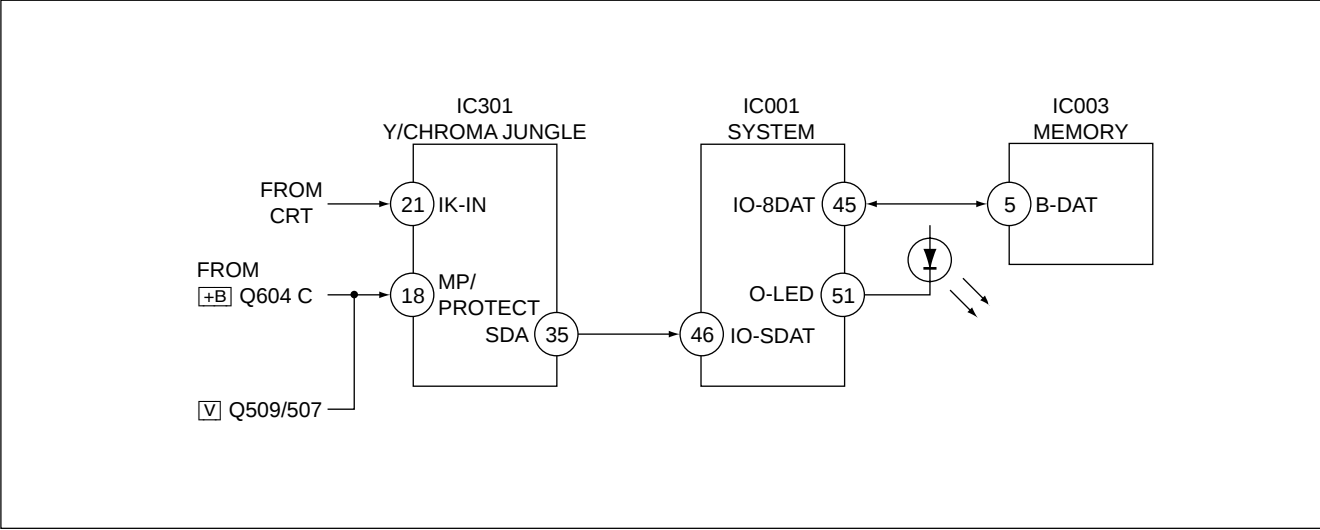
To clear the result display to “0”, press buttons on the remote commander sequentially as shown below when the diagnostic screen is being displayed.

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.

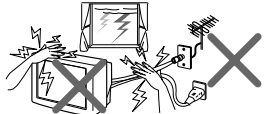
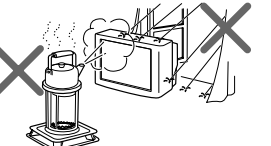
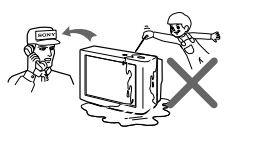
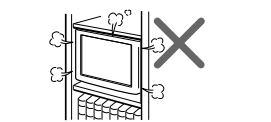
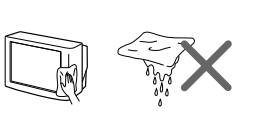
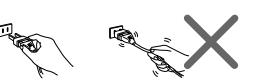
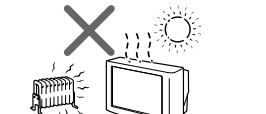
* (Refers to the RGB levels of the AKB detection Ref pulse that detects IK.)

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 benzene, 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.

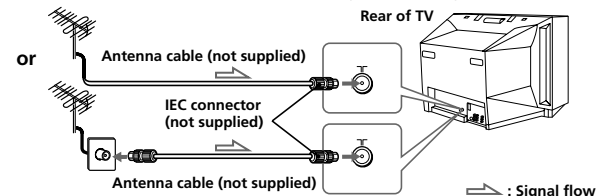
Using Your New TV

Getting Started

Step 1

Connect the antenna

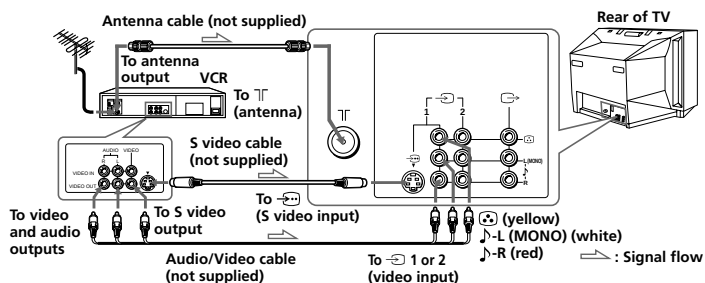
If you wish to connect a VCR, see the "Connecting a VCR" diagram below.



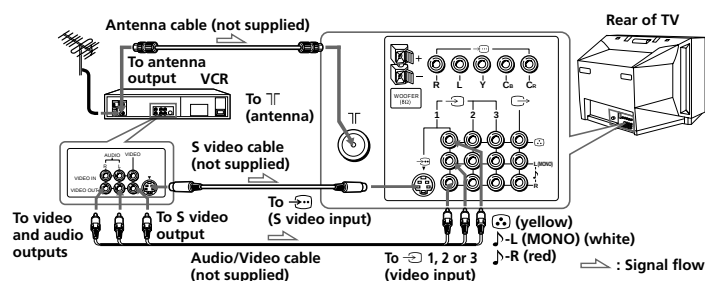
Connecting a VCR

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

KV-XS29M80/XS29M50



KV-XS29M93



CAUTION

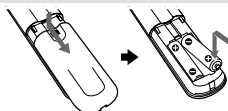
Do not connect the power cord until you have completed making all other connections; otherwise a minimum leakage current might flow through the antenna and other terminals to ground.

Notes

- If you connect a monaural VCR, connect the yellow plug to (S) (the yellow jack) and the black plug to (L) (MONO) (the white jack).
- If you connect a VCR to the (I) (antenna) terminal, preset the signal output from the VCR to the program number 0 on the TV.
- If both (S) (S video input) and (1) (video input) at the rear of your TV are input at the same time, the (S) (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



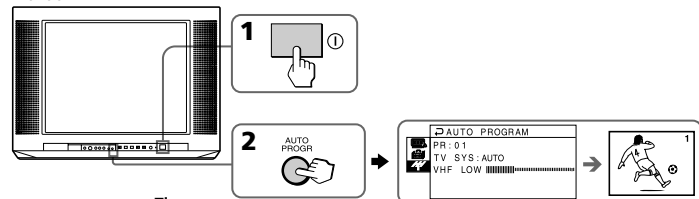
Note

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

Step 3

Preset the channels automatically

Front of TV



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)

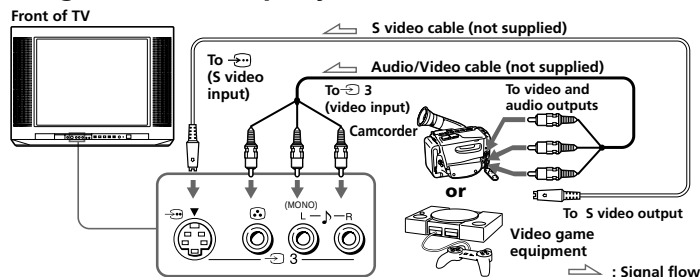
- During automatic channel presetting, your TV screen will indicate "B/G", "I", "D/K" or "M" for the TV system (TV SYS).

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 (S) (see page 12).

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

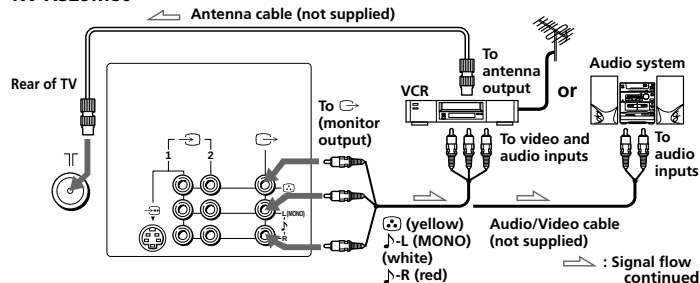


Notes

- You can also connect video equipment to the (1) or (2) (video input) jacks at the rear of your TV.
- If both (S) (S video input) and (3) (video input) at the front of your TV are input at the same time, the (S) (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.

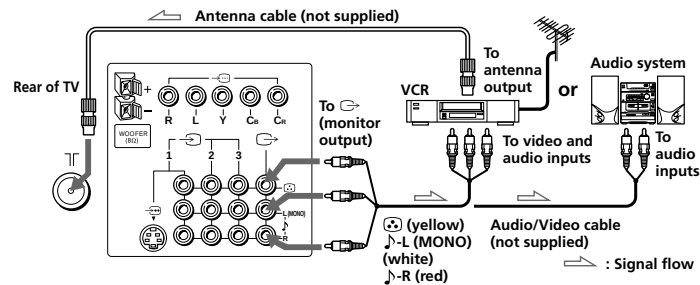
Connecting audio/video equipment using the (M) (monitor output) jacks

KV-XS29M80



Connecting optional components (continued)

KV-XS29M93 (not used for this model.)

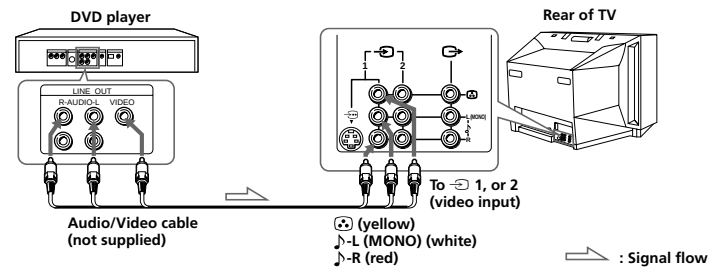


Note

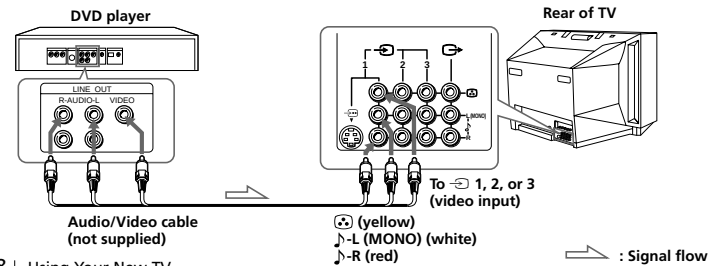
- If you select "DVD" on your TV screen, no signal will be output at the (monitor output) jacks (see page 12).

Connecting a DVD player using the (video input) jacks

KV-XS29M80



KV-XS29M93



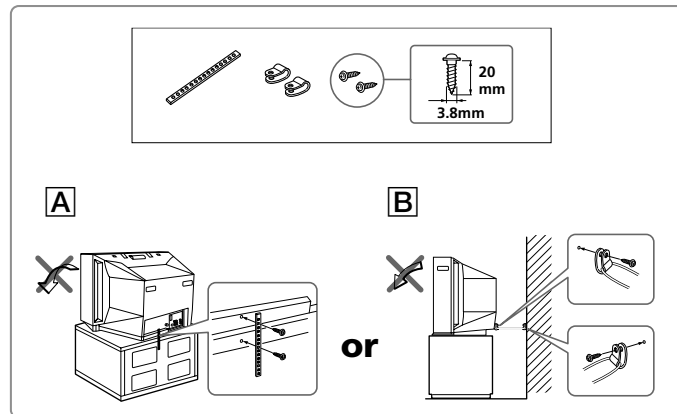
Securing the TV

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.

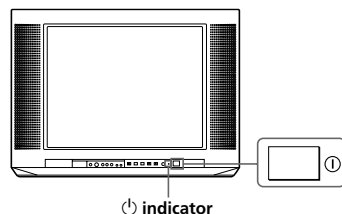


Note

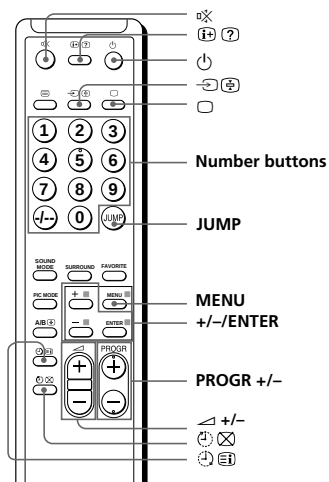
- Use only the supplied screws. Use of other screws may damage the TV.

Watching the TV

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



indicator



Using Your New TV

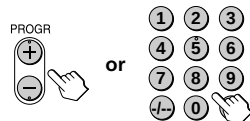
1 Press ① to turn on the TV.

When the TV is in the standby mode (the ① indicator on the TV is lit red), press ① 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

Watching the TV (continued)

Additional tasks

To	Do this
Turn off temporarily	Press ①. The ① indicator on the TV lights up red.
Turn off completely	Press ① on the TV.
Adjust the volume	Press ④ +/-.
Mute the sound	Press ⑤X.
Watch the video input (VCR, camcorder, etc.)	Press ⑥ to select "VIDEO 1", "VIDEO 2", "VIDEO 3" or "DVD" (KV-XS29M93 only). To return to the TV program, press ①.
Jump back to the previous channel	Press JUMP.
Display the on-screen information*	Press ⑦.

* 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

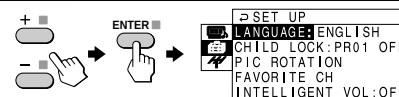
You can change the menu language as well as the on-screen language.

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

1 Press MENU.



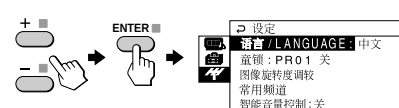
2 Press + or - to select the "SET UP" icon (⚙️), then press ENTER.



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.

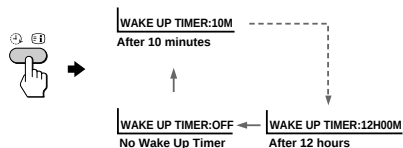
To return to the normal screen

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.

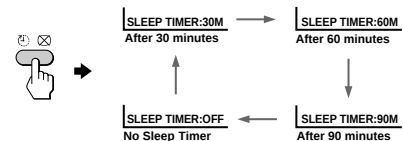
Note

- 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

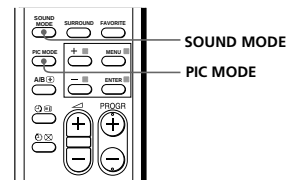
Press until "SLEEP TIMER: OFF" appears or turn the TV off.

Using Your New TV

Advanced Operations

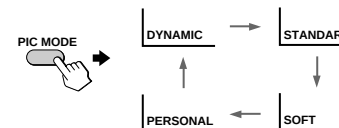
Selecting the picture and sound modes

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



Selecting the picture mode

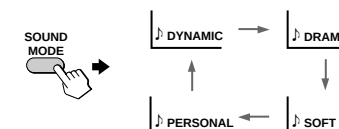
Press PIC MODE repeatedly until you get the desired picture mode.



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.



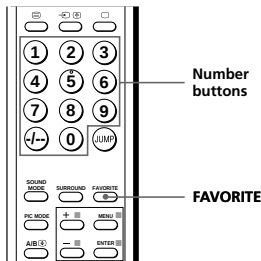
Select	To
"DYNAMIC"	listen to dynamic and clear sound that emphasizes the low and high tones.
"DRAMA"	listen to sound that emphasizes voice and high tones.
"SOFT"	receive soft sound.
"PERSONAL"	receive the last adjusted sound setting from the "ADJUST" option in the "A/V CONTROL" menu (see page 21).

Tip

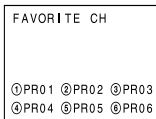
- You can also set the picture and sound modes using the menu (see "Changing the "A/V CONTROL" setting" on page 21).

Viewing your favorite channels

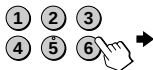
You can display and select six of your favorite channels directly from your TV screen.



1 Press FAVORITE.



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



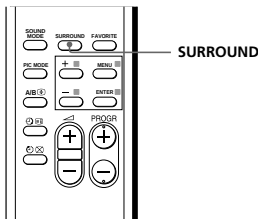
Advanced Operations

Tip

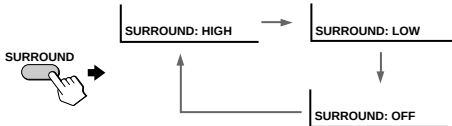
- To program your favorite channels, see “Programming your favorite channels” on page 24.

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.

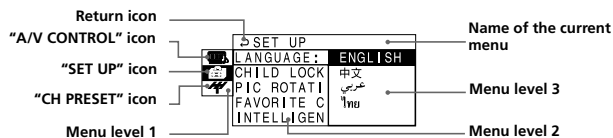
The surround of your TV is categorized as TruSurround.

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.

Adjusting Your Setup (MENU)

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"*
"SET UP" 	"SURROUND"	Select the surround mode. "HIGH" → "LOW" → "OFF"
	"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.
"CH PRESET" 	"INTELLIGENT VOL"	Adjust volume automatically.
	"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"

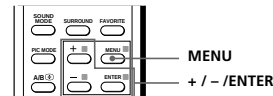
* The "BBE" is manufactured by Sony Corporation under license from BBE Sound, Inc. It is covered by U.S. Patent No. 4,638,258 and No. 4,482,866. The word "BBE" and the BBE symbol are the trademarks of BBE Sound, Inc.

continued

Introducing the menu system (continued)

How to use the menu

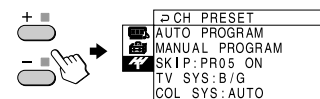
You can use the buttons on the remote and on the TV as well to display the menu and adjust the settings.



- 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

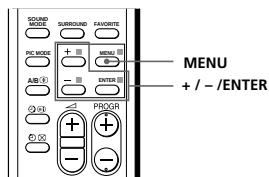


Notes

- 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.

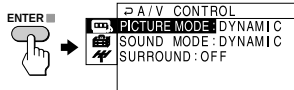
Changing the "A/V CONTROL" setting

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

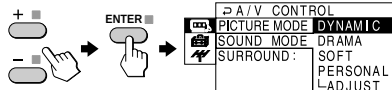


1 Press MENU.

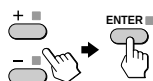
2 Make sure the "A/V CONTROL" icon (📺) is selected, then press ENTER.



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

Adjusting Your Setup (MENU) | 21

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

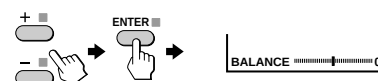
* You can adjust "HUE" for the NTSC color system only.

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".

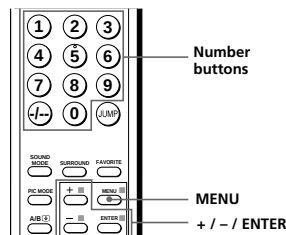
Tip

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

22 | Adjusting Your Setup (MENU)

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.

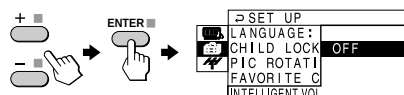


1 Press MENU.

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

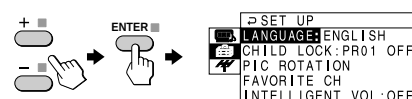
Changing the “SET UP” setting (continued)

Programming your favorite channels

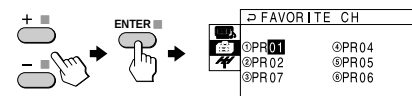
The “FAVORITE CH” feature enables you to program up to six channels for direct selection.

1 Press MENU.

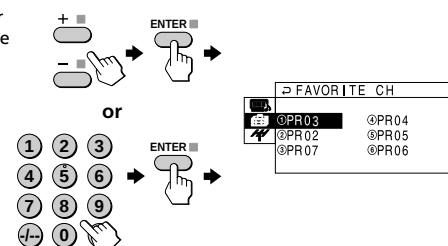
2 Press + or – to select the “SET UP” icon (⚙️), then press ENTER.



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.

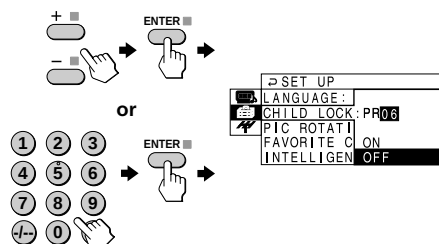
2 Press + or – to select the "SET UP" icon (⚙️), then press ENTER.



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.

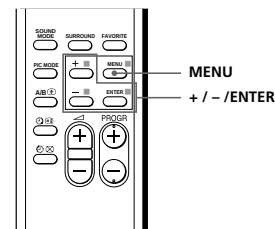
To return to the normal screen

Press MENU.

Note

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

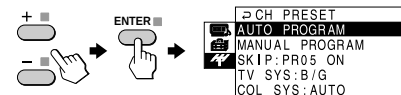
Changing the Channel Preset ("CH PRESET") setting



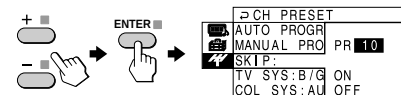
The "CH PRESET" menu allows you to adjust the setup of your TV. For example, you can receive a channel with a weak signal that fails to be tuned in by automatic presetting.

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.

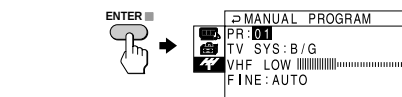


Select	To
"AUTO PROGRAM"	preset channels automatically.
"MANUAL PROGRAM"	preset channels manually. See "Presetting channels manually" on page 27.
"SKIP"	skip unwanted or unused program numbers. 1 Press + or – until the unused or unwanted program number appears, then press ENTER. 2 Press + or – to select "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.

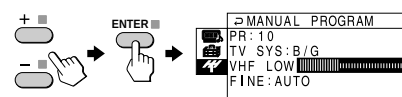


(2) Press + or – until the program number you want to preset (e.g., program number "10") appears on the menu, then press ENTER.

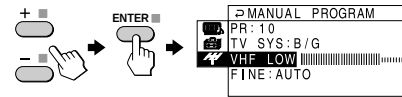


2 Select the desired channel.

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

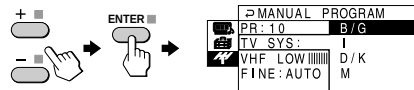


(2) Press + or – until the desired channel picture appears on the TV screen, then press ENTER.



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.



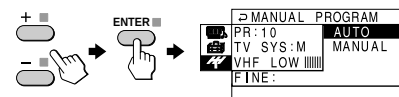
(2) Press + or – until the sound becomes normal (e.g., "M"), then press ENTER.



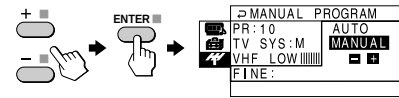
Changing the Channel Preset ("CH PRESET") setting (continued)

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

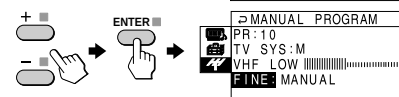
(1) Press + or – to select "FINE", then press ENTER.



(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.

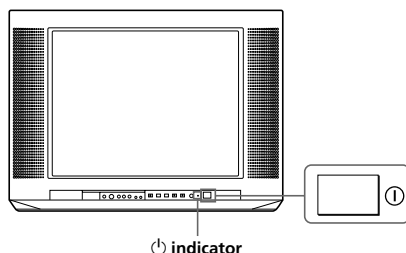
continued

Additional Information

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.

Front of TV



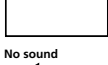
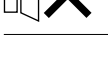
indicator

- 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 ① (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.

Additional Information

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. - Channel presetting is inappropriate or incomplete.	- Check the antenna cable and connection on the TV, VCR and on the wall. - Display the "CH PRESET" menu and select "MANUAL PROGRAM" to preset the channel again.	4 26
Noisy sound 	- The antenna type is inappropriate. - The antenna direction is inappropriate. - Signal transmission is low.	- Check the antenna type ("VHF"/"UHF"). Contact a Sony dealer for advice. - Adjust the antenna direction. Contact a Sony dealer for advice. - 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 channels again. - 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 26
Noisy sound 			
No picture 	- The power cord, antenna or VCR is not connected. - The TV is not turned on.	- Check the power cord, antenna and the VCR connections. - Press  (power). - Press ① (main power) on the TV to turn off the TV for about five seconds, then turn it on again.	4 12 11
No sound 			

Symptom	Possible cause	Solutions	Page
Good picture 	The volume level is too low.	Press $\triangleleft$ + to increase the volume level.	12
No sound 	- The sound is muted. - Broadcast signal has a transmission problem.	- Press $\otimes$ to cancel the muting. - Press A/B until a good sound is heard. (KV-XS29M93 only)	12 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. - The antenna direction is inappropriate. - Use of a booster is inappropriate.	- Use a highly directional antenna. - Use the fine tuning ("FINE") function. - Adjust the antenna direction. Contact a Sony dealer for advice. - Turn off or disconnect the booster if it is in use.	— 28 —
No color 	- The color level setting is too low. - The color system setting is inappropriate. - The antenna direction is inappropriate.	- Display the "A/V CONTROL" menu and select "ADJUST" of "PICTURE MODE", then adjust the "COLOR" level. - Display the "CH PRESET" menu and check the color system ("COL SYS") setting (usually set this to "AUTO"). - Adjust the antenna direction. Contact a Sony dealer for advice.	21 26 —
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 $\textcircled{1}$ (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

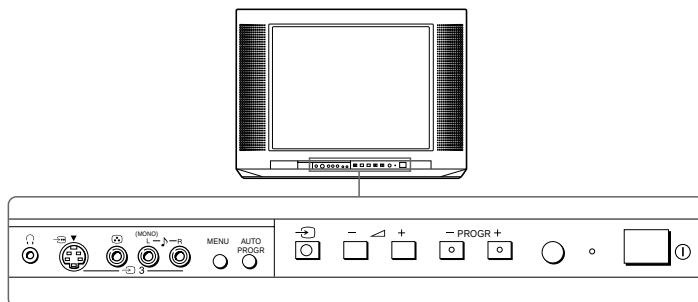
continued

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. - The antenna direction is inappropriate. - Broadcast signal has a transmission problem.	- Check the antenna cable and connection on the TV, VCR and on the wall. - Adjust the antenna direction. Contact a Sony dealer for advice. - Press A/B until a good sound is heard.	4 — 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 $\textcircled{1}$ 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

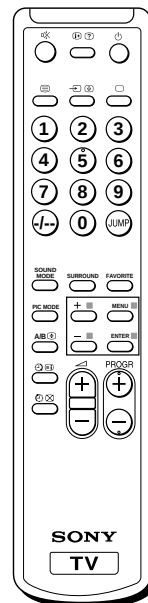
Front panel



Button	Function	Page
AUTO PROGR	Preset channels automatically.	5
⓪	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.	–

Identifying parts and controls (continued)

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	–

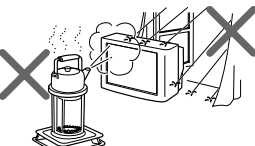
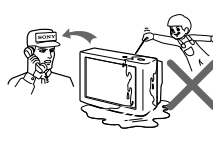
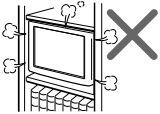
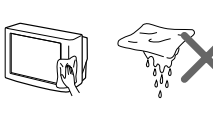
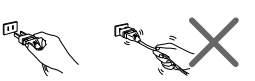
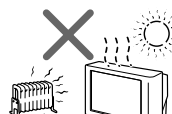
continued

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).

 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 benzene, 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.

2

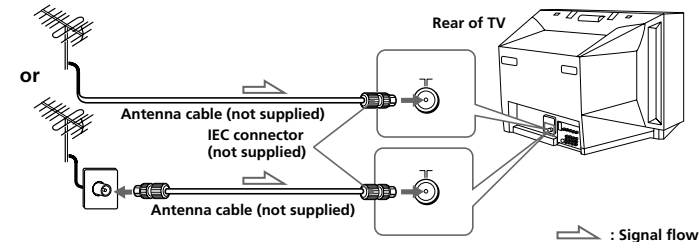
Using Your New TV

Getting Started

Step 1

Connect the antenna

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

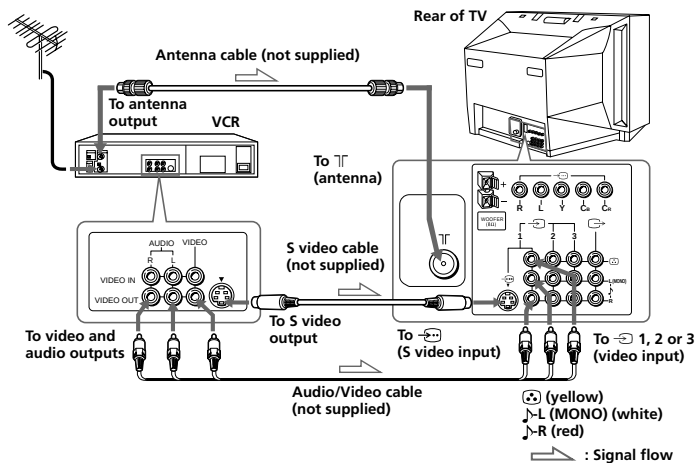


CAUTION

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

Connecting a VCR

To watch the video, press  (see page 11).



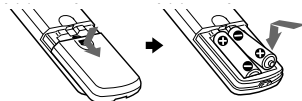
4 Using Your New TV

Notes

- If you connect a monaural VCR, connect the yellow plug to (the yellow jack) and the black plug to (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.
- Do not connect video equipment to 3 (video input) at the front and the rear of your TV at the same time; otherwise the picture will not be displayed properly on the screen.
- When no signal is input to the connected video equipment, the TV screen becomes blue.

Step 2

Insert the batteries into the remote



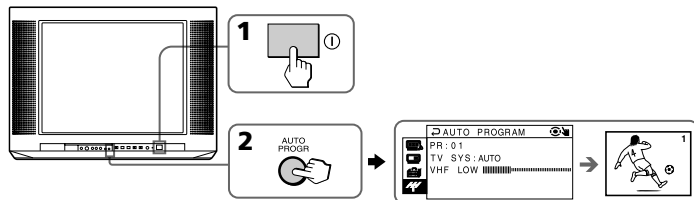
Note

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

Step 3

Preset the channels automatically

Front of TV



Tip

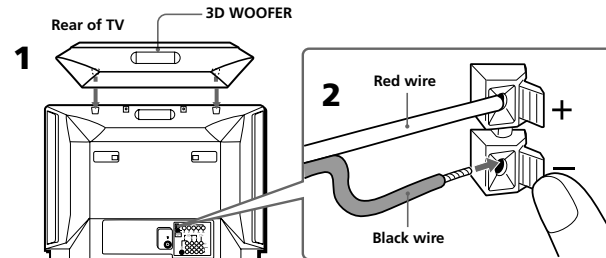
- If you want to stop the automatic channel presetting, press MENU twice.

Note

- If your TV has preset an unwanted channel or cannot preset a particular channel, then preset your TV manually (see page 31).

Connecting the 3D WOOFER

You can enjoy high quality sound by connecting the 3D WOOFER.



- 1 Attach the 3D WOOFER into the footholds on the top of your TV.

- 2 Connect the wires to the 3D WOOFER (8Ω) terminals at the rear of your TV. The red wire should be connected to the ⊕ red terminal and the black wire to the ⊖ black terminal.

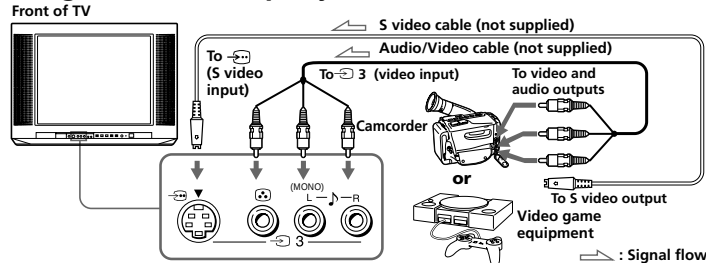
Notes

- Connect only the supplied 3D WOOFER; otherwise your TV may malfunction.
- Unplug your TV from the wall outlet when connecting the 3D WOOFER.
- To prevent a malfunction caused by a short circuit of the terminals, make sure that none of the 3D WOOFER wire strands stick out, making contact with the neighbouring speaker terminal.

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 $\rightarrow$ (see page 11).

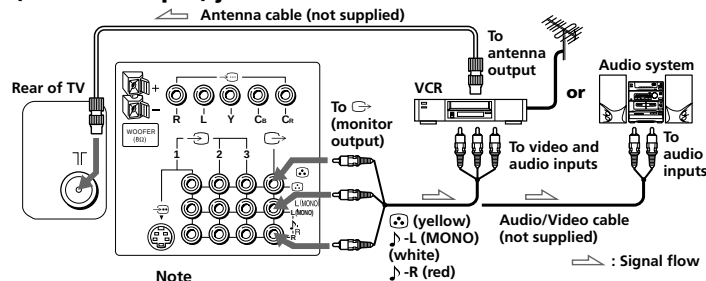
Connecting a camcorder/video game equipment using the $\rightarrow$ (video input) jacks



Notes

- You can also connect video equipment to the $\rightarrow$ 1, 2 or 3 (video input) jacks at the rear of your TV.
- If both $\rightarrow$ (S video input) and $\rightarrow$ 3 (video input) at the front of your TV are input at the same time, the $\rightarrow$ (S video input) is automatically selected. To view $\rightarrow$ 3 (video input), disconnect the S video cable.
- Do not connect video equipment to the $\rightarrow$ 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 $\rightarrow$ (monitor output) jacks



Note

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

continued

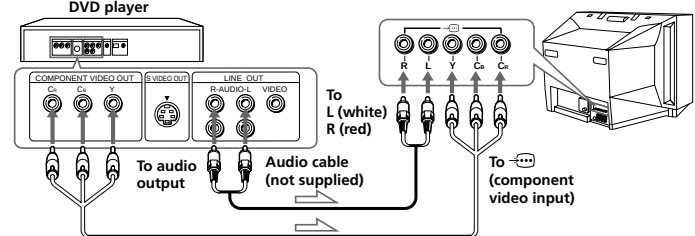
Using Your New TV | 7

Using Your New TV

Connecting optional components (continued)

Connecting a DVD player using the $\rightarrow$ (component video input) jacks

- Connect R and L under $\rightarrow$ (component video input) on your TV to the LINE OUT, AUDIO R and L output connectors on your DVD player.
- Using a component video cable, connect Y, C_b, and C_r under $\rightarrow$ (component video input) on your TV to the COMPONENT VIDEO OUT Y, C_b, and C_r output connectors on your DVD player.



To component video output

Component video cable (not supplied)

Notes

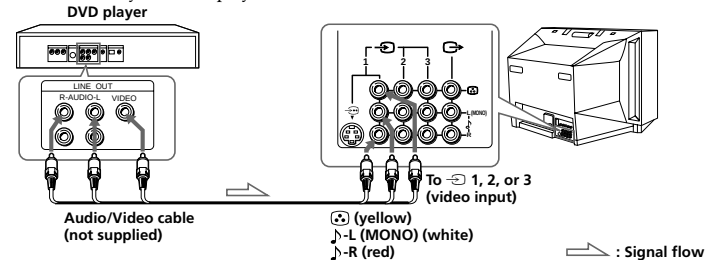
- Some DVD player terminals may be labeled differently:

Connect	To (on the DVD player)
Y (green)	Y
C _b (blue)	C _b , B-Y or P _B
C _r (red)	C _r , R-Y or P _R

- Since the high quality pictures on a DVD disc contain a lot of information, picture noise may appear. In this case, adjust the sharpness ("SHARP") in the PERSONAL ADJUST menu of the PICTURE MODE menu (see page 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 $\rightarrow$ (video input) jacks

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



8 Using Your New TV

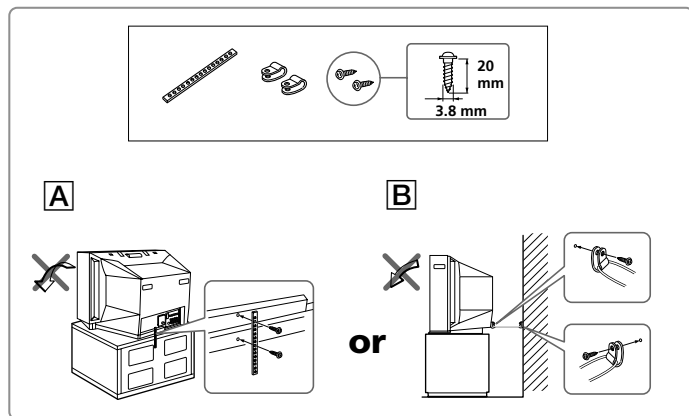
Securing the TV

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

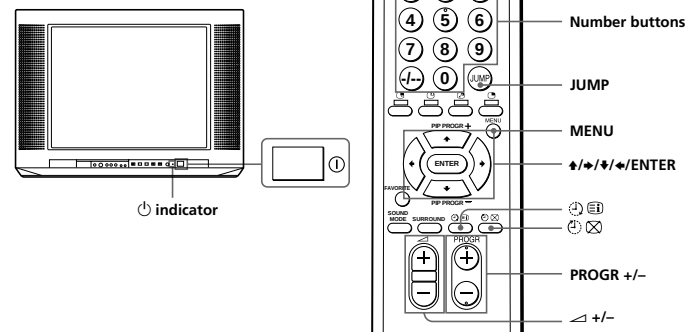
- B** Put the cord or chain through the clamps to secure the TV against a wall or pillar.



Using Your New TV

Watching the TV

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



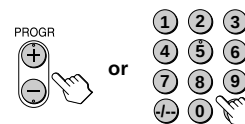
- 1** Press ① to turn on the TV.

When the TV is in the standby mode (the power indicator on the TV is lit red), press ① 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

- Press and hold PROGR +/-.
- 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 .

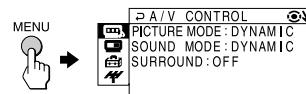
* The picture, sound, and either the program number or video mode are displayed. The on-screen display for the picture and sound information disappears after about 3 seconds.

Changing the menu language

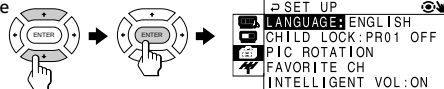
You can change the menu language as well as the on-screen language.

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

1 Press MENU.



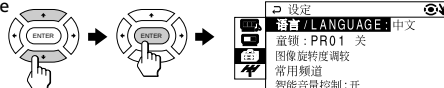
2 Press or to select the SET UP icon (⚙️), then press ENTER.



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

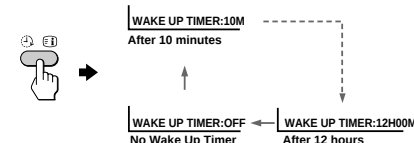
Press MENU.

continued

Watching the TV (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

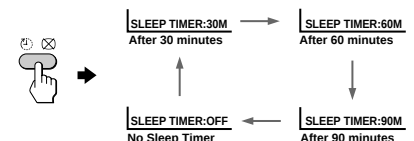
Press until "WAKE UP TIMER: OFF" appears or turn off the TV's main power.

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.



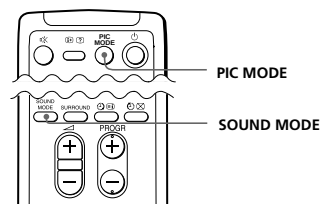
To cancel the Sleep timer

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

Advanced Operations

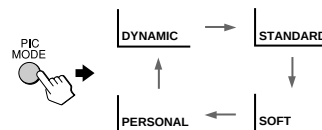
Selecting the picture and sound modes

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



Selecting the picture mode

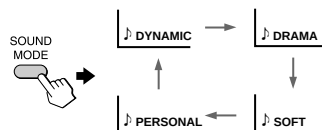
Press "PIC MODE" repeatedly until you get the desired picture mode.



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).

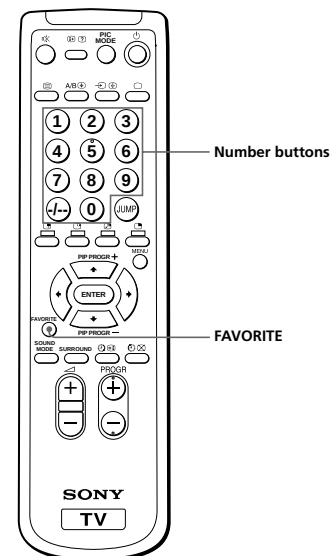
Tip

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

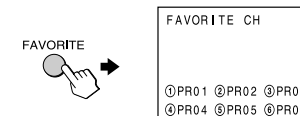
Advanced Operations 13

Viewing your favorite channels

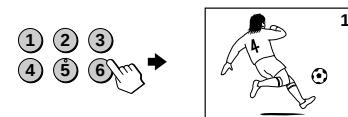
You can display and select six of your favorite channels directly from your TV screen.



1 Press FAVORITE.



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



Tip

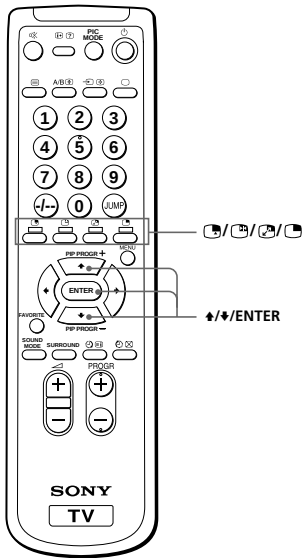
- To program your favorite channels, see "Programming your favorite channels" on page 28.

Advanced Operations 14

Watching two programs at the same time

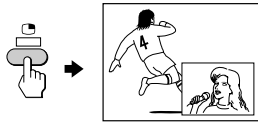
— PIP

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 .



Watching two programs at the same time—PIP (continued)

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).

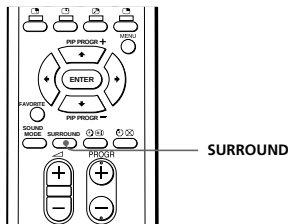
Notes

- 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.

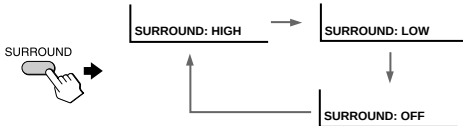
continued

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.



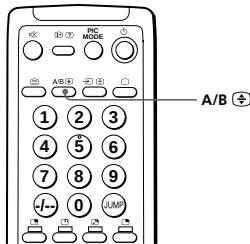
Select	To
"HIGH"	listen to sound that spreads out over a large area, giving the feeling of being at a concert hall.
"LOW"	listen to the sound that gives the feeling of being at a live concert.
"OFF"	turn off the surround sound.

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.

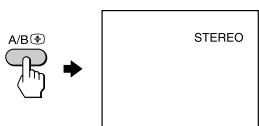
Selecting a stereo or bilingual program

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.

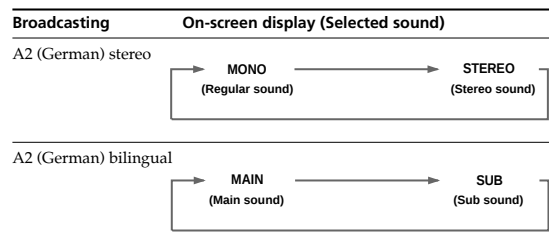
The on-screen display changes to show the selected sound and the  indicator on the TV lights up red.



When receiving a NICAM program

Broadcasting	On-screen display (Selected sound)
NICAM stereo	
NICAM bilingual	
NICAM monaural	

When receiving an A2 (German) program



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 ㄱ (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.



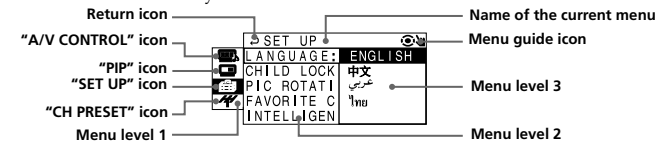
Notes

- 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".

Adjusting Your Setup (MENU)

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.

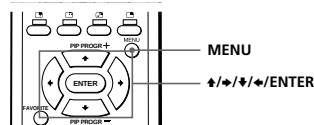


Level 1	Level 2	Level 3/Function
A/V CONTROL	"PICTURE MODE"	Select the picture mode. "DYNAMIC" → "STANDARD" → "SOFT" → "PERSONAL" → "ADJUST"
	"ADJUST"	Adjust the "PERSONAL" option "PICTURE" → "COLOR" → "BRIGHT" → "HUE" → "SHARP"
	"SOUND MODE"	Select the sound mode. "DYNAMIC" → "DRAMA" → "SOFT" → "PERSONAL" → "ADJUST"
	"ADJUST"	Adjust the "PERSONAL" option. "BASS" → "TREBLE" → "BALANCE" → "BBE"*
PIP	"SURROUND"	Select the surround mode. "HIGH" → "LOW" → "OFF"
	"PIP POSITION"	Change the position of the PIP screen.
	"PIP"	Display a sub screen within the main picture.
SET UP	"SWAP"	Exchange program between main screen and sub screen
	"LANGUAGE"	Change the menu language. ENGLISH - 中文 (Chinese) / 阿拉伯文 (Arabic) / ไทย (Thai)
	"CHILD LOCK"	Lock the channel independently.
	"PIC ROTATION"	Adjust the picture position.
	"FAVORITE CH"	Program favorite channels.
CH PRESET	"INTELLIGENT VOL"	Adjust volume automatically.
	"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 $\uparrow$ or $\downarrow$ 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	$\uparrow$, $\downarrow$, $\leftarrow$, or $\rightarrow$
Move to the next/previous menu level	$\leftarrow$ or $\rightarrow$
Cancel the menu	MENU

Tips

- If you want to exit from Menu Level 2 to Menu Level 1, press $\uparrow$ or $\downarrow$ until the return icon (↶) is highlighted, then press ENTER.
- You can also use the buttons on the TV for menu operations. $\leftarrow$ / $\rightarrow$ works as $\uparrow$ or $\downarrow$ on the remote and ENTER works as ENTER on the remote.

Front of TV

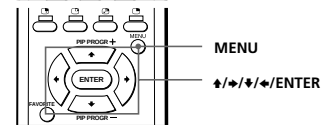


Note

- 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.

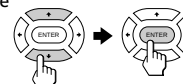
- 2 Make sure the "A/V CONTROL" icon (📺) is selected, then press ENTER.



- 3 Press $\uparrow$ or $\downarrow$ to select either "PICTURE MODE", "SOUND MODE", or "SURROUND", then press ENTER.



- 4 Press $\uparrow$ or $\downarrow$ 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.

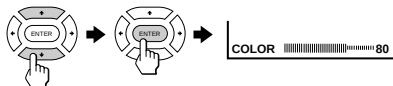
Tip

- 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"

- Press $\blacktriangle$ or $\blacktriangledown$ to select the desired item (e.g., "COLOR"), then press ENTER. 

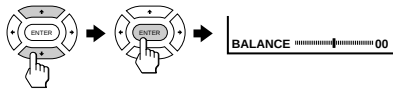
- Adjust the value according to the following table, then press ENTER.

For	Press $\blacktriangle/\blacktriangledown$ to	Press $\blacktriangle/\blacktriangledown$ 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.

- 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"

- Press $\blacktriangle$ or $\blacktriangledown$ to select the desired item (e.g., "BALANCE"), then press ENTER. 

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

For	Press $\blacktriangle/\blacktriangledown$ to	Press $\blacktriangle/\blacktriangledown$ 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	

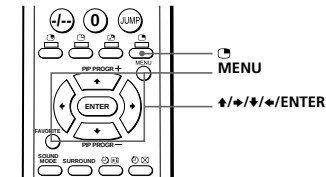
- Repeat the above steps to adjust other items.
The adjusted settings will be received when you select "PERSONAL".

Tip

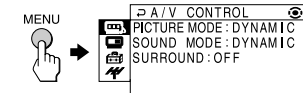
- For details on the menu system and how to use the menu, refer to "Introducing the menu system" on page 22.

Changing the "PIP" setting

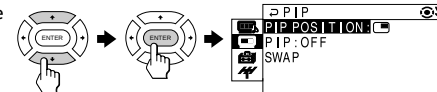
With the Picture-In-Picture (PIP) feature, you can display a sub screen within the main picture of different TV programs or video inputs.



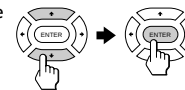
- Press MENU.



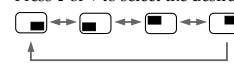
- Press $\blacktriangle$ or $\blacktriangledown$ to select the "PIP" icon (), then press ENTER.



- Press $\blacktriangle$ or $\blacktriangledown$ 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 $\blacktriangle$ or $\blacktriangledown$ to select the desired position, then press ENTER. 
"PIP"	display a sub screen within the main picture. Press $\blacktriangle$ or $\blacktriangledown$ to select "ON", then press ENTER. To cancel, press $\square$ or select "PIP: OFF", then press ENTER.
"SWAP"	exchange program between main screen and sub-screen.

To return to the normal screen

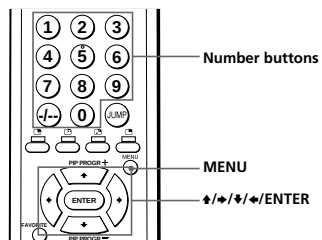
Press MENU.

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 $\uparrow$ or $\downarrow$ to select the “SET UP” icon (), then press ENTER.

3 Press $\uparrow$ or $\downarrow$ 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 $\uparrow$, $\downarrow$, $\leftarrow$ or $\rightarrow$ 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 $\uparrow$ or $\downarrow$ 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.

Changing the “SET UP” setting (continued)

Programming your favorite channels

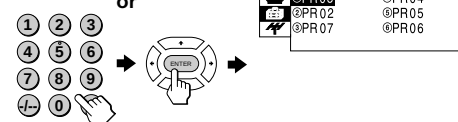
The “FAVORITE CH” feature enables you to program up to six channels for direct selection.

1 Press MENU.

2 Press $\uparrow$ or $\downarrow$ to select the “SET UP” icon (), then press ENTER.

3 Press $\uparrow$ or $\downarrow$ to select FAVORITE CH, then press ENTER twice.

4 Press $\uparrow$ or $\downarrow$, or number buttons to program the desired channel (e.g., “PR03”), then press ENTER.



5 To continue programming other favorite channels, press $\uparrow$ or $\downarrow$ and then press ENTER. After that, repeat step 4.

To return to the normal screen

Press MENU.

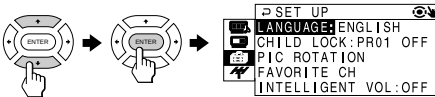
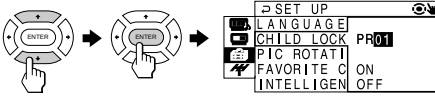
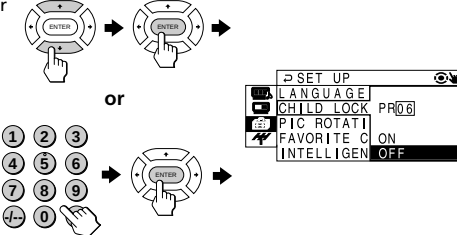
Tip

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

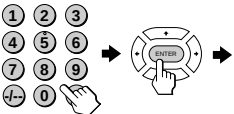
continued

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 $\uparrow$ or $\downarrow$ to select the "SET UP" icon (), then press ENTER.
 
- 3 Press $\uparrow$ or $\downarrow$ to select "CHILD LOCK", then press ENTER.
 
- 4 Press $\uparrow$ or $\downarrow$, or number buttons to select the desired channel, then press ENTER.
 

or


- 5 Press $\uparrow$ or $\downarrow$ to select "ON", then press ENTER.
 

The lock symbol () appears on the screen.

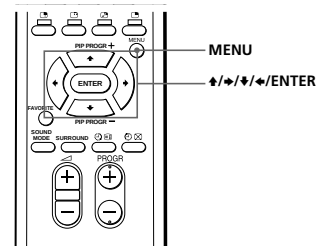
To unlock the channel, select "OFF".
- 6 To continue locking other channels, press ENTER and then repeat step 4 to 5.

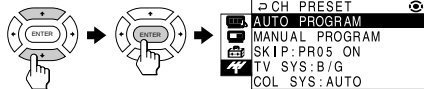
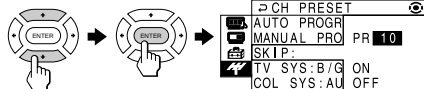
To return to the normal screen

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 $\uparrow$ or $\downarrow$ to select the "CH PRESET" icon (), then press ENTER.
 
- 3 Press $\uparrow$ or $\downarrow$ 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 $\uparrow$ or $\downarrow$ until the unused or unwanted program number appears, then press ENTER. 2 Press $\uparrow$ or $\downarrow$ 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".

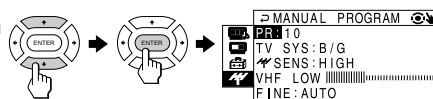
Presetting channels manually

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 $\uparrow$ or $\downarrow$ until the program number you want to preset (e.g., program number "10") appears on the menu, then press ENTER.

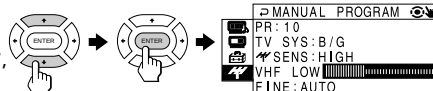


Tip

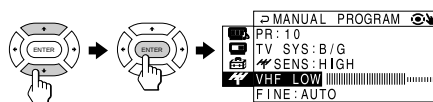
- You can also select the program number with the PROG +/– or number buttons.

2 Select the desired channel.

- (1) Press $\uparrow$ or $\downarrow$ to select either "VHF LOW", "VHF HIGH" or "UHF", then press ENTER.

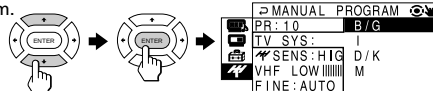


- (2) Press $\uparrow$ or $\downarrow$ until the desired channel picture appears on the TV screen, then press ENTER.

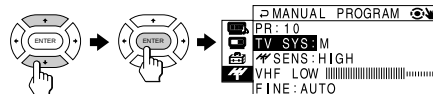


3 If the sound of the desired channel is abnormal, select the appropriate TV system.

- (1) Press $\uparrow$ or $\downarrow$ to select "TV SYS", then press ENTER.



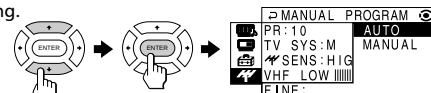
- (2) Press $\uparrow$ or $\downarrow$ until the sound becomes normal (e.g., "M"), then press ENTER.



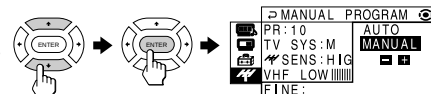
Changing the Channel Preset ("CH PRESET") setting (continued)

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

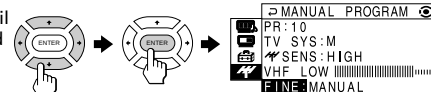
- (1) Press $\uparrow$ or $\downarrow$ to select "FINE", then press ENTER.



- (2) Press $\uparrow$ or $\downarrow$ to select "MANUAL", then press ENTER.



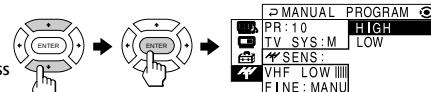
- (3) Press $\uparrow$, $\rightarrow$, $\downarrow$ or $\leftarrow$ until the picture and sound quality are optimal, then press ENTER.



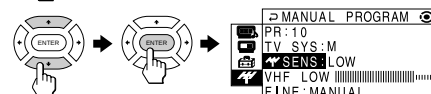
The + or – icon on the menu flashes while tuning.

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

- (1) Press $\uparrow$ or $\downarrow$ to select "SENS", then press ENTER.



- (2) Press $\uparrow$ or $\downarrow$ to select "LOW", then press ENTER.



To return to the normal screen

Press MENU.

Notes

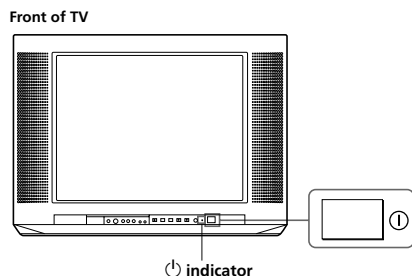
- If you preset a locked channel, that particular channel will be unlocked automatically.
- The TV system (TV SYS), "SENS" and the fine tuning (FINE) settings are memorized for each program number.

continued

Additional Information

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.



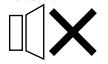
- 1** Check that the  indicator flashes red a number of times between 3-second intervals.
- 2** Count the number of times the  indicator flashes.
- 3** Press  (main power) to turn off your TV.
- 4** Inform your nearest Sony service center about the number of times the  indicator flashes. Be sure to note the model name and serial number located on the rear of your TV.

Additional Information

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. - Channel presetting is inappropriate or incomplete.	- Check the antenna cable and connection on the TV, VCR and on the wall. - Display the "CH PRESET" menu and select "MANUAL PROGRAM" to preset the channel again.	4 31
Noisy sound 	- The antenna type is inappropriate. - The antenna direction is inappropriate. - Signal transmission is low.	- Check the antenna type (VHF/UHF). Contact a Sony dealer for advice. - Adjust the antenna direction. Contact a Sony dealer for advice. - Try using a booster.	— — —
Distorted picture 	Broadcast signals are too strong.	- Display the "CH PRESET" menu and select "MANUAL PROGRAM". Then, select "SENS: LOW". - Turn off or disconnect the booster if it is in use.	32 —
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. - 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).	30 31
Noisy sound 			
No picture 	- The power cord, antenna or VCR is not connected. - The TV is not turned on.	- Check the power cord, antenna and the VCR connections. - Press  (power). - Press  (main power) on the TV to turn off the TV about five seconds, then turn it on again.	4 11 10
No sound 			

Symptom	Possible cause	Solutions	Page
Good picture 	The volume level is too low.	Press $\triangle$ + to increase the volume level.	11
No sound 	- The sound is muted. - Broadcast signal has a transmission problem.	- Press $\times$ to cancel the muting. - Press A/B until a good sound is heard.	11 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. - The antenna direction is inappropriate. - Use of a booster is inappropriate.	- Use a highly directional antenna. - Use the fine tuning (FINE) function. - Adjust the antenna direction. Contact a Sony dealer for advice. - Turn off or disconnect the booster if it is in use.	— 32 —
No color 	- The color level setting is too low. - The color system setting is inappropriate. - The antenna direction is inappropriate.	- Display the "A/V CONTROL" menu and select "ADJUST" of "PICTURE MODE", then adjust the "COLOR" level. - Display the "CH PRESET" menu and check the color system (COL SYS) setting (usually set this to "AUTO"). - Adjust the antenna direction. Contact a Sony dealer for advice.	25 30 —
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 $\odot$ (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

continued

Additional Information | 35

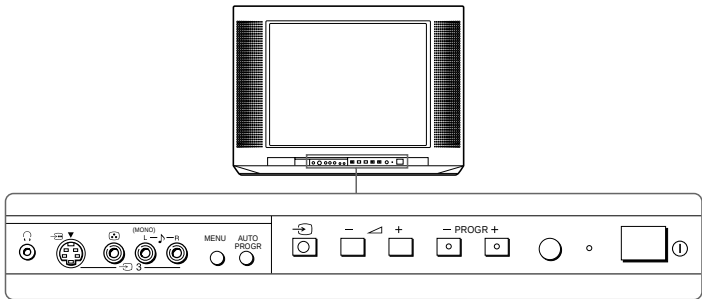
Troubleshooting (continued)

Symptom	Possible cause	Solutions	Page
Stereo broadcast sound switches on and off or is distorted. OR The sound switches between monaural and stereo frequently.	- Connection is loose or the cable is damaged. - The antenna direction is inappropriate. - Broadcast signal has a transmission problem.	- Check the antenna cable and connection on the TV, VCR and on the wall. - Adjust the antenna direction. Contact a Sony dealer for advice. - Press A/B until a good sound is heard.	4 — 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 $\odot$ 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.	—	—

36 | Additional Information

Identifying parts and controls

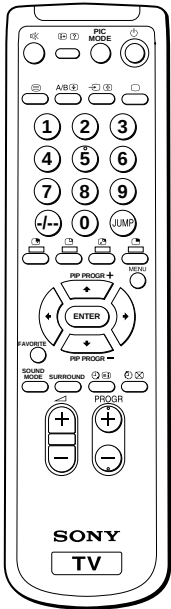
Front panel



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.	-

Identifying parts and controls (continued)

Remote control



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

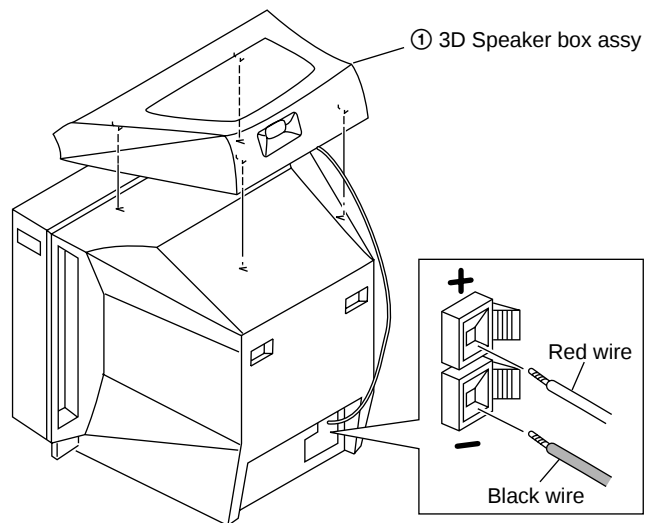
Label color	Button function
White	For general TV operations
Green	For Teletext operations
Yellow	For PIP operations

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
	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
	A Fastext menu.	20, 21
	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
	Change program in PIP/ Twin picture.	15
(PIP PROGR +/-)		

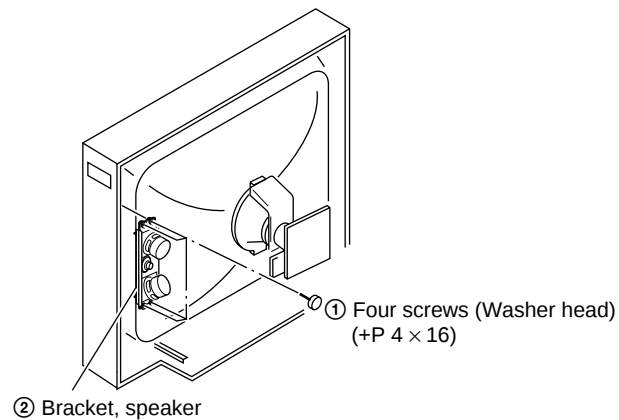
continued

SECTION 2 DISASSEMBLY

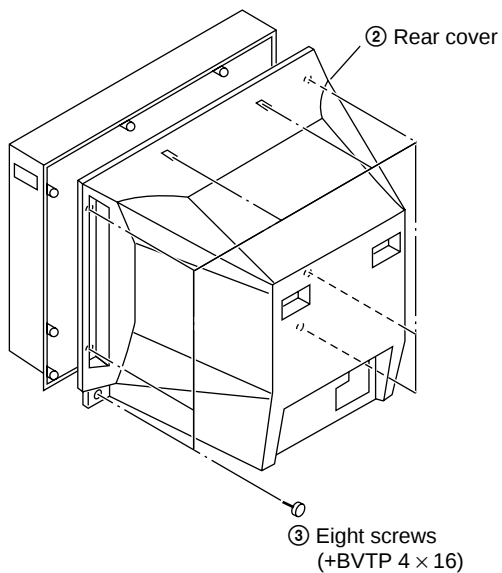
2-1. 3D SPEAKER BOX REMOVAL



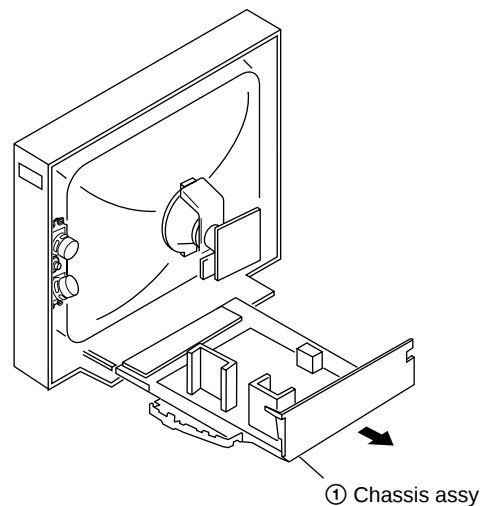
2-3. SPEAKER REMOVAL



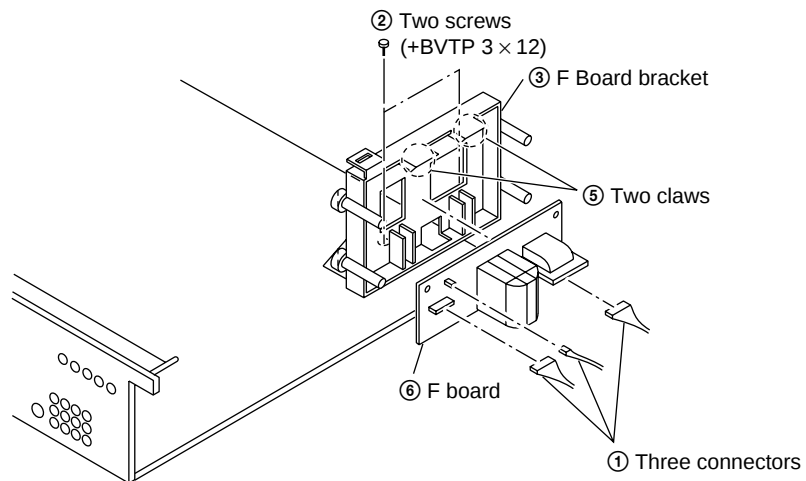
2-2. REAR COVER REMOVAL



2-4. CHASSIS ASSY REMOVAL

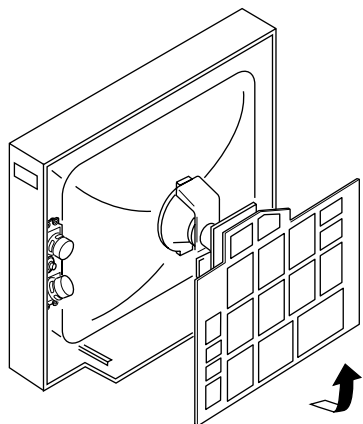


2-5. F BRACKET REMOVAL



2-6. SERVICE POSITION

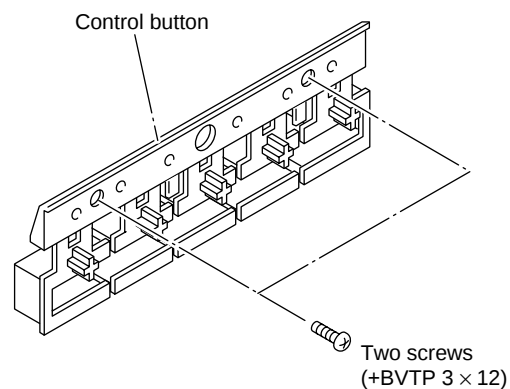
(Note: Remove F Bracket first.)



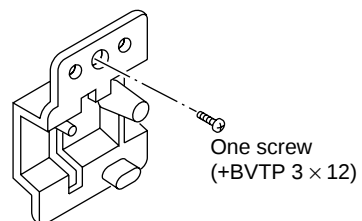
2-7. REPLACEMENT OF PARTS

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

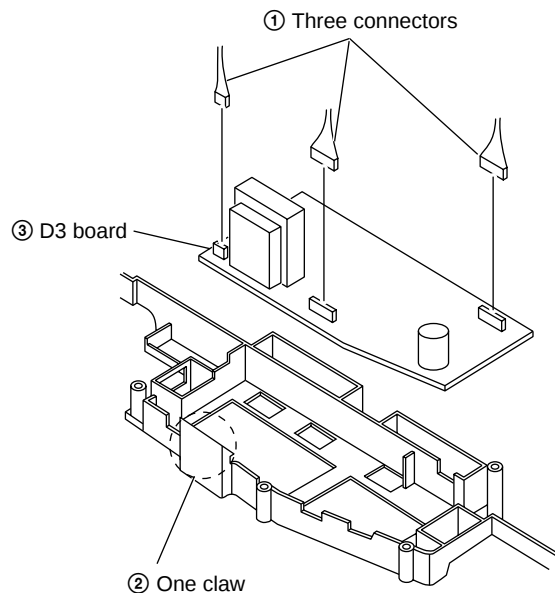
2-7-1. REPLACEMENT OF CONTROL BUTTON



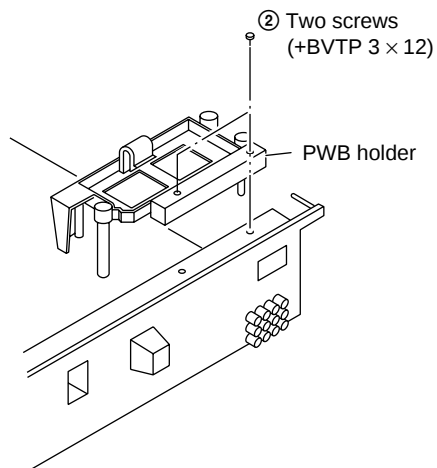
2-7-2. REPLACEMENT OF LIGHT GUIDE



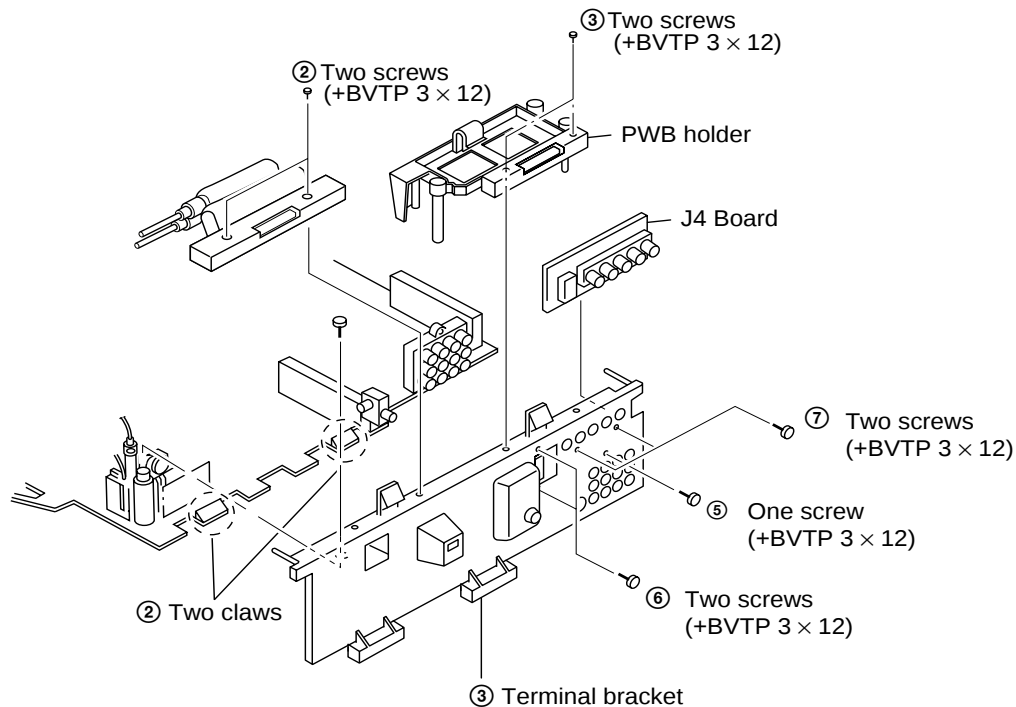
2-8. D3 BOARD REMOVAL



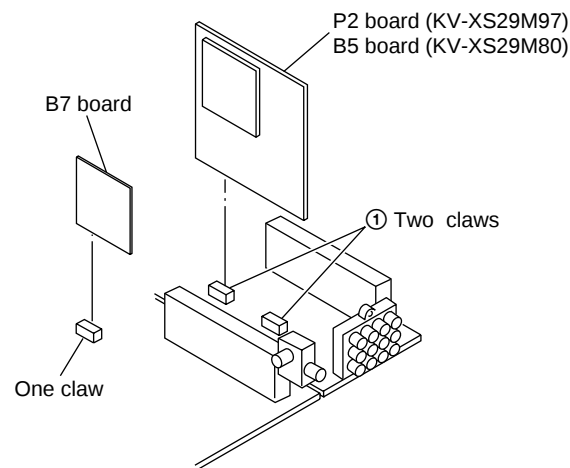
2-9. PWB HOLDER REMOVAL



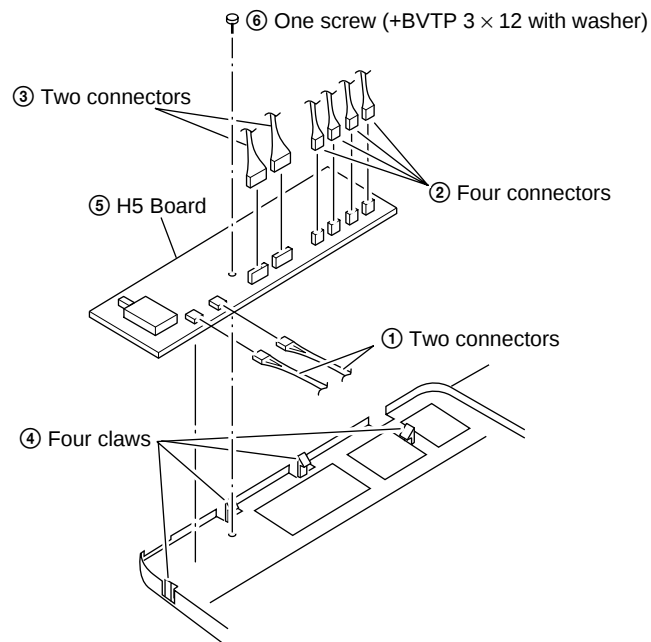
2-10. TERMINAL BRACKET REMOVAL



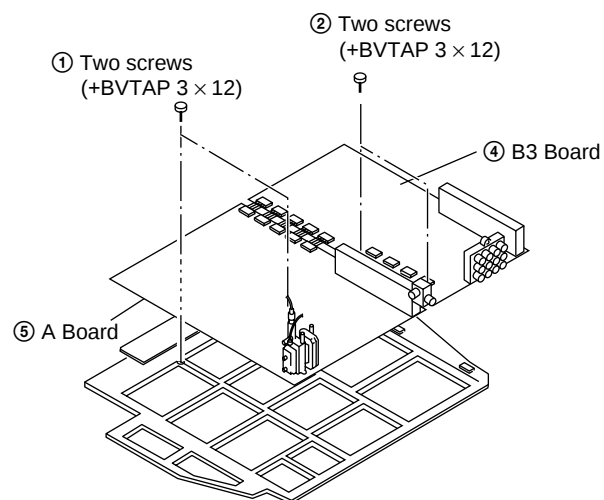
2-11. P2, B5 and B7 BOARDS REMOVAL



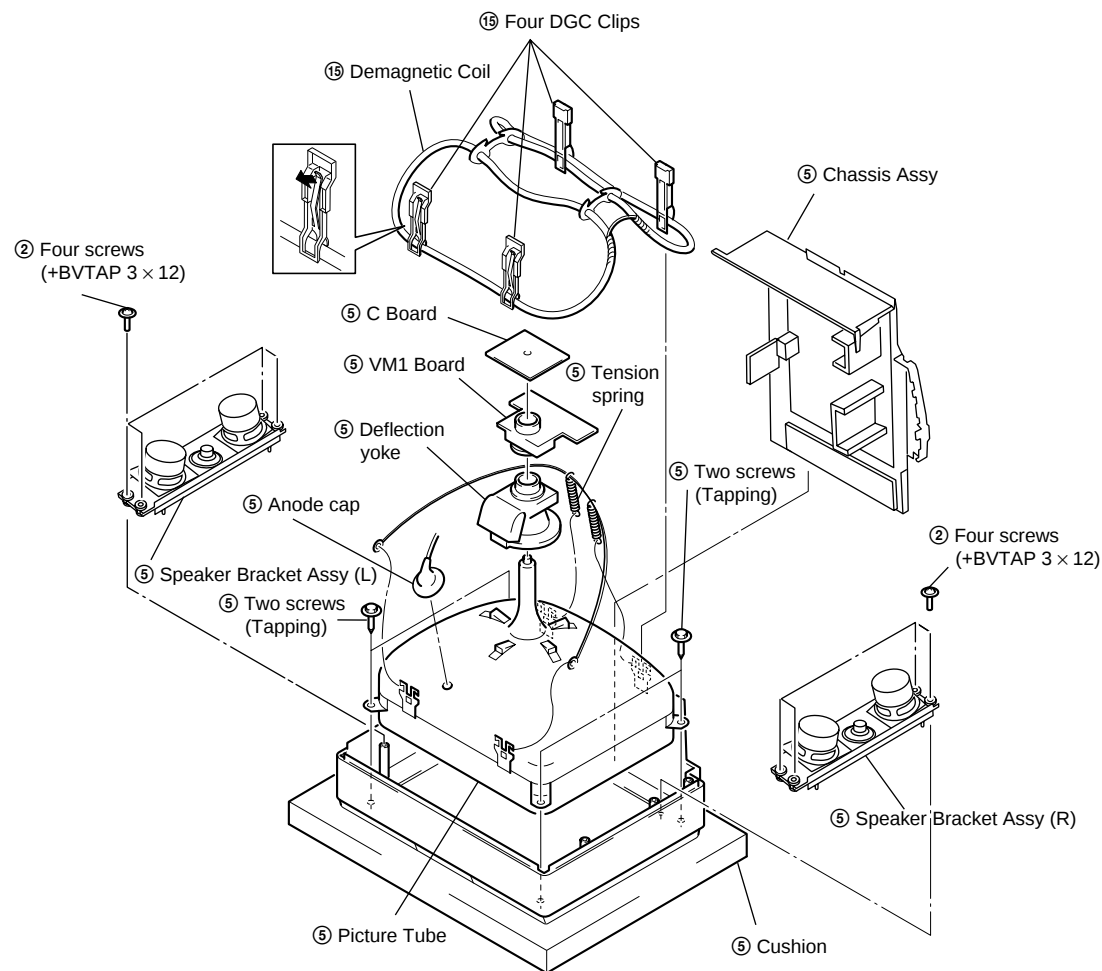
2-12. H5 BOARD REMOVAL



2-13. A AND B3 BOARDS REMOVAL



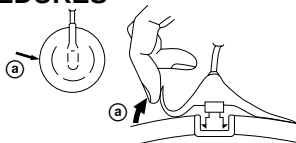
2-14. PICTURE TUBE REMOVAL



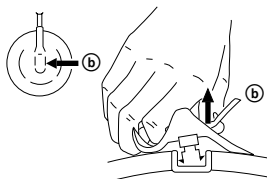
•REMOVAL OF ANODE-CAP

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.

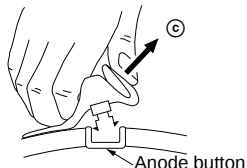
•REMOVING PROCEDURES



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



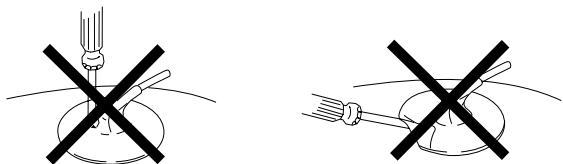
- ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ②.



- 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 ③.

• 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

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.)

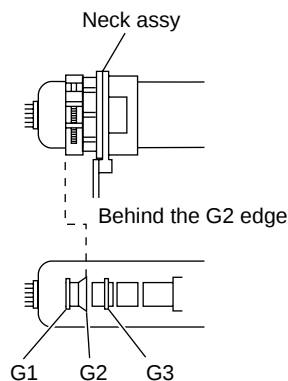


Fig. 3-1

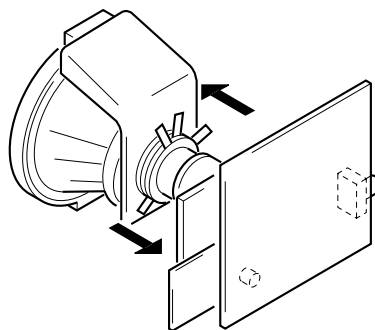


Fig. 3-2

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

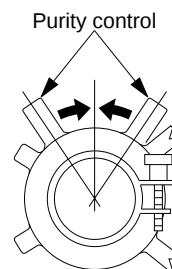


Fig. 3-3

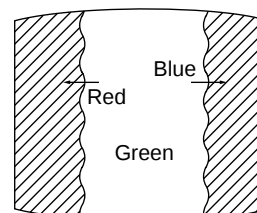


Fig. 3-4

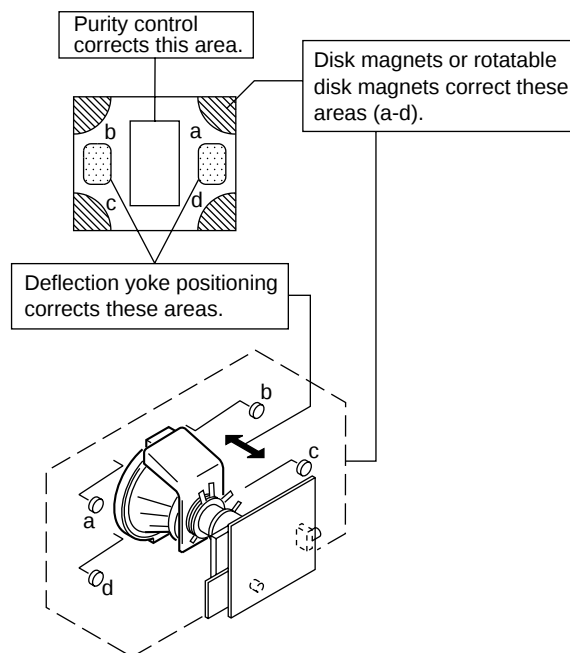


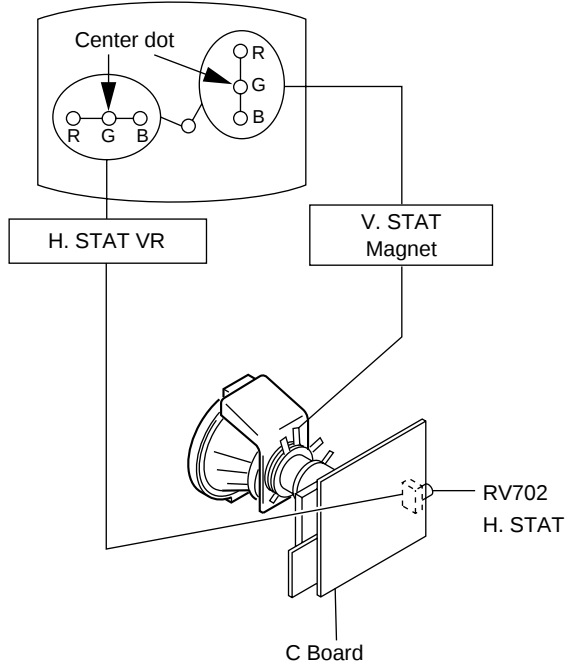
Fig. 3-5

3-2. CONVERGENCE

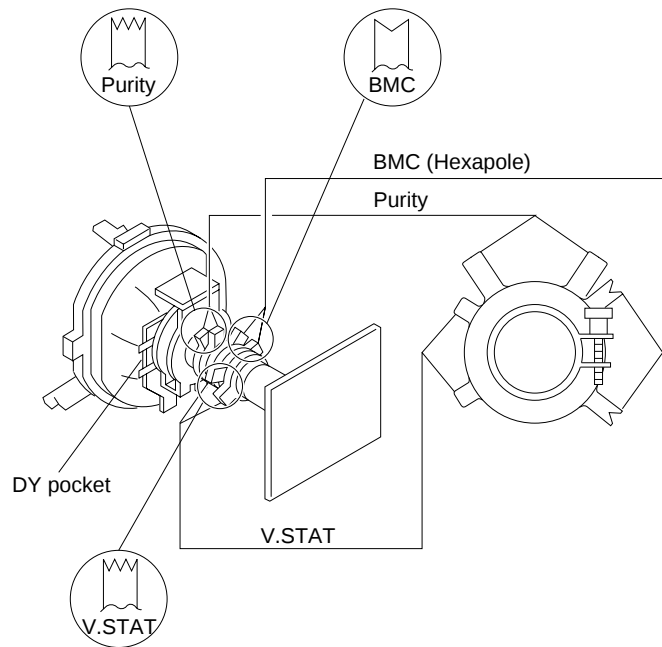
Preparation :

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

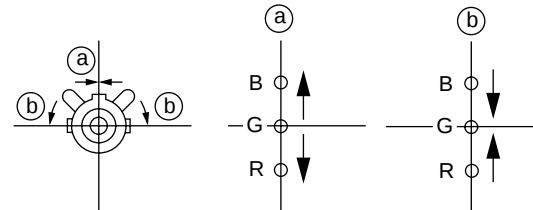
(1) Horizontal and Vertical Static Convergence



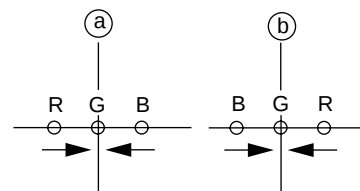
1. (Moving horizontally), adjust the H.STAT control so that the red, green and blue dots are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue dots are on top of each other at the center of the screen.
3. If the H.STAT variable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



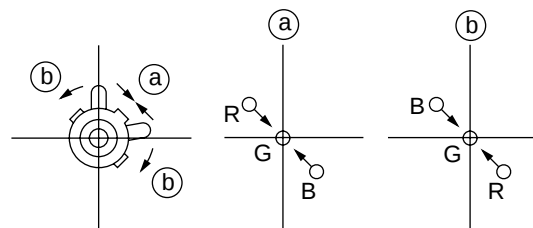
① V. STAT



② H. STAT VR

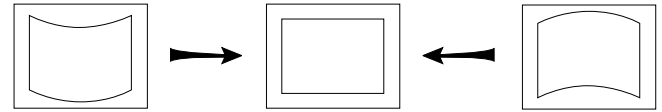
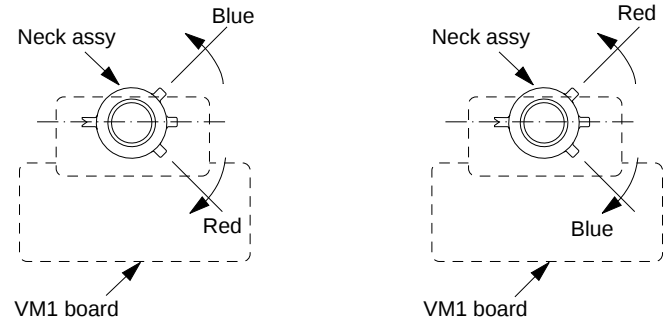
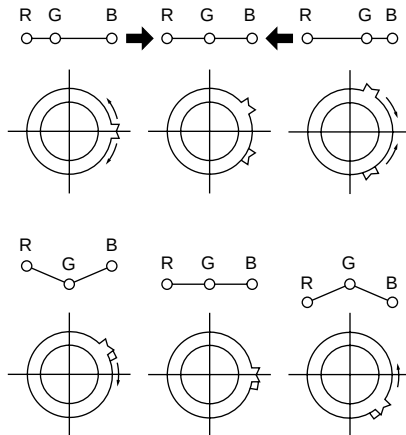


③



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.



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)

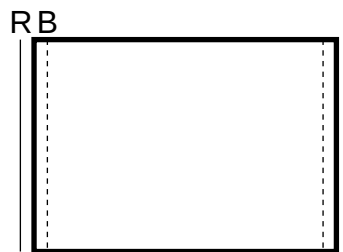
⑤ Y separation axis correction magnet adjustment.

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.

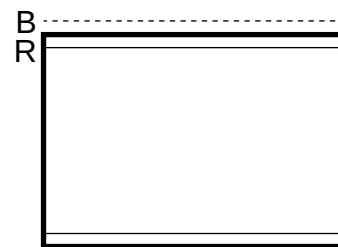
(2) Dynamic Convergence Adjustment

Preparation:

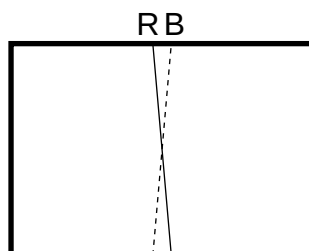
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence



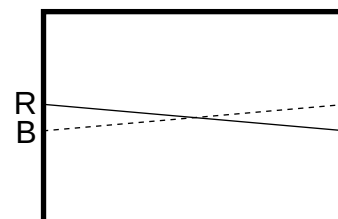
TLH



TLV



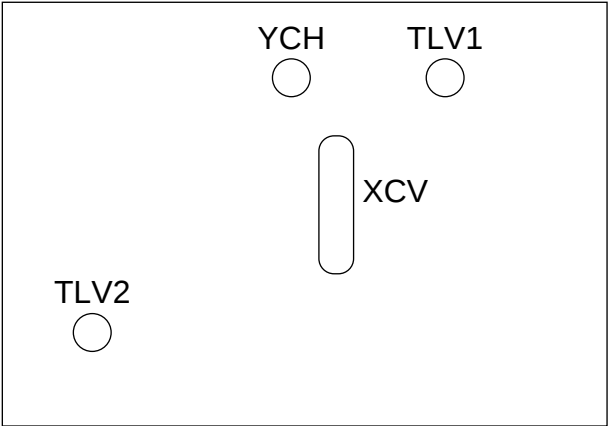
YCH



XCV

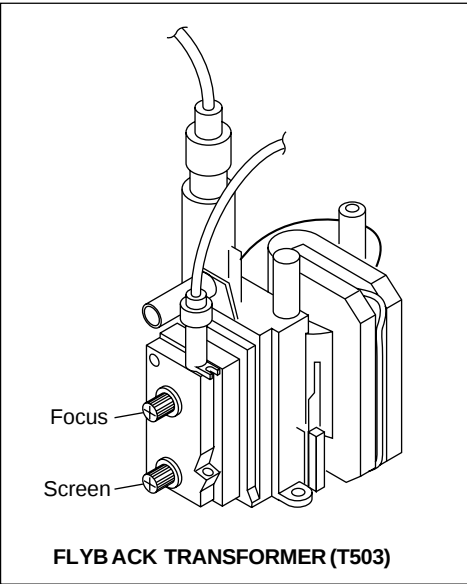
TLV	Rotate	TLV-2	VOL (29", 34") on DY
	Rotate	TLV	VOL (25") on DY
XCV	Rotate	XCV	Adj core on DY
YCH	Rotate	YCH	VOL on DY
TLH	Insert	TLH	Correction Plate to DY Pocket (Left or Right)

ON DY:

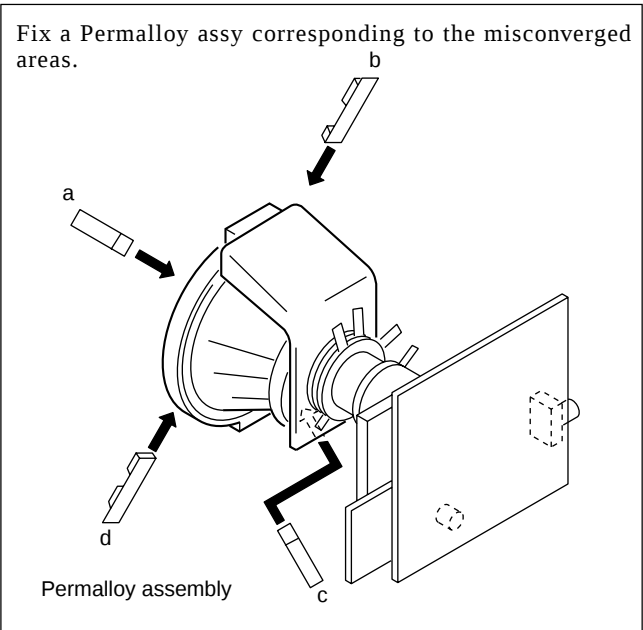
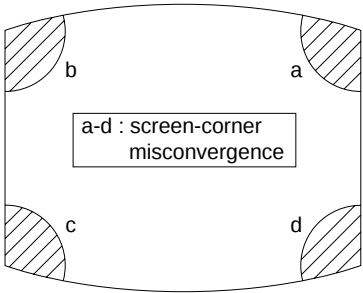


3-3. FOCUS ADJUSTMENT

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



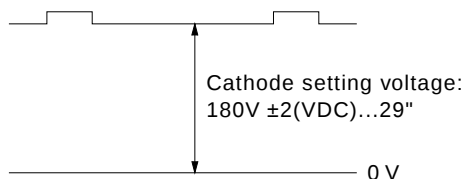
(3) Screen-corner Convergence



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.

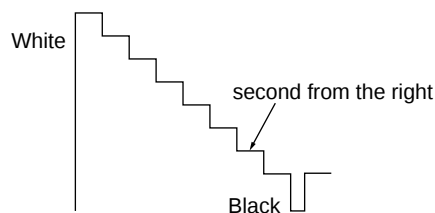


2. WHITE BALANCE ADJUSTMENT

- 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 :

Device Name	Item Name	Marking of virgin NVM				
	Item No	Data		Mode		
GEO	00	HPS	1C	■	SERVICE 50	
011S	1.0C	59	7F	0	000A	
Suffix No (OEM Code)	Software version	Total Power-On time (hours)				

PAL, SECAM : 50

NTSC : 60

1, 4

↓

3, 6

↓

MUTING

↓

0

Select the adjustment item.

Raise/lower the data value.

Writes.

Executes the writing.

7, 0

8, 0

5, 0

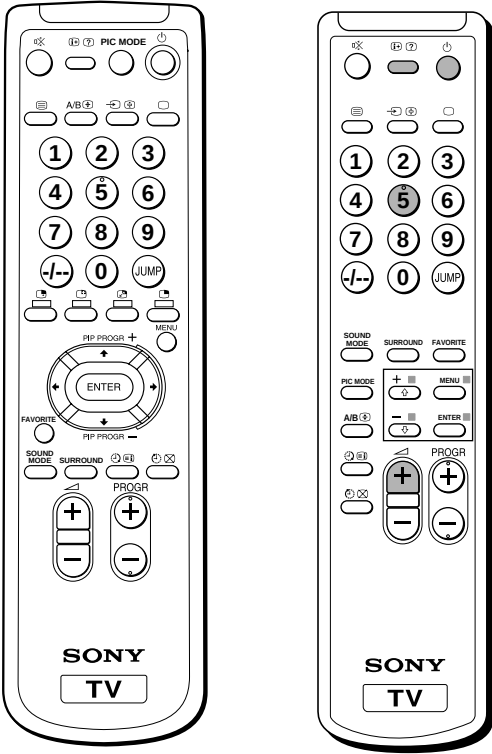
2, 0

All the data becomes the values in memory.

All user control goes to the standard state.

Service data initialization (Be sure not to use usually.)

Write 50Hz adjustment data to 60Hz, or vice versa.



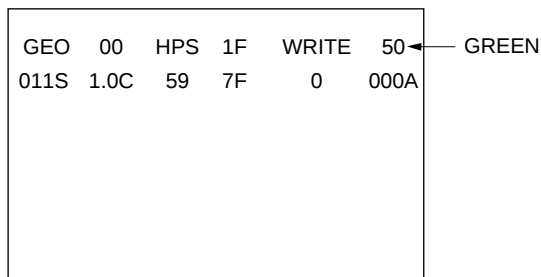
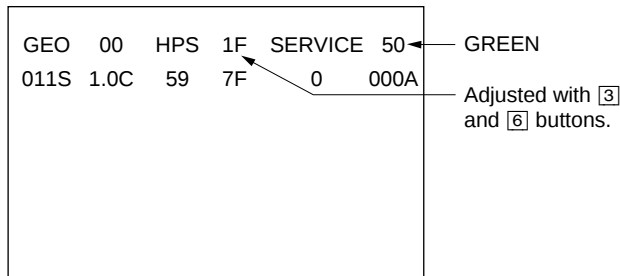
RM-953 RM-954

4-2. ADJUSTMENT METHOD

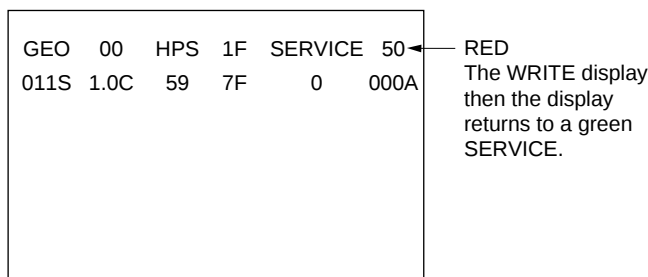
Item Number 00 of device GEO

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		Note	Data Range	Function	Note for Different Data	Register No. (bit)	Slava Address	RAM Address (bit)
	No	Name							
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 f0		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		Note	Data Range	Function	Note for Different Data	Register No. (bit)	Slava Address	RAM Address (bit)
	No	Name							
VP	13	HDW	0	1	H Drive Pulse Width Switch	TV/Video/Text	00 (6)		54 (6)
	14	AFC	1	03	AFC Gain Control		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.	50/60Hz	0D (0)		61 (0)
	18	HMS	1	1	Macro Vision C/m off/on		0E (0)		92 (0)
	19	YUV	0	1	YUV Switch Control		01 (0)		55 (0)
	20	CDV	1	3	CD mode for Video		0D (5-4)		259 (5-4)
	21	RON	1	1	R ON	Video only 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		Note	Data Range	Function	Note for Different Data	Register No. (bit)	Slava Address	RAM Address (bit)
	No	Name							
SVP	0	SBF	22	3F	SECAM BELL f0	TV Video NTSC/others	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		05 (7-2)		210
	3	SCL	1F	3F	Sub Color Control		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

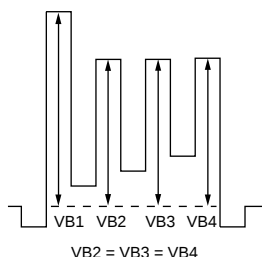
No. OPB3 OP4

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

4-3. PICTURE QUALITY ADJUSTMENTS

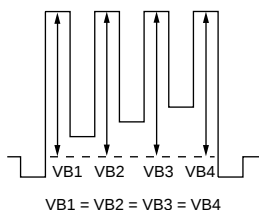
SUB COLOR ADJUSTMENT

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.



SUB HUE ADJUSTMENT

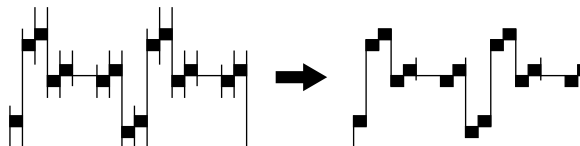
1. Select Video 1.
2. Input a NTSC color-bar, video into Video 1.
3. Set the following condition:
PICTURE 100%, BRIGHTNESS 50%, COLOR 50%
4. Connect an oscilloscope to pin ① (B OUT) of CN305, A board.
5. Select SAJ 1 'SHU' with [1] and [4] of the commander by setting to Service Mode and adjust to VB1=VB2=VB3=VB4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



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-COM):

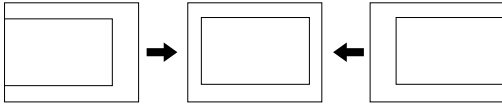
CXP750097-011S

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.)

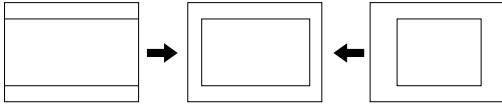
4-5. PICTURE DISTORTION ADJUSTMENT (1)

Item Number 00 – 0B

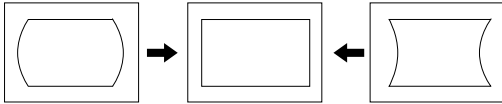
GEO 0 HPS (H POSITION)



GEO 1 HSZ (H SIZE)



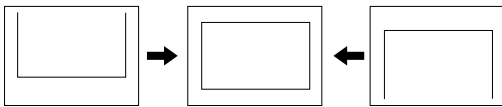
GEO 2 PAP (PIN AMP)



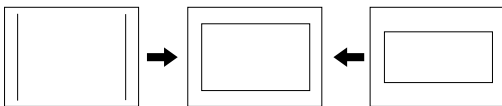
GEO 3 TLT (TRAPEZIUM)



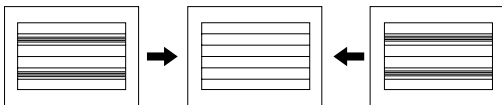
GEO 4 VPS (V POSITION)



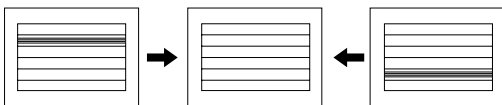
GEO 5 VSZ (V SIZE)



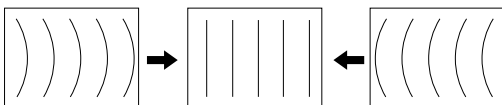
GEO 6 SCO (VERTICAL S-Correction)



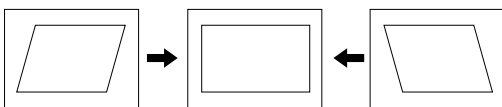
GEO 7 VLN (V LINEARITY)



GEO 8 BOW (AFC.BOW)

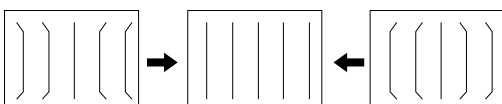


GEO 9 AGL (AFC.ANGLE)



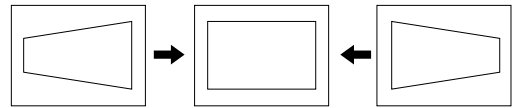
GEO 0A UCP (UPPER CORNER PIN)

GEO 0B LCP (LOWER CORNER PIN)



PICTURE DISTORTION ADJUSTMENT (2)

H-TRAPEZOID (Rotate RV1801)



SECTION 5
DIAGRAM

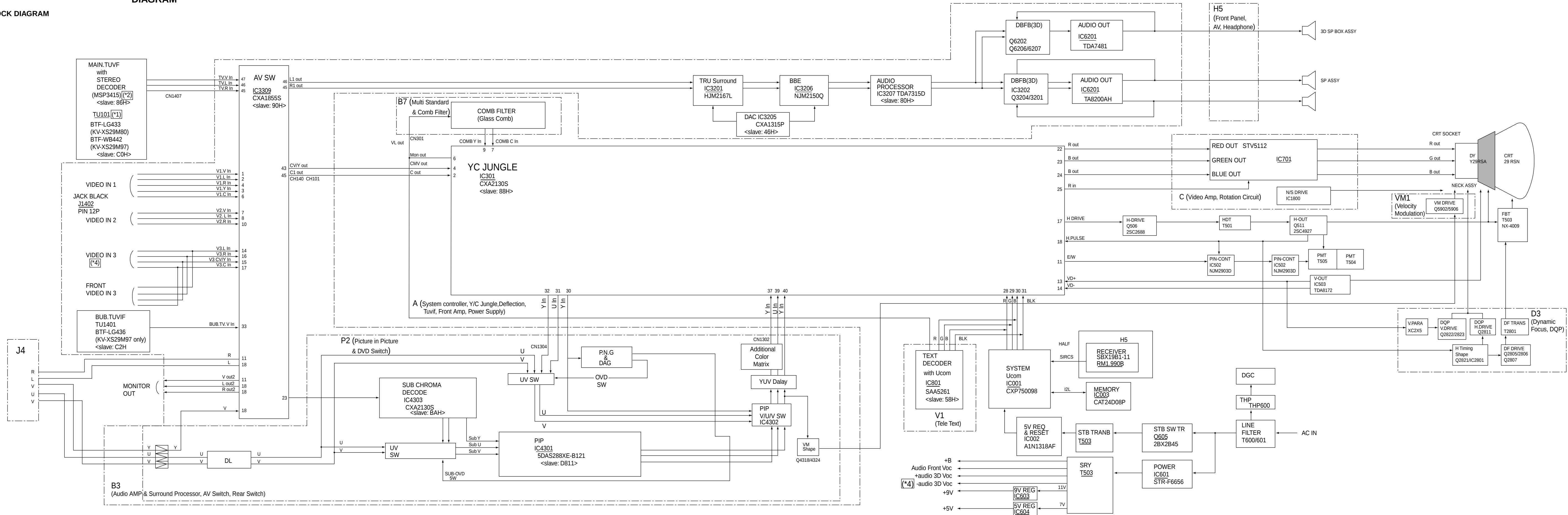
KV-XS29M80/XS29M97
RM-954 RM-953

KV-XS29M80/XS29M97
RM-954 RM-953

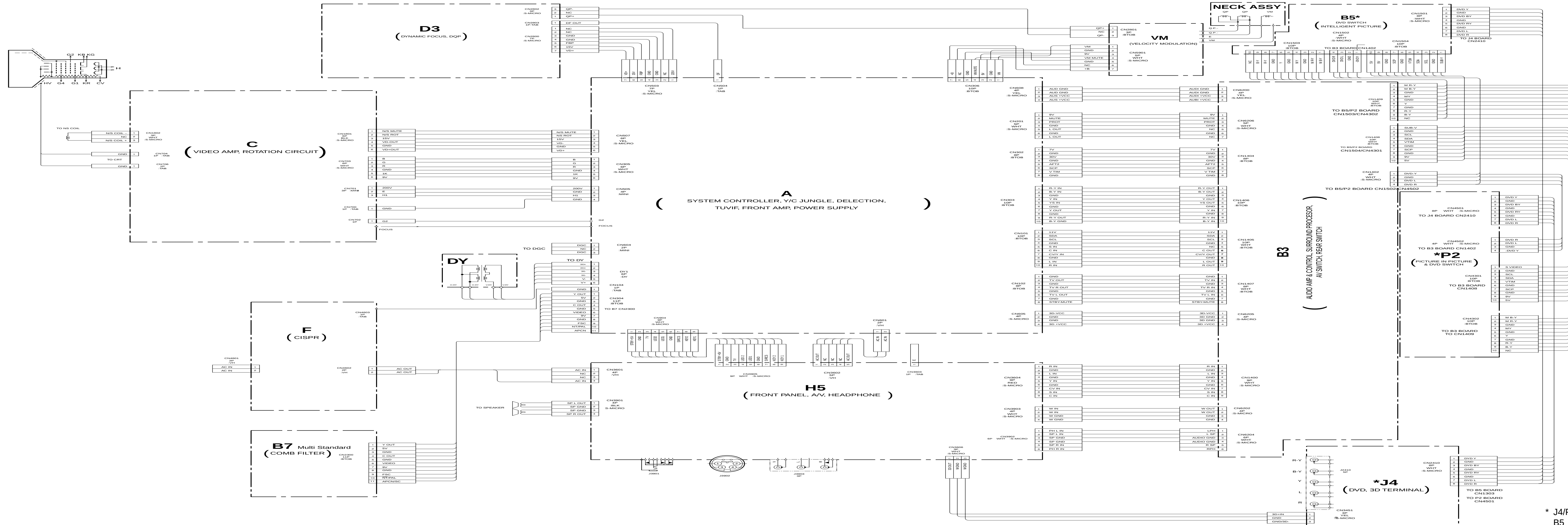
KV-XS29M80/XS29M97
RM-954 RM-953

KV-XS29M80/XS29M97
RM-954 RM-953

5-1. BLOCK DIAGRAM

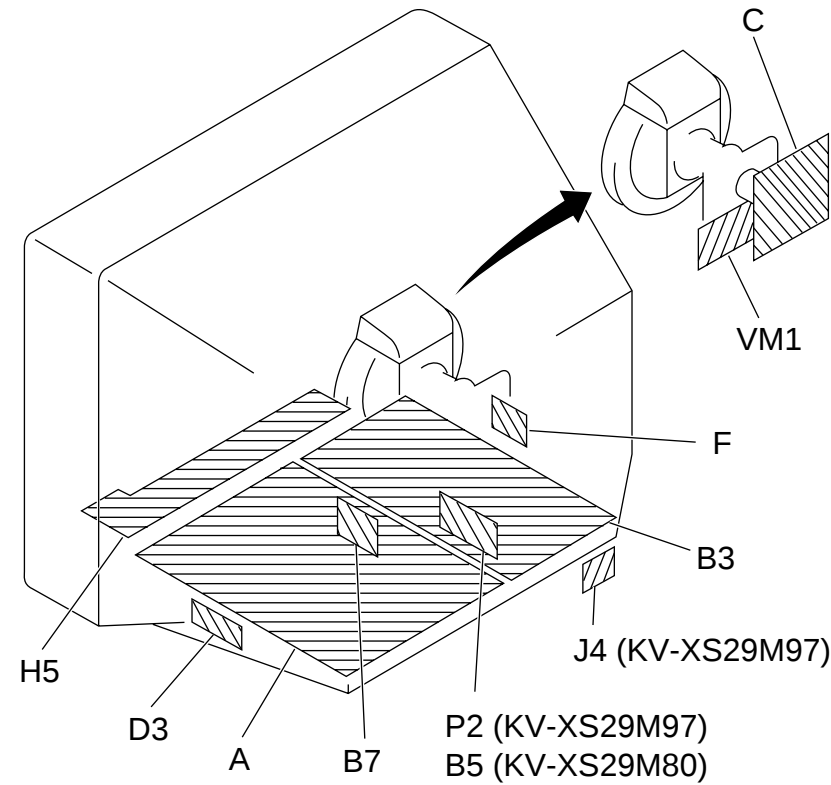


5-1. FRAME SCHEMATIC DIAGRAM

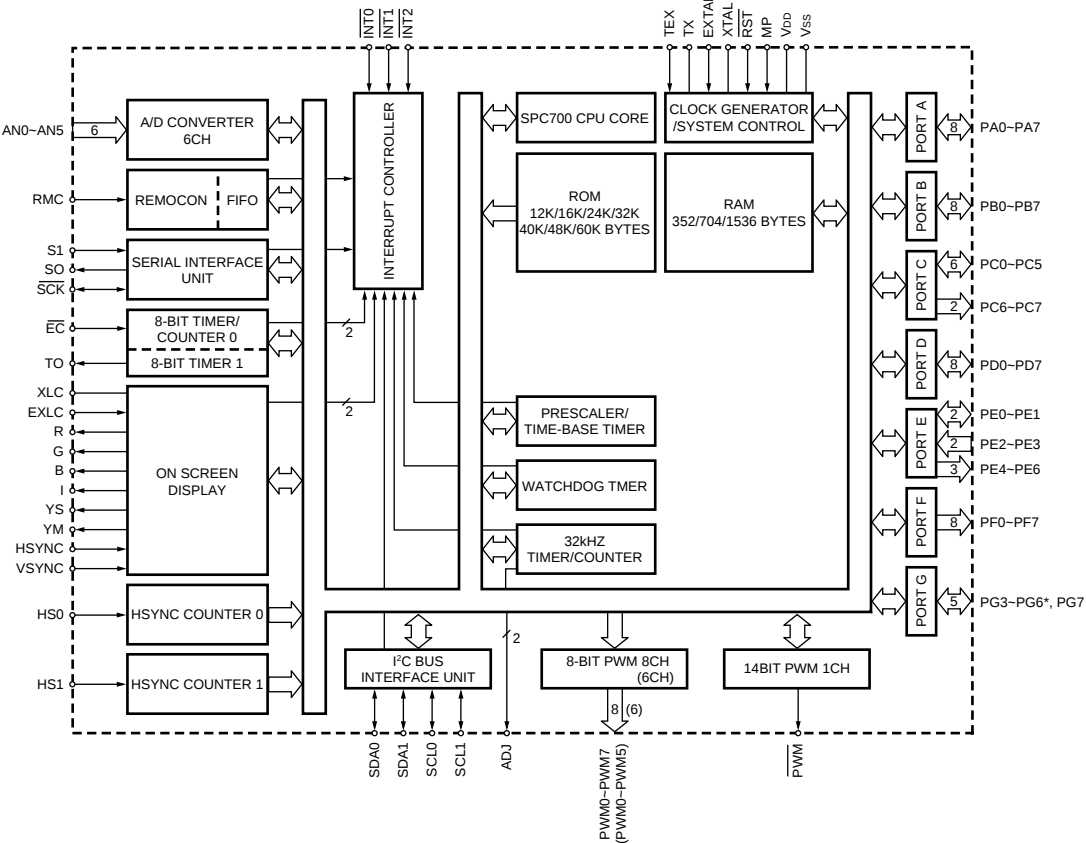


* J4/P2 → for KV-XS29M97 only.
B5 → for KV-XS29M80 only.

5-3. CIRCUIT BOARDS LOCATION



A BOARD IC001 CXP750097-011S



5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

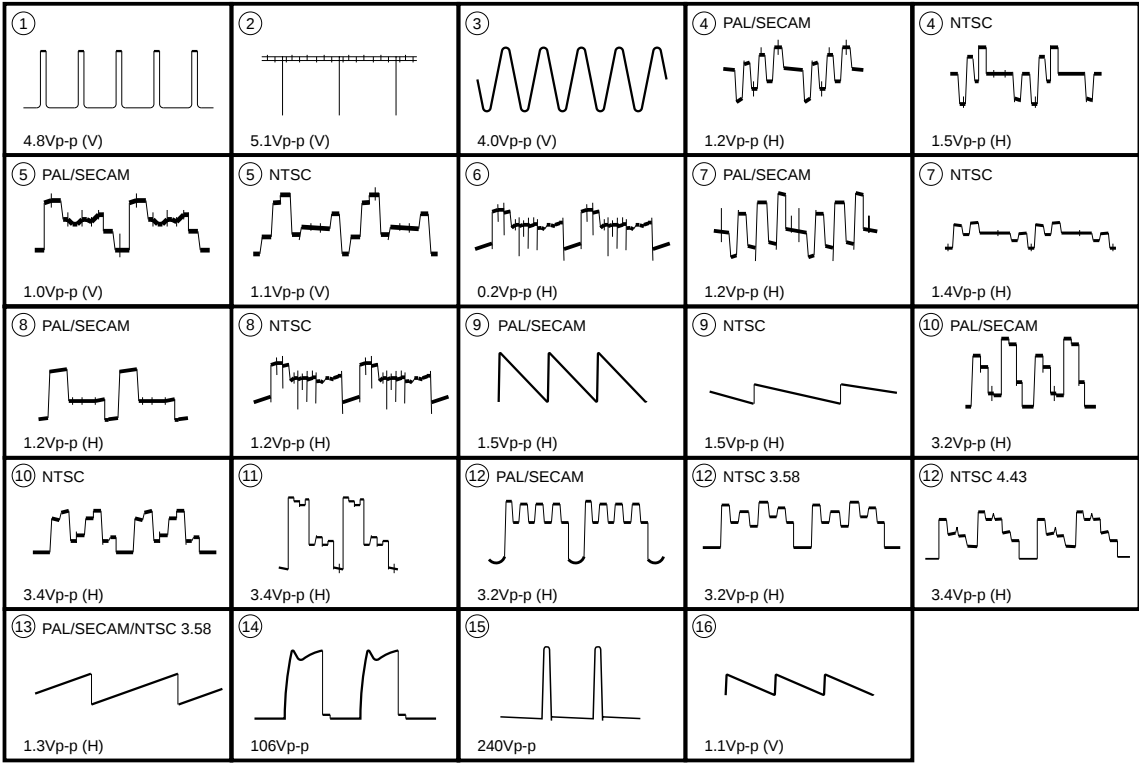
- All capacitors are in μF unless otherwise noted.
- All electrolytic capacitors are rated at 50V unless otherwise noted.
- All resistors are in ohms.
- $\text{k}\Omega = 1000\Omega$, $\text{M}\Omega = 1000\text{k}\Omega$
- Indication of resistance which does not have rating electrical power is as follows.
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 M Ω 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	BIPOLEAR
	: 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

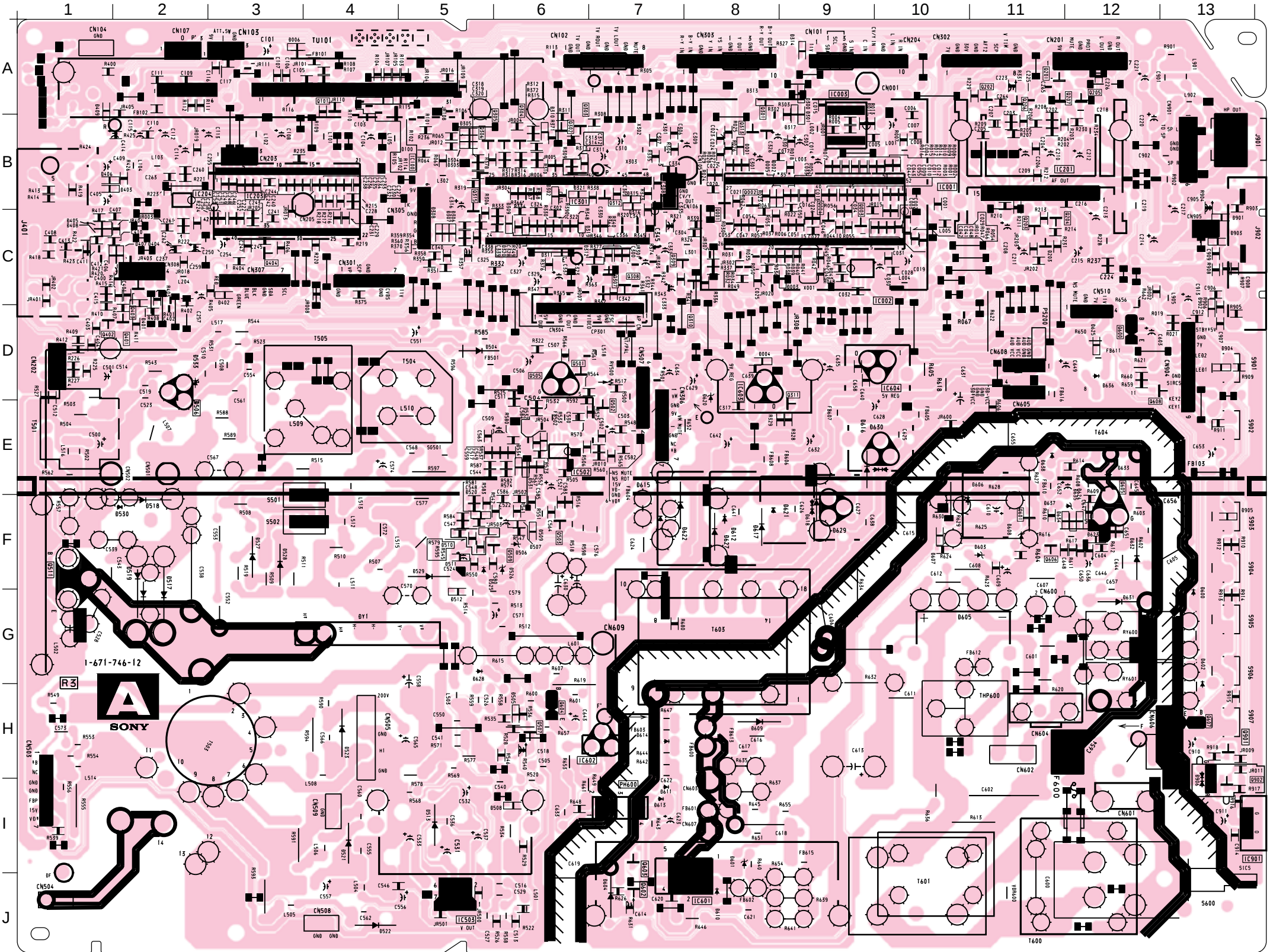


A BOARD

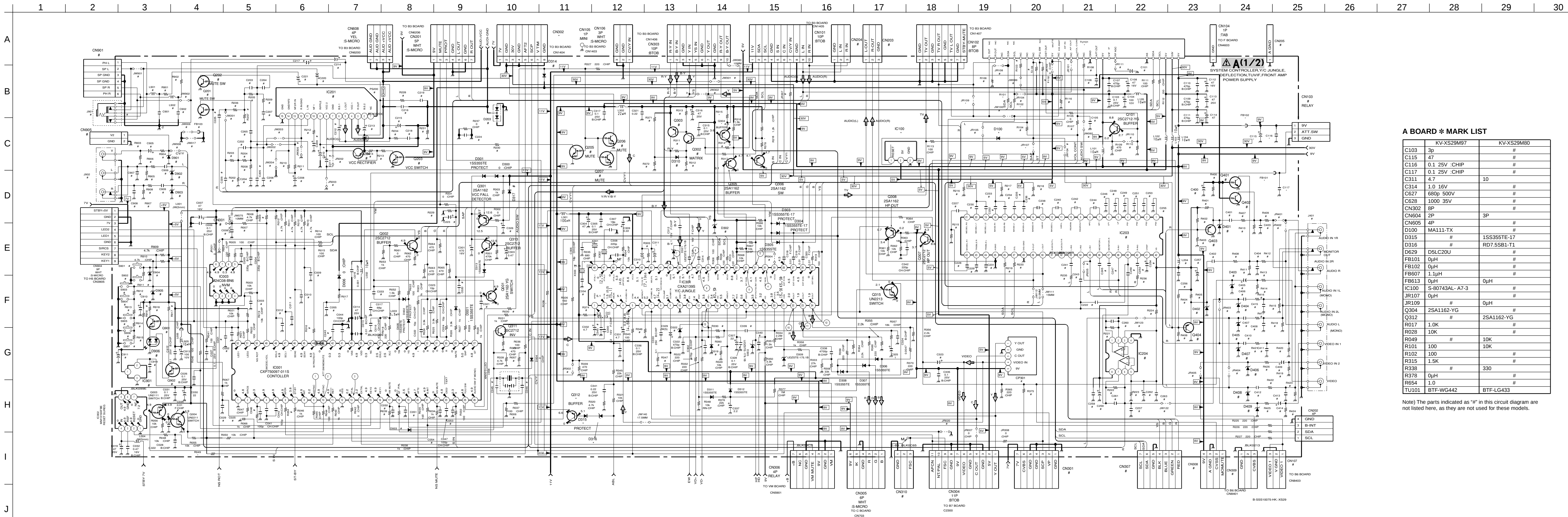
IC		D004	D-8	D614	H-7
IC001	B-10	D005	B-8	D615	E-7
IC002	C-9	D006	A-3	D616	E-9
IC003	A-9	D203	C-11	D617	F-8
IC100	B-5	D300	A-9	D618	F-9
IC201	B-11	D301	B-9	D620	D-8
IC203	C-3	D302	B-6	D621	F-8
IC204	B-2	D303	B-5	D622	F-7
IC301	B-6	D304	B-5	D623	F-12
IC502	E-6	D305	B-5	D624	F-12
IC503	J-5	D306	C-5	D625	D-12
IC601	I-8	D307	C-5	D627	F-8
IC602	H-6	D308	B-5	D628	G-5
IC603	D-8	D309	B-6	D629	F-9
IC604	D-10	D310	A-6	D630	E-9
IC901	I-13	D311	C-6	D631	G-12
PH600	H-7	D312	C-6	D632	F-12
TRANSISTOR		D313	A-8	D633	E-12
Q001	B-8	D315	B-7	D634	F-11
Q002	B-8	D316	C-7	D635	F-12
Q003	C-9	D317	B-9	D636	D-12
Q004	C-9	D318	A-9	D637	F-11
Q101	A-4	D319	C-6	D638	E-11
Q201	A-11	D320	C-6	D901	C-13
Q202	A-11	D321	B-6	D902	D-13
Q203	C-11	D401	D-2	D903	C-13
Q204	C-11	D402	C-3	D904	D-13
Q205	A-12	D403	B-1	D905	F-13
Q206	A-11	D404	C-2	D906	I-13
Q207	A-11	D405	C-1		
Q301	B-8	D406	B-1		
Q302	A-6	D407	C-2		
Q303	A-6	D408	C-1		
Q304	B-6	D409	A-1		
Q305	B-5	D504	D-5		
Q306	B-5	D505	H-6		
Q307	C-7	D506	F-6		
Q308	C-7	D507	F-6		
Q309	C-7	D508	I-5		
Q310	D-7	D509	E-6		
Q311	D-9	D510	F-5		
Q312	B-7	D511	F-5		
Q313	B-8	D512	G-5		
Q315	B-5	D513	I-5		
Q401	D-2	D517	F-2		
Q402	D-1	D518	F-2		
Q403	D-2	D519	F-2		
Q404	C-3	D520	E-5		
Q501	D-6	D521	I-4		
Q502	E-7	D522	J-4		
Q503	F-6	D525	F-5		
Q505	D-6	D526	F-6		
Q506	D-2	D527	F-3		
Q507	H-6	D528	F-3		
Q509	F-6	D529	F-5		
Q511	F-1	D530	F-2		
Q600	C-12	D531	E-6		
Q601	F-11	D532	E-6		
Q602	J-7	D533	D-2		
Q603	I-7	D534	E-6		
Q604	H-6	D600	G-13		
Q605	E-12	D601	I-8		
Q606	F-11	D602	G-13		
Q607	H-13	D603	F-11		
Q901	H-13	D604	J-7		
Q902	H-13	D605	G-10		
DIODE		D606	E-11		
D001	B-8	D607	F-10		
D002	C-8	D608	E-11		
D003	C-9	D609	H-8		
		D610	J-8		
		D611	I-7		
		D612	F-8		
		D613	I-7		

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

- A Board -



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



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

A

B

C

D

E

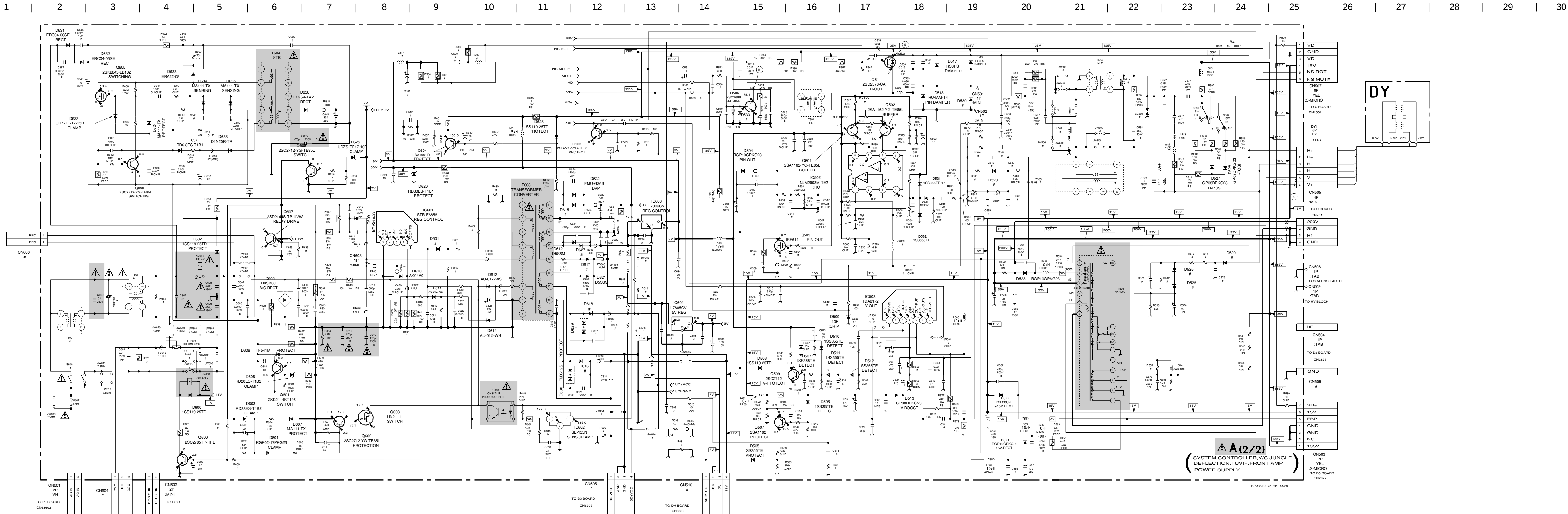
F

G

H

I

J



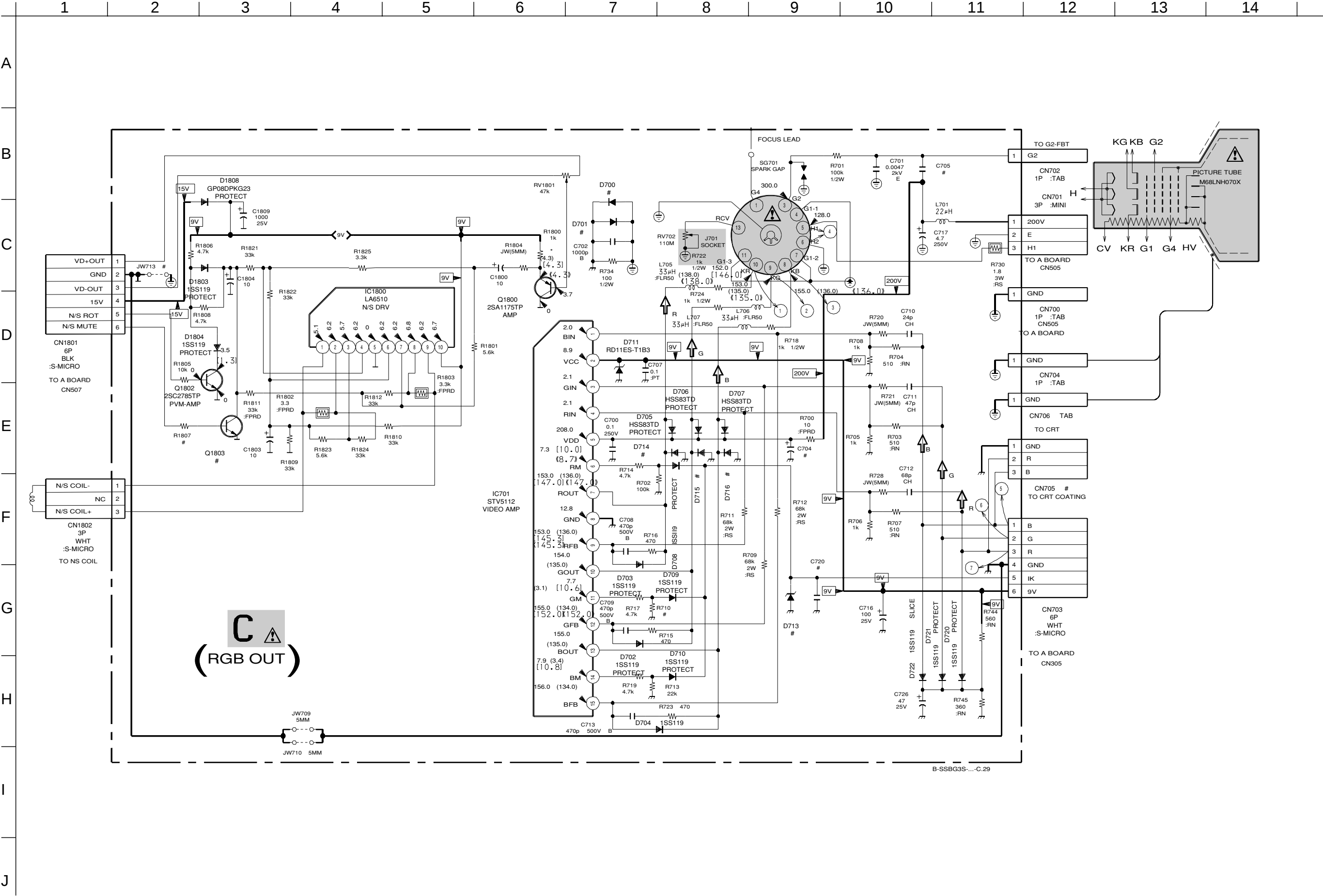
Schematic diagram

← A (1/2) board

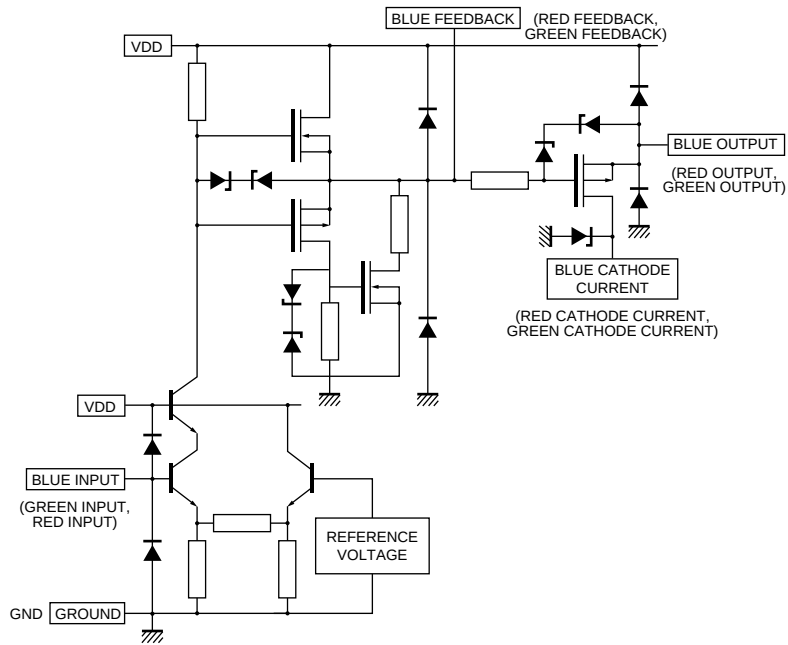
Schematic diagram

A (2/2) board →

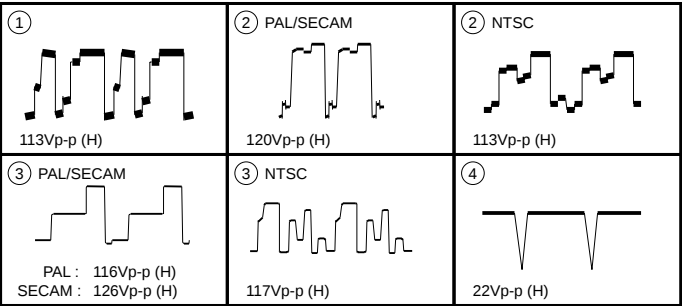
(5) Schematic Diagram of C Board



C BOARD IC701 STV5112

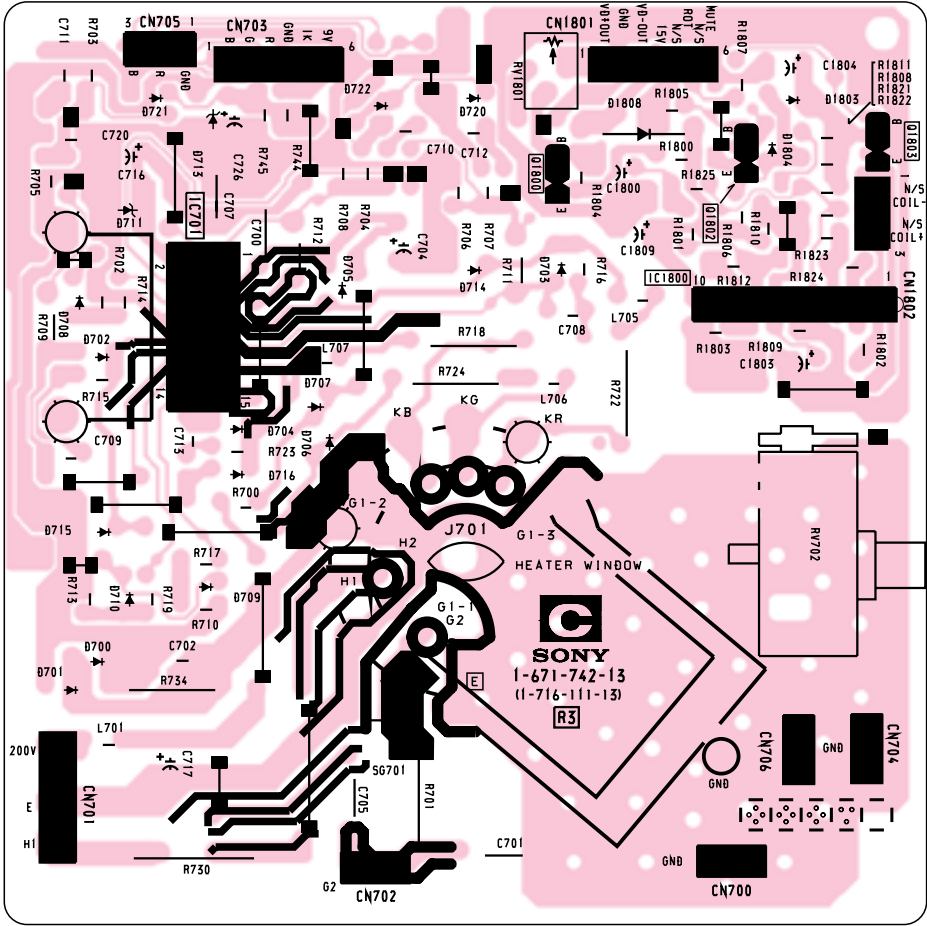


C BOARD WAVEFORMS



C [VIDEO AMP, ROTATION CIRCUIT] PRINTED WIRING BOARDS

- C Board -



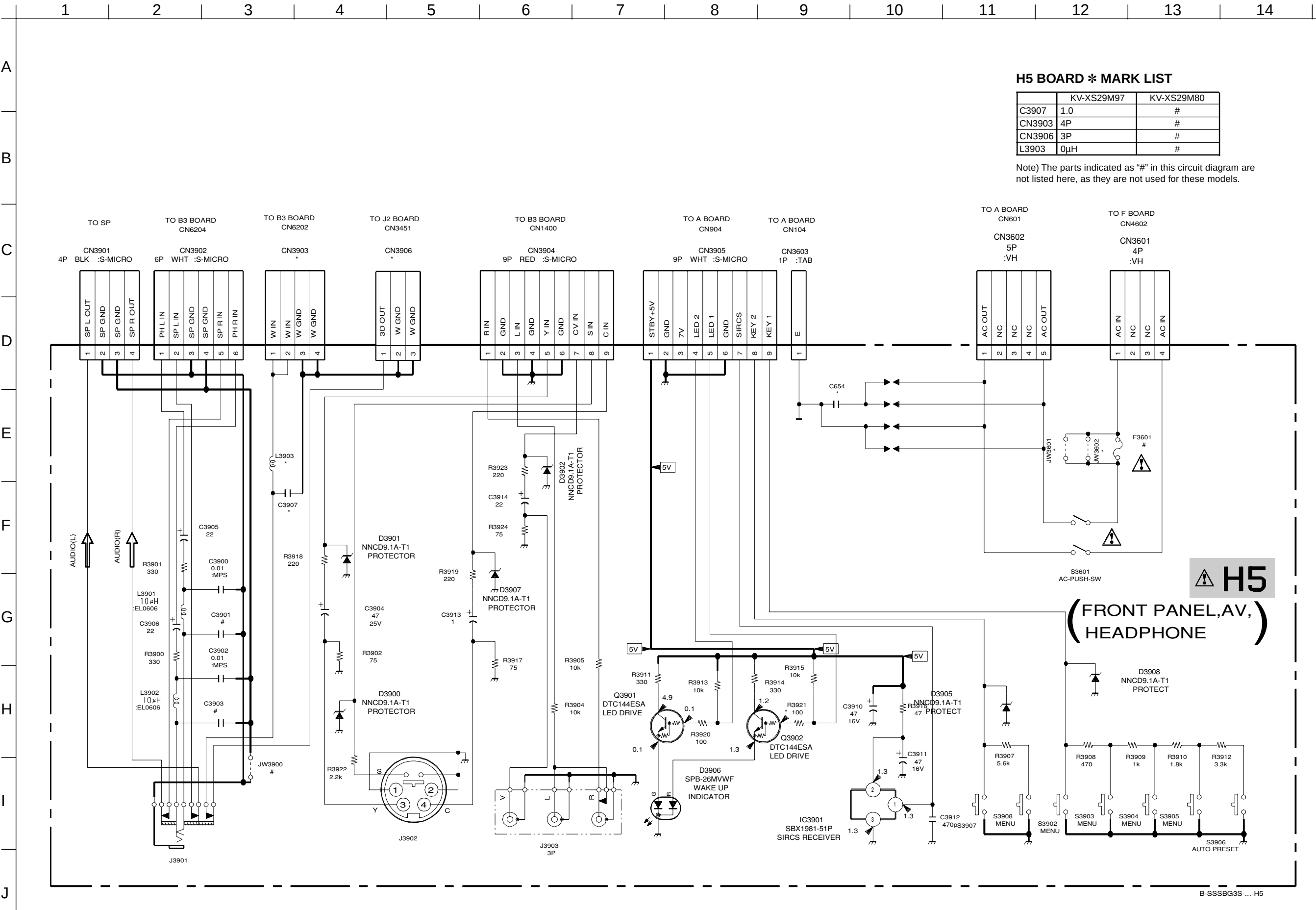
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----

D3 ⚠️
(DYNAMIC FOCUS, DQP)

B-SSSBG3S...-D3

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

(8) Schematic Diagram of H5 Board

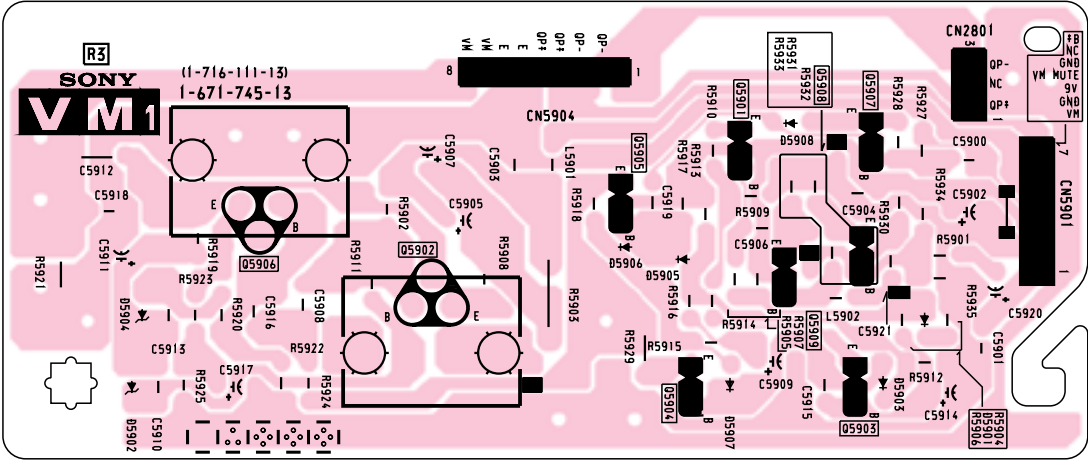


PRINTED WIRING BOARDS

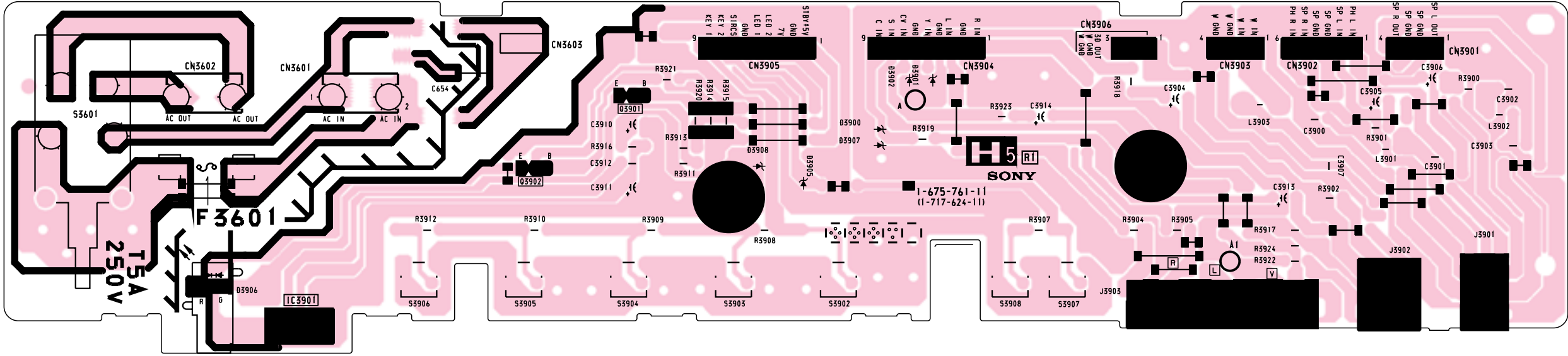
VM1 [VELOCITY MODULATION]

H5 [FRONT PANEL, AV, HEADPHONE]

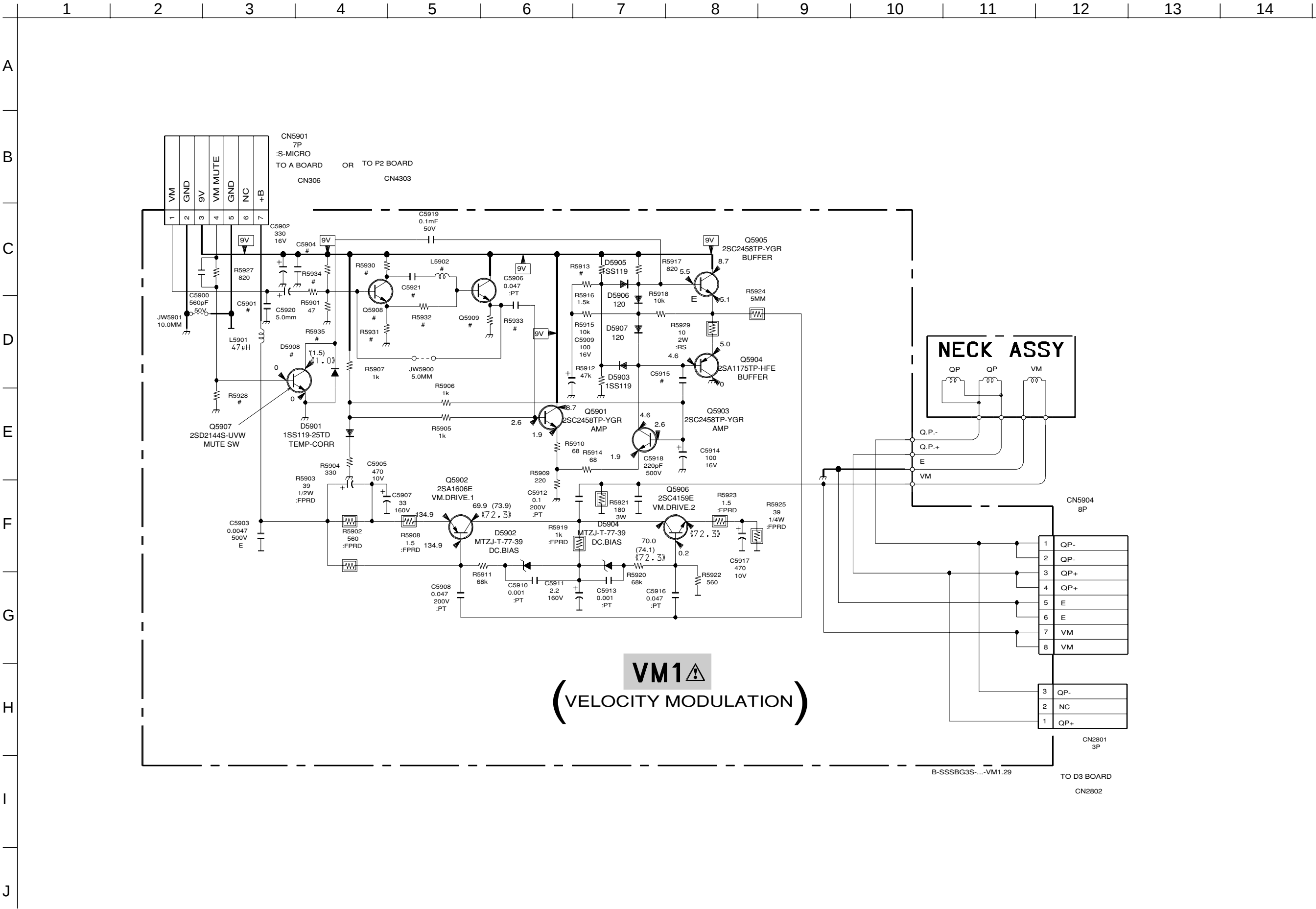
– VM1 Board –



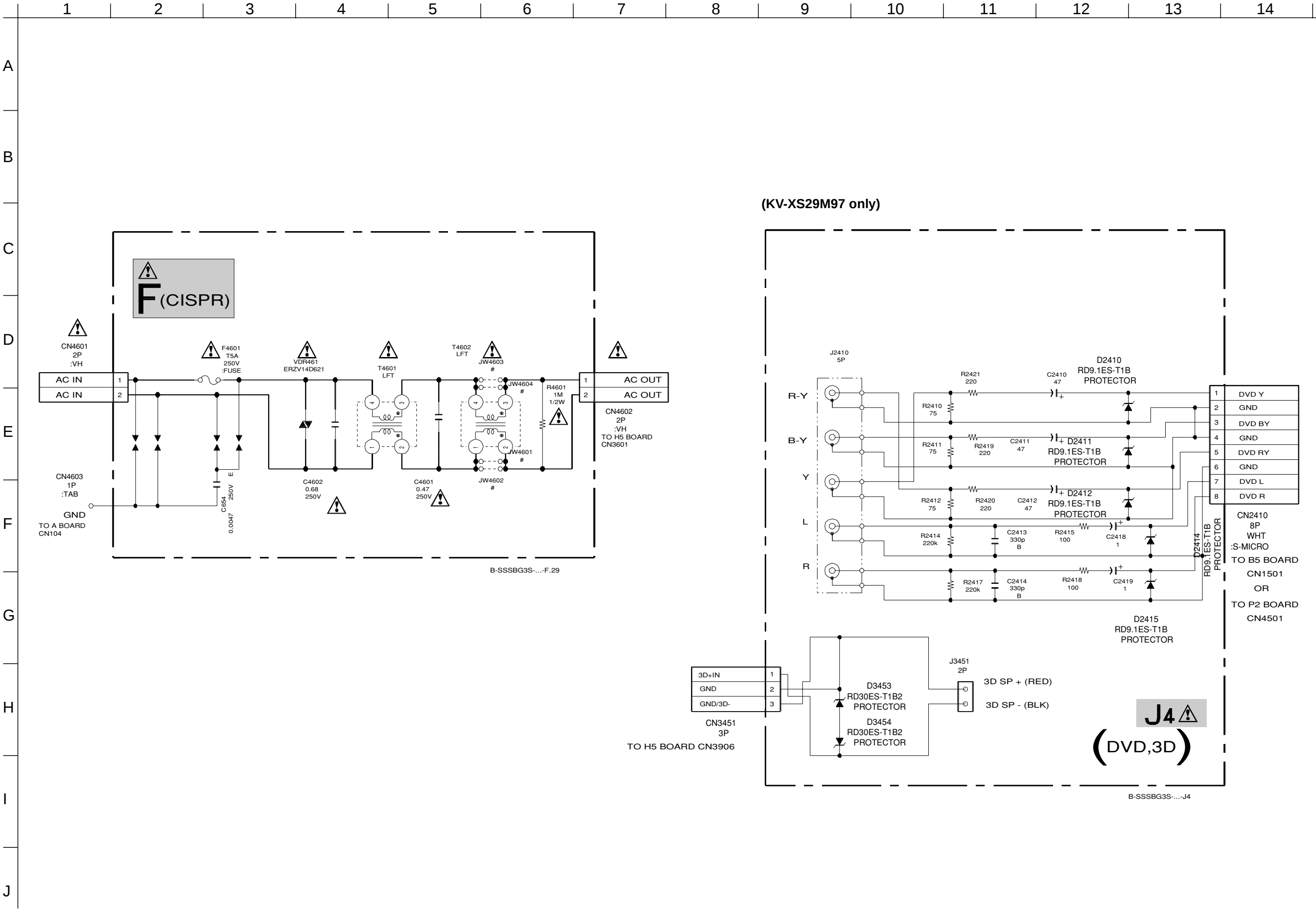
– H5 Board –



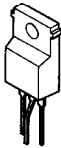
(9) Schematic Diagram of VM1 Board



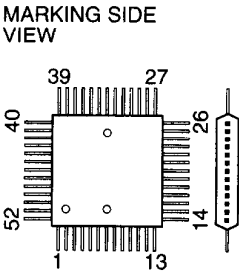
(10) Schematic Diagrams of F and J4 Boards



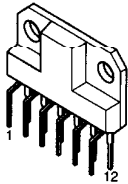
SE-135N



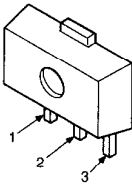
RU-1P



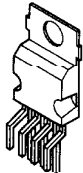
TA0200AH



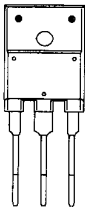
S-80743AL-A7-S



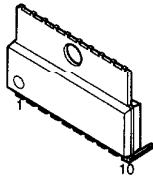
TDA8172



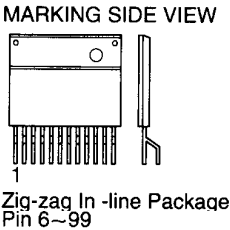
2SD2578-RF



LA6510



STR-F6656



SECTION 6 EXPLODED VIEWS

NOTE:

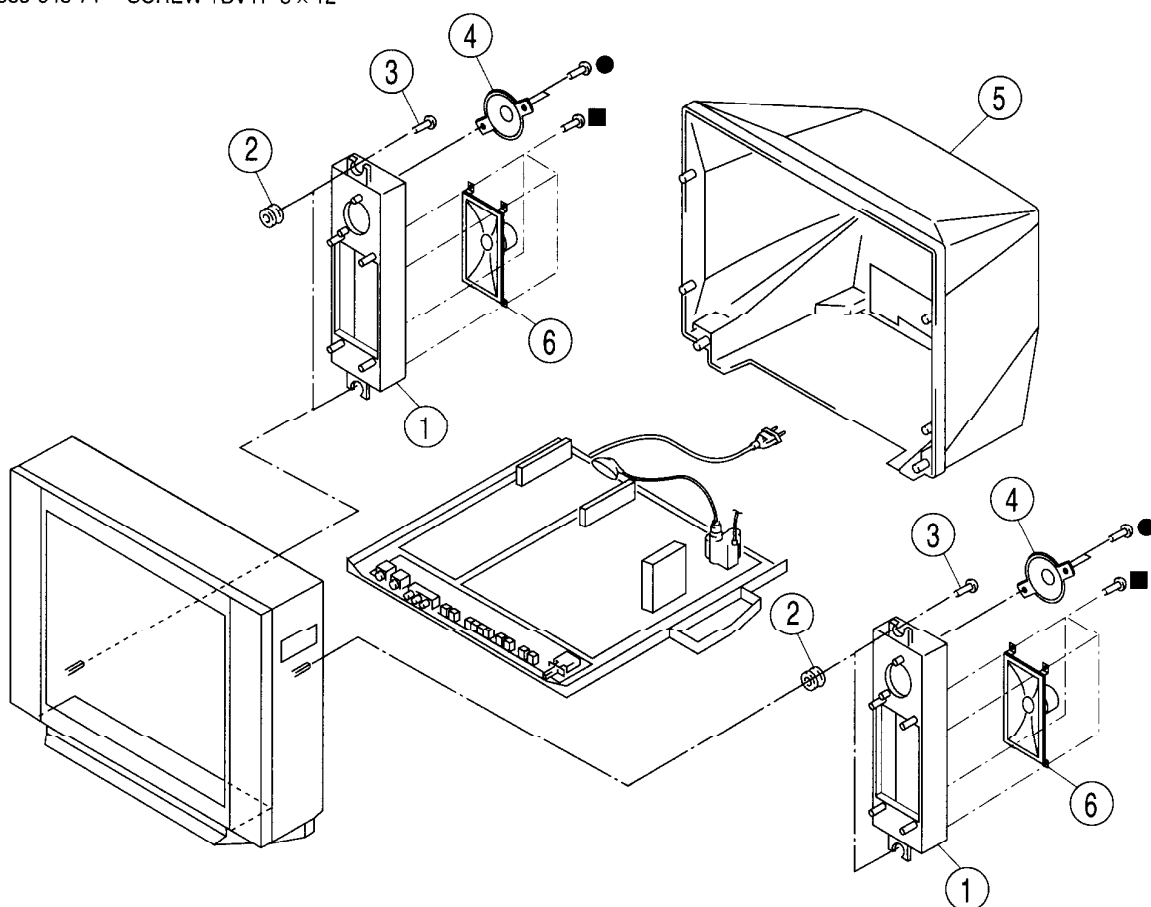
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- 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 $\triangle$ are critical for safety.
Replace only with part number specified.

6-1. SPEAKER BRACKET

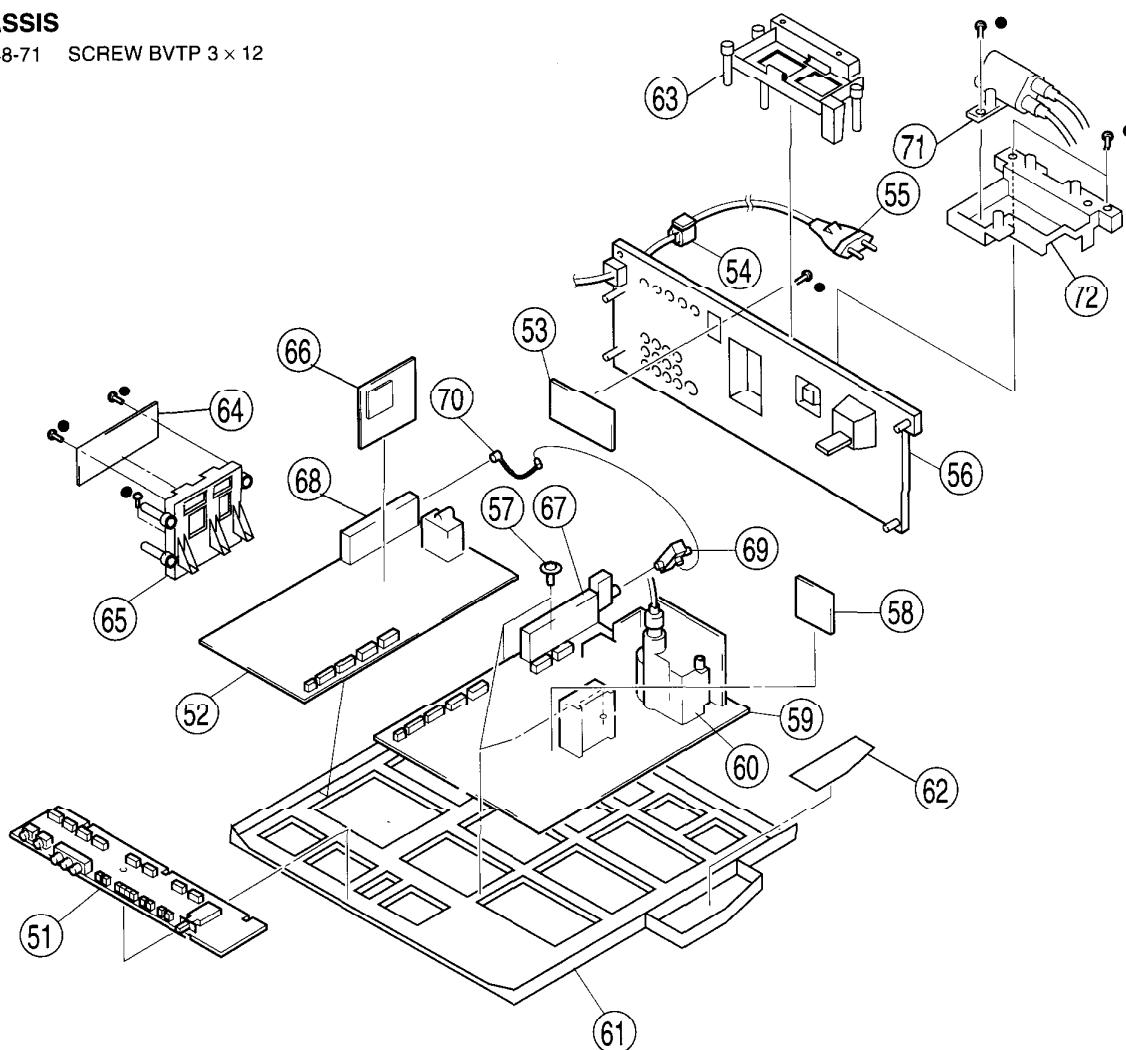
- : 7-685-663-71 SCREW +BVTP 4 × 16
●: 7 685 648 71 SCREW +BVTP 3 × 12



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

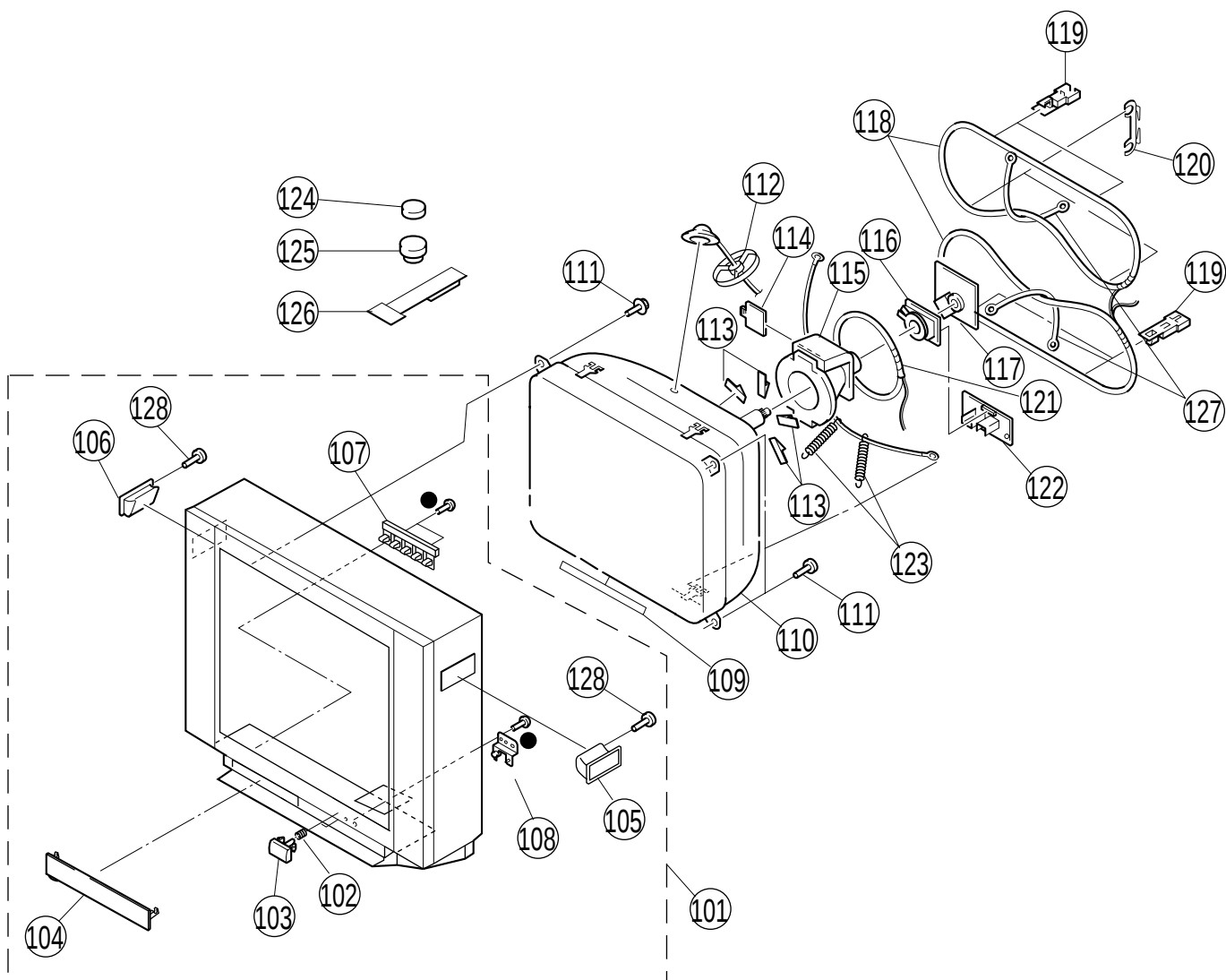
●: 7-685-648-71 SCREW BVTP 3 × 12



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
51	* A-1372-717-A	H5 BOARD MOUNTED		61	* 4-066-681-04	BRACKET, MAIN	
52	* A-1136-055-A	B3 BOARD COMPLETE (KV-XS29M80)		62	* A-1343-745-A	D3 BOARD MOUNTED	
	* A-1136-050-A	B3 BOARD COMPLETE (KV-XS29M97)		63	* 4-066-683-11	HOLDER, PWB	
53	* A-1388-266-A	J4 BOARD MOUNTED (KV-XS29M97 ONLY)		64	* A-1241-346-A	F BOARD MOUNTED	
54	4-022-115-00	HOLDER, AC CORD		65	* 4-066-682-01	BRACKET, F PWB	
55	Δ 1-574-062-61	CORD, POWER (WITH CONNECTOR) 2.5A/250V (KV-XS29M80)		66	* A-1131-506-A	B5 BOARD MOUNTED (KV-XS29M80)	
	Δ 1-769-609-21	CORD, POWER (WITH CONNECTOR) (KV-XS29M97)			* A-1190-359-A	P2 BOARD MOUNTED (KV-XS29M97)	
56	* 4-066-684-21	BRACKET, TERMINAL (KV-XS29M80)		67	8-598-449-10	TUNER, FSS BTF-LG433 (KV-XS29M80)	
	* 4-066-684-51	BRACKET, TERMINAL (KV-XS29M97)			8-598-452-30	TUNER, FSS BTF-WG442 (KV-XS29M97)	
57	4-046-797-01	SCREW (3X12), (+)BVTAP		68	8-598-508-10	TUNER, FSS BTF-LG436 (KV-XS29M97 ONLY)	
58	* A-1131-500-A	B7 BOARD MOUNTED		69	1-251-658-21	SPLITTER RF (KV-XS29M97 ONLY)	
59	* A-1299-070-A	A BOARD COMPLETE (KV-XS29M80)		70	* 1-555-110-00	P-P CABLE (KV-XS29M97 ONLY)	
	* A-1299-047-A	A BOARD COMPLETE (KV-XS29M97)		71	Δ 1-467-525-31	CAPRI LOCK, HIGH-VOLTAGE (KV-XS29M97 ONLY)	
60	Δ 1-453-284-11	TRANSFORMER ASSY, FLYBACK (KV-XS29M80)		72	4-066-680-02	BRACKET, HVC (KV-XS29M97 ONLY)	
	Δ 1-453-305-11	TRANSFORMER ASSY, FLYBACK (KV-XS29M97)					

6-3. PICTURE TUBE

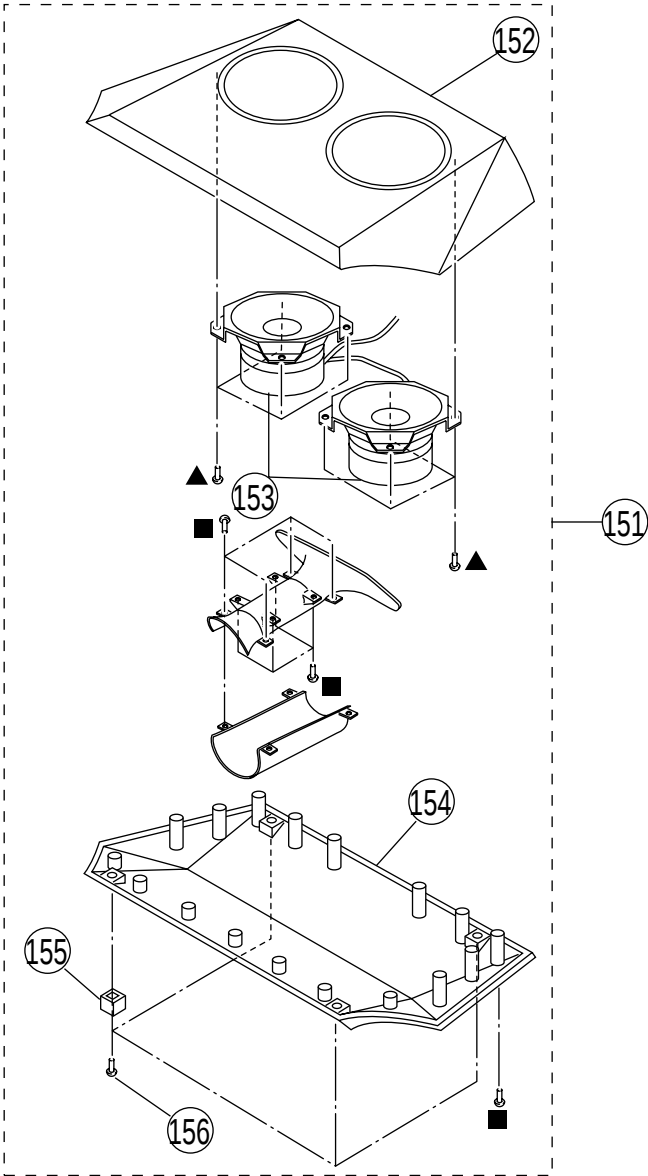
●: 7-685-648-79 SCREW BVTP 3 × 12



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
101	X-4037-231-1	BEZNET,ASSY (KV-XS29M80)	102-108, 128	116	8-453-011-11	NA299-M	
	X-4036-803-1	BEZNET,ASSY (KV-XS29M97)	102-108, 128	117	* A-1331-999-A	C BOARD MOUNTED	
102	4-036-405-11	SPRING, COMPRESSION		118	△ 1-419-323-11	COIL, DEGAUSSING (HONG KONG)	
103	4-070-752-01	BUTTON, POWER			△ 1-419-294-11	COIL, DEGAUSSING (E)	
104	4-070-754-31	DOOR, CONTROL (KV-XS29M80)		119	* 4-062-970-11	CLIP (29RSN), DGC	
	4-070-754-01	DOOR, CONTROL (KV-XS29M97)		120	4-061-369-01	HOLDER, DEGAUSE COIL	
105	X-4035-862-4	HANDLE ASSY (R)		121	1-452-896-11	COIL, NA ROTATION (RT200)	
106	X-4035-861-4	HANDLE ASSY (L)		122	* A-1342-512-A	VM1 BOARD MOUNTED	
107	4-070-753-01	BUTTON, MULTI		123	4-369-318-61	SPRING, TENSION	
108	* 4-070-755-01	BAR, OPTICAL		124	1-452-032-00	MAGNET,DISC	
109	4-072-569-11	SHEET, BLOTING		125	1-452-094-00	CIRCULAR DISC MAGNET B	
110	△ 8-735-057-05	PICTURE TUBE (M68LNH070X)		126	X-4387-214-3	PERMALOY ASSY, CORRECTION	
111	4-046-765-12	SCREW, TAPPING 7+CROWN WASHER		127	4-068-028-31	BAND, DGC	
112	* 3-704-372-11	HOLDER, HV CABLE		128	4-058-870-01	SCREW, (4X16) W (+) P TAPPING	
113	4-046-600-11	SPACER, DY					
114	2-163-920-01	PLATE, TLH CORRECTION					
115	8-451-494-31	DEFLECTION YOKE (Y29RSA-S)					

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 $\triangle$ 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 : μ F, PF : μ F

COILS

• MMH : mH, UH : μ H

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
	* A-1299-070-A	A BOARD COMPLETE (KV-XS29M80)		C306	1-163-233-11	CERAMIC CHIP 18PF	5% 50V
		*****		C307	1-163-233-11	CERAMIC CHIP 18PF	5% 50V
	4-382-854-11	SCREW (M3X10), P, SW (+)		C308	1-163-259-91	CERAMIC CHIP 220PF	5% 50V
	4-382-854-21	SCREW (M3X14), P, SW (+)		C309	1-126-957-11	ELECT 0.22MF	20% 50V
		<CAPACITOR>		C311	1-126-964-11	ELECT 10MF	20% 50V
C004	1-163-001-11	CERAMIC CHIP 220PF	10% 50V	C312	1-164-346-11	CERAMIC CHIP 1MF	16V
C005	1-163-001-11	CERAMIC CHIP 220PF	10% 50V	C313	1-164-346-11	CERAMIC CHIP 1MF	16V
C006	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C315	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C007	1-104-664-11	ELECT 47MF	20% 16V	C316	1-104-664-11	ELECT 47MF	20% 25V
C013	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C317	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C014	1-104-664-11	ELECT 47MF	20% 25V	C318	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C015	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C319	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C016	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C320	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C017	1-163-113-00	CERAMIC CHIP 68PF	5% 50V	C322	1-163-005-11	CERAMIC CHIP 470PF	10% 50V
C019	1-104-664-11	ELECT 47MF	20% 25V	C324	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C022	1-163-227-11	CERAMIC CHIP 10PF	0.5PF 50V	C325	1-126-960-11	ELECT 1MF	20% 50V
C023	1-163-227-11	CERAMIC CHIP 10PF	0.5PF 50V	C327	1-126-965-11	ELECT 22MF	20% 50V
C024	1-163-227-11	CERAMIC CHIP 10PF	0.5PF 50V	C328	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C026	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C330	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C027	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C331	1-126-963-11	ELECT 4.7MF	20% 50V
C028	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V	C332	1-126-963-11	ELECT 4.7MF	20% 50V
C030	1-126-965-11	ELECT 22MF	20% 50V	C335	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C031	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C336	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C032	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V	C337	1-126-961-11	ELECT 2.2MF	20% 50V
C034	1-163-031-11	CERAMIC CHIP 0.01MF	50V	C338	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C041	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C341	1-115-340-11	CERAMIC CHIP 0.22MF	10% 25V
C042	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C342	1-163-259-91	CERAMIC CHIP 220PF	5% 50V
C044	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C502	1-163-145-00	CERAMIC CHIP 0.0015MF	5% 50V
C047	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C503	1-126-964-11	ELECT 10MF	20% 50V
C103	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C506	1-107-638-11	ELECT 33MF	20% 160V
C104	1-104-665-11	ELECT 100MF	20% 10V	C507	1-161-830-00	CERAMIC 0.0047MF	500V
C107	1-163-005-11	CERAMIC CHIP 470PF	10% 50V	C510	1-102-112-00	CERAMIC 330PF	10% 50V
C108	1-104-664-11	ELECT 47MF	20% 16V	C513	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
C109	1-163-005-11	CERAMIC CHIP 470PF	10% 50V	C514	1-106-383-00	MYLAR 0.047MF	10% 200V
C110	1-163-005-11	CERAMIC CHIP 470PF	10% 50V	C517	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V
C111	1-163-005-11	CERAMIC CHIP 470PF	10% 50V	C518	1-104-665-11	ELECT 100MF	20% 10V
C112	1-104-664-11	ELECT 47MF	20% 16V	C519	1-102-212-00	CERAMIC 820PF	10% 500V
C113	1-104-664-11	ELECT 47MF	20% 25V	C521	1-126-934-11	ELECT 220MF	20% 16V
C114	1-126-967-11	ELECT 47MF	20% 50V	C522	1-126-933-11	ELECT 100MF	20% 16V
C300	1-164-505-11	CERAMIC CHIP 2.2MF	16V	C523	1-102-002-00	CERAMIC 680PF	10% 500V
C301	1-126-935-11	ELECT 470MF	20% 16V	C524	1-126-967-11	ELECT 47MF	20% 50V
C302	1-163-005-11	CERAMIC CHIP 470PF	10% 50V	C526	1-130-495-00	MYLAR 0.1MF	5% 50V
C303	1-126-959-11	ELECT 0.47MF	20% 50V	C527	1-102-820-00	CERAMIC 330PF	5% 50V
C304	1-126-967-11	ELECT 47MF	20% 50V	C528	1-162-116-00	CERAMIC 680PF	10% 2KV
C305	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	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 Δ 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	Δ 1-104-705-11	FILM	0.1MF	20%	250V
C601	1-130-338-91	FILM	0.01MF	5%	630V
C602	Δ 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	Δ 1-119-886-51	CERAMIC	470PF	10%	250V
C606	Δ 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	Δ 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	Δ 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

REF. NO.	PART NO.	DESCRIPTION	REMARK		
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	Δ 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			

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
		<DIODE>					
D001	8-719-988-61	DIODE 1SS355TE-17		D613	8-719-046-74	DIODE AU-01Z-V1	
D002	8-719-988-61	DIODE 1SS355TE-17		D614	8-719-046-74	DIODE AU-01Z-V1	
D004	1-216-295-91	SHORT 0		D620	8-719-110-72	DIODE RD30ESB2	
D005	8-719-988-61	DIODE 1SS355TE-17		D621	8-719-071-38	DIODE D5S6M	
D006	1-216-295-91	SHORT 0		D622	8-719-071-39	DIODE FMU-G26S	
D300	1-216-295-91	SHORT 0		D623	8-719-978-65	DIODE DTZ-TT11-15B	
D301	8-719-988-61	DIODE 1SS355TE-17		D624	8-719-073-01	DIODE MA111-(K8).S0	
D303	8-719-988-61	DIODE 1SS355TE-17		D625	8-719-977-28	DIODE DTZ10B	
D304	8-719-988-61	DIODE 1SS355TE-17		D628	8-719-911-19	DIODE 1SS119-25	
D305	8-719-988-61	DIODE 1SS355TE-17		D630	8-719-052-74	DIODE FMX-12S	
D306	8-719-988-61	DIODE 1SS355TE-17		D631	8-719-068-00	DIODE ERC04-06SE	
D307	8-719-988-61	DIODE 1SS355TE-17		D632	8-719-068-00	DIODE ERC04-06SE	
D308	8-719-988-61	DIODE 1SS355TE-17		D633	8-719-948-45	DIODE ERA22-08	
D309	8-719-069-54	DIODE UDZS-TE17-5.1B		D634	8-719-073-01	DIODE MA111-(K8).S0	
D311	8-719-988-61	DIODE 1SS355TE-17		D635	8-719-073-01	DIODE MA111-(K8).S0	
D312	8-719-988-61	DIODE 1SS355TE-17		D636	8-719-510-02	DIODE D1NS4	
D313	8-719-988-61	DIODE 1SS355TE-17		D637	8-719-109-96	DIODE RD6.8ESB1	
D315	8-719-988-61	DIODE 1SS355TE-17		D638	8-719-510-48	DIODE D1N20R	
D316	8-719-037-06	DIODE RD7.5SB1-T1				<CONNECTOR>	
D320	8-719-069-60	DIODE UDZS-TE17-9.1B		DY1	* 1-580-798-11	CONNECTOR PIN (DY) 6P	
D321	8-719-069-60	DIODE UDZS-TE17-9.1B				<FERRITE BEAD>	
D504	8-719-302-06	DIODE EU2A		FB501	1-410-397-21	FERRITE 1.1UH	
D504	8-719-302-43	DIODE EL1Z		FB502	1-410-397-21	FERRITE 1.1UH	
D505	8-719-988-61	DIODE 1SS355TE-17		FB600	1-410-397-21	FERRITE 1.1UH	
D506	8-719-911-19	DIODE 1SS119-25		FB601	1-410-397-21	FERRITE 1.1UH	
D507	8-719-988-61	DIODE 1SS355TE-17		FB602	1-410-397-21	FERRITE 1.1UH	
D508	8-719-988-61	DIODE 1SS355TE-17		FB603	1-410-397-21	FERRITE 1.1UH	
D509	1-216-073-00	RES,CHIP 10K	5% 1/10W	FB604	1-412-911-31	FERRITE 0UH	
D510	8-719-988-61	DIODE 1SS355TE-17		FB605	1-412-911-31	FERRITE 0UH	
D511	8-719-988-61	DIODE 1SS355TE-17		FB606	1-412-911-31	FERRITE 0UH	
D512	8-719-988-61	DIODE 1SS355TE-17		FB608	1-412-911-31	FERRITE 0UH	
D513	8-719-908-03	DIODE GP08D		FB611	1-410-397-21	FERRITE 1.1UH	
D517	8-719-312-71	DIODE RS3FS		FB612	1-410-397-21	FERRITE 1.1UH	
D518	8-719-074-35	DIODE RU4AM-T4		FB613	1-412-911-11	FERRITE 0UH	
D519	8-719-312-71	DIODE RS3FS		FB615	1-410-397-21	FERRITE 1.1UH	
D521	8-719-302-43	DIODE EL1Z				<IC>	
D522	8-719-028-45	DIODE D2L20U		IC001	8-752-898-41	IC CXP750097-011S	
D523	8-719-302-43	DIODE EL1Z		IC002	8-759-371-21	IC MM1319AFBE	
D527	8-719-908-03	DIODE GP08D		IC003	8-759-527-71	IC M24C08-BN6	
D528	8-719-908-03	DIODE GP08D		IC301	8-752-090-41	IC CXA2139S	
D531	8-719-988-61	DIODE 1SS355TE-17		IC502	8-759-700-07	IC NJM2903M	
D532	8-719-988-61	DIODE 1SS355TE-17		IC503	8-759-980-58	IC TDA8172	
D534	8-719-988-61	DIODE 1SS355TE-17		IC601	8-749-014-48	IC STR-F6656	
D600	8-719-911-19	DIODE 1SS119-25		IC602	8-749-920-61	IC SE-135N	
D602	8-719-911-19	DIODE 1SS119-25		IC603	8-759-701-59	IC NJM78M09FA	
D603	8-719-150-92	DIODE RD33EB3T		IC604	8-759-231-53	IC TA7805S	
D604	8-719-028-72	DIODE RGP02-17EL-6433				<CHIP CONDUCTOR>	
D605	8-719-510-53	DIODE D4SB60L		JR001	1-216-295-91	SHORT 0	
D606	8-719-108-18	THYRISTOR 5P6M		JR002	1-216-295-91	SHORT 0	
D607	8-719-073-01	DIODE MA111-(K8).S0		JR004	1-216-295-91	SHORT 0	
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					

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

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
JR005	1-216-295-91	SHORT	0	Q003	8-729-424-08	TRANSISTOR UN2111	
JR006	1-216-295-91	SHORT	0	Q004	8-729-421-22	TRANSISTOR UN2211	
JR007	1-216-295-91	SHORT	0	Q101	8-729-230-49	TRANSISTOR 2SC2712-YG	
JR008	1-216-295-91	SHORT	0	Q301	8-729-216-22	TRANSISTOR 2SA1162-G	
JR010	1-216-295-91	SHORT	0	Q305	8-729-216-22	TRANSISTOR 2SA1162-G	
JR012	1-216-295-91	SHORT	0	Q306	8-729-216-22	TRANSISTOR 2SA1162-G	
JR014	1-216-295-91	SHORT	0	Q307	8-729-230-49	TRANSISTOR 2SC2712-YG	
JR015	1-216-295-91	SHORT	0	Q308	8-729-216-22	TRANSISTOR 2SA1162-G	
JR016	1-216-295-91	SHORT	0	Q311	8-729-230-49	TRANSISTOR 2SC2712-YG	
JR102	1-216-295-91	SHORT	0	Q312	8-729-216-22	TRANSISTOR 2SA1162-G	
JR109	1-216-295-91	SHORT	0	Q313	8-729-230-49	TRANSISTOR 2SC2712-YG	
JR301	1-216-295-91	SHORT	0	Q315	8-729-421-19	TRANSISTOR UN2213	
JR303	1-216-295-91	SHORT	0	Q501	8-729-216-22	TRANSISTOR 2SA1162-G	
JR308	1-216-295-91	SHORT	0	Q502	8-729-216-22	TRANSISTOR 2SA1162-G	
JR500	1-216-295-91	SHORT	0	Q503	8-729-230-49	TRANSISTOR 2SC2712-YG	
JR501	1-216-295-91	SHORT	0	Q505	8-729-931-45	TRANSISTOR IRF614	
JR502	1-216-295-91	SHORT	0	Q506	8-729-119-80	TRANSISTOR 2SC2688-LK	
JR503	1-216-295-91	SHORT	0	Q507	8-729-216-22	TRANSISTOR 2SA1162-G	
JR600	1-216-295-91	SHORT	0	Q509	8-729-230-49	TRANSISTOR 2SC2712-YG	
<COIL>				Q511	8-729-048-07	TRANSISTOR 2SD2578-CA	
L002	1-414-856-11	INDUCTOR	10UH	Q600	8-729-119-78	TRANSISTOR 2SC2785-HFE	
L003	1-414-180-11	INDUCTOR	3.3UH	Q601	8-729-023-22	TRANSISTOR 2SD2114K	
L005	1-414-233-22	INDUCTOR CHIP	0UH	Q602	8-729-230-49	TRANSISTOR 2SC2712-YG	
L101	1-414-856-11	INDUCTOR	10UH	Q603	8-729-424-08	TRANSISTOR UN2111	
L102	1-414-856-11	INDUCTOR	10UH	Q604	8-729-200-17	TRANSISTOR 2SA1091-O	
L103	1-414-856-11	INDUCTOR	10UH	Q605	8-729-044-30	TRANSISTOR 2SK2845-LB102	
L104	1-414-856-11	INDUCTOR	10UH	Q606	8-729-230-49	TRANSISTOR 2SC2712-YG	
L105	1-414-856-11	INDUCTOR	10UH	Q607	8-729-922-37	TRANSISTOR 2SD2144S-UVW	
L301	1-414-189-31	INDUCTOR	100UH	Q608	8-729-230-49	TRANSISTOR 2SC2712-YG	
L302	1-414-185-41	INDUCTOR	22UH	<RESISTOR>			
L501	1-412-525-31	INDUCTOR	10UH	R001	1-414-233-22	INDUCTOR CHIP	0UH
L502	1-422-613-11	COIL, AIR CORE		R002	1-216-025-91	RES,CHIP	100 5% 1/10W
L503	1-412-525-31	INDUCTOR	10UH	R003	1-216-073-00	RES,CHIP	10K 5% 1/10W
L504	1-412-525-31	INDUCTOR	10UH	R004	1-216-025-91	RES,CHIP	100 5% 1/10W
L505	1-412-525-31	INDUCTOR	10UH	R005	1-216-025-91	RES,CHIP	100 5% 1/10W
L506	1-412-525-31	INDUCTOR	10UH	R008	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
L507	1-459-111-00	INDUCTOR	10MMH	R010	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
L508	1-412-525-31	INDUCTOR	10UH	R011	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
L511	1-406-977-21	INDUCTOR	100UH	R012	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
L512	1-412-549-31	INDUCTOR	1MMH	R013	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
L513	1-412-549-31	INDUCTOR	1MMH	R014	1-216-025-91	RES,CHIP	100 5% 1/10W
L515	1-459-104-00	COIL, WITH CORE		R015	1-216-025-91	RES,CHIP	100 5% 1/10W
L518	1-414-187-11	INDUCTOR	47UH	R018	1-216-033-00	RES,CHIP	220 5% 1/10W
L601	1-412-527-11	INDUCTOR	15UH	R019	1-216-073-00	RES,CHIP	10K 5% 1/10W
L905	1-414-856-11	INDUCTOR	10UH	R021	1-216-073-00	RES,CHIP	10K 5% 1/10W
<PHOTO COUPLER>				R022	1-216-025-91	RES,CHIP	100 5% 1/10W
PH600 $\triangle$	8-749-924-35	PHOTO COUPLER ON3171-R		R023	1-216-049-91	RES,CHIP	1K 5% 1/10W
<TRANSISTOR>				R024	1-216-063-91	RES,CHIP	3.9K 5% 1/10W
Q001	8-729-216-22	TRANSISTOR 2SA1162-G		R025	1-216-063-91	RES,CHIP	3.9K 5% 1/10W
Q002	8-729-230-49	TRANSISTOR 2SC2712-YG		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

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REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
R035	1-216-025-91	RES,CHIP	100	5%	1/10W	R338	1-216-037-00	RES,CHIP	330	5%	1/10W
R036	1-216-025-91	RES,CHIP	100	5%	1/10W	R339	1-216-041-00	RES,CHIP	470	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	R340	1-216-025-91	RES,CHIP	100	5%	1/10W
R040	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
R041	1-216-025-91	RES,CHIP	100	5%	1/10W	R349	1-216-073-00	RES,CHIP	10K	5%	1/10W
R042	1-216-295-91	SHORT	0			R350	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R043	1-216-049-91	RES,CHIP	1K	5%	1/10W						
R044	1-216-025-91	RES,CHIP	100	5%	1/10W	R351	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R045	1-414-233-22	INDUCTOR CHIP	0UH			R354	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
						R355	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R046	1-216-049-91	RES,CHIP	1K	5%	1/10W	R356	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R047	1-414-233-22	INDUCTOR CHIP	0UH			R357	1-216-079-00	RES,CHIP	18K	5%	1/10W
R048	1-216-073-00	RES,CHIP	10K	5%	1/10W						
R049	1-216-073-00	RES,CHIP	10K	5%	1/10W	R358	1-216-049-91	RES,CHIP	1K	5%	1/10W
R050	1-216-073-00	RES,CHIP	10K	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
R052	1-216-053-00	RES,CHIP	1.5K	5%	1/10W	R361	1-216-073-00	RES,CHIP	10K	5%	1/10W
R053	1-216-049-91	RES,CHIP	1K	5%	1/10W	R362	1-216-075-00	RES,CHIP	12K	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	R363	1-216-079-00	RES,CHIP	18K	5%	1/10W
R061	1-216-295-91	SHORT	0			R364	1-216-295-91	SHORT	0		
						R365	1-216-033-00	RES,CHIP	220	5%	1/10W
R062	1-216-041-00	RES,CHIP	470	5%	1/10W	R366	1-216-073-00	RES,CHIP	10K	5%	1/10W
R063	1-216-041-00	RES,CHIP	470	5%	1/10W	R367	1-216-073-00	RES,CHIP	10K	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	R368	1-216-073-00	RES,CHIP	10K	5%	1/10W
R066	1-216-049-91	RES,CHIP	1K	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
R067	1-216-049-91	RES,CHIP	1K	5%	1/10W	R377	1-216-121-91	RES,CHIP	1M	5%	1/10W
R105	1-216-295-91	SHORT	0			R500	1-249-417-11	CARBON	1K	5%	1/4W
R109	1-216-041-00	RES,CHIP	470	5%	1/10W						
R111	1-216-025-91	RES,CHIP	100	5%	1/10W	R501	1-216-049-91	RES,CHIP	1K	5%	1/10W
R112	1-216-025-91	RES,CHIP	100	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
R113	1-216-025-91	RES,CHIP	100	5%	1/10W	R507	1-249-389-11	CARBON	4.7	5%	1/4W F
R225	1-216-033-00	RES,CHIP	220	5%	1/10W	R508	1-216-471-11	METAL OXIDE	27	5%	3W F
R226	1-216-033-00	RES,CHIP	220	5%	1/10W						
R227	1-216-033-00	RES,CHIP	220	5%	1/10W	R509	1-216-473-11	METAL OXIDE	56	5%	3W F
R237	1-216-295-91	SHORT	0			R510	1-216-449-11	METAL OXIDE	56	5%	2W F
						R511	1-215-908-00	METAL OXIDE	33	5%	3W F
R301	1-216-113-00	RES,CHIP	470K	5%	1/10W	R515	1-215-911-11	METAL OXIDE	100	5%	3W F
R302	1-216-295-91	SHORT	0			R517	1-208-798-11	RES,CHIP	4.7K	0.50%	1/10W
R303	1-216-049-91	RES,CHIP	1K	5%	1/10W						
R304	1-216-073-00	RES,CHIP	10K	5%	1/10W	R518	1-247-807-31	CARBON	100	5%	1/4W
R306	1-216-085-00	RES,CHIP	33K	5%	1/10W	R519	1-215-913-11	METAL OXIDE	220	5%	3W F
						R520	1-215-445-00	METAL	10K	1%	1/4W
R308	1-216-025-91	RES,CHIP	100	5%	1/10W	R522	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R309	1-216-025-91	RES,CHIP	100	5%	1/10W	R523	1-249-411-11	CARBON	330	5%	1/4W
R310	1-216-025-91	RES,CHIP	100	5%	1/10W						
R316	1-216-053-00	RES,CHIP	1.5K	5%	1/10W	R525	1-218-768-11	METAL CHIP	470K	0.50%	1/10W
R318	1-216-051-00	RES,CHIP	1.2K	5%	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
R319	1-216-025-91	RES,CHIP	100	5%	1/10W	R528	1-208-814-91	RES,CHIP	22K	0.50%	1/10W
R320	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	R529	1-208-766-11	RES,CHIP	220	0.50%	1/10W
R321	1-216-073-00	RES,CHIP	10K	5%	1/10W						
R322	1-216-033-00	RES,CHIP	220	5%	1/10W	R531	1-247-843-11	CARBON	3.3K	5%	1/4W
R326	1-216-029-00	RES,CHIP	150	5%	1/10W	R533	1-249-417-11	CARBON	1K	5%	1/4W
						R534	1-216-361-00	METAL OXIDE	0.22	5%	2W F
R327	1-216-033-00	RES,CHIP	220	5%	1/10W	R535	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R328	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	R536	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R329	1-216-041-00	RES,CHIP	470	5%	1/10W						
R331	1-216-295-91	SHORT	0			R537	1-208-804-11	RES,CHIP	8.2K	0.50%	1/10W
R332	1-216-033-00	RES,CHIP	220	5%	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
R333	1-216-083-00	RES,CHIP	27K	5%	1/10W	R541	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R334	1-216-129-00	RES,CHIP	2.2M	5%	1/10W	R542	1-216-073-00	RES,CHIP	10K	5%	1/10W
R335	1-216-045-00	RES,CHIP	680	5%	1/10W						

A (KV-XS29M80)

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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

REF. NO.	PART NO.	DESCRIPTION	REMARK
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	Δ 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	Δ 1-755-276-21	RELAY, POWER	
RY601	Δ 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	Δ 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	

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and mark $\triangle$ are critical for safety.
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REF. NO.	PART NO.	DESCRIPTION	REMARK
T603	$\triangle$ 1-431-976-11	TRANSFORMER, CONVERTER (SRT)	
T604	$\triangle$ 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

REF. NO.	PART NO.	DESCRIPTION	REMARK
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 Δ	1-104-705-11	FILM	0.1MF 20% 250V
C601	1-130-338-91	FILM	0.01MF 5% 630V
C602 Δ	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 Δ	1-119-886-51	CERAMIC	470PF 10% 250V
C606 Δ	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 Δ	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 Δ	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 Δ	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	REF. NO.	PART NO.	DESCRIPTION	REMARK
CN509	1-695-915-11	TAB (CONTACT)		D605	8-719-510-53	DIODE D4SB60L	
CN601	* 1-580-843-11	PIN, CONNECTOR (POWER)		D606	8-719-108-18	THYRISTOR 5P6M	
CN602	* 1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P		D607	8-719-073-01	DIODE MA111-(K8).S0	
CN603	* 1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P		D608	8-719-110-53	DIODE RD20ESB2	
CN604	* 1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P		D609	8-719-311-31	DIODE RU-1P	
CN605	* 1-564-507-11	PLUG, CONNECTOR 4P		D610	8-719-043-76	DIODE AK04V0	
CN608	* 1-564-507-11	PLUG, CONNECTOR 4P		D611	8-719-046-74	DIODE AU-01Z-V1	
CN904	* 1-564-512-11	PLUG, CONNECTOR 9P		D612	8-719-071-38	DIODE D5S6M	
		<DIODE>		D613	8-719-046-74	DIODE AU-01Z-V1	
				D614	8-719-046-74	DIODE AU-01Z-V1	
D001	8-719-988-61	DIODE 1SS355TE-17		D620	8-719-110-72	DIODE RD30ESB2	
D002	8-719-988-61	DIODE 1SS355TE-17		D621	8-719-071-38	DIODE D5S6M	
D004	1-216-295-91	SHORT 0		D622	8-719-071-39	DIODE FMU-G26S	
D005	8-719-988-61	DIODE 1SS355TE-17		D623	8-719-978-65	DIODE DTZ-TT11-15B	
D006	1-216-295-91	SHORT 0		D624	8-719-073-01	DIODE MA111-(K8).S0	
D100	8-719-073-01	DIODE MA111-(K8).S0		D625	8-719-977-28	DIODE DTZ10B	
D300	1-216-295-91	SHORT 0		D628	8-719-911-19	DIODE 1SS119-25	
D301	8-719-988-61	DIODE 1SS355TE-17		D629	8-719-052-74	DIODE FMX-12S	
D303	8-719-988-61	DIODE 1SS355TE-17		D630	8-719-052-74	DIODE FMX-12S	
D304	8-719-988-61	DIODE 1SS355TE-17		D631	8-719-068-00	DIODE ERC04-06SE	
D305	8-719-988-61	DIODE 1SS355TE-17		D632	8-719-068-00	DIODE ERC04-06SE	
D306	8-719-988-61	DIODE 1SS355TE-17		D633	8-719-948-45	DIODE ERA22-08	
D307	8-719-988-61	DIODE 1SS355TE-17		D634	8-719-073-01	DIODE MA111-(K8).S0	
D308	8-719-988-61	DIODE 1SS355TE-17		D635	8-719-073-01	DIODE MA111-(K8).S0	
D309	8-719-069-54	DIODE UDZS-TE17-5.1B		D636	8-719-510-02	DIODE D1NS4	
D311	8-719-988-61	DIODE 1SS355TE-17		D637	8-719-109-96	DIODE RD6.8ESB1	
D312	8-719-988-61	DIODE 1SS355TE-17		D638	8-719-510-48	DIODE D1N20R	
D313	8-719-988-61	DIODE 1SS355TE-17				<CONNECTOR>	
D320	8-719-069-60	DIODE UDZS-TE17-9.1B		DY1	* 1-580-798-11	CONNECTOR PIN (DY) 6P	
D321	8-719-069-60	DIODE UDZS-TE17-9.1B				<FERRITE BEAD>	
D504	8-719-302-43	DIODE EL1Z		FB101	1-216-295-91	SHORT 0	
D505	8-719-988-61	DIODE 1SS355TE-17		FB102	1-216-295-91	SHORT 0	
D506	8-719-911-19	DIODE 1SS119-25		FB501	1-410-397-21	FERRITE 1.1UH	
D507	8-719-988-61	DIODE 1SS355TE-17		FB502	1-410-397-21	FERRITE 1.1UH	
D508	8-719-988-61	DIODE 1SS355TE-17		FB600	1-410-397-21	FERRITE 1.1UH	
D509	1-216-073-00	RES,CHIP 10K	5% 1/10W	FB601	1-410-397-21	FERRITE 1.1UH	
D510	8-719-988-61	DIODE 1SS355TE-17		FB602	1-410-397-21	FERRITE 1.1UH	
D511	8-719-988-61	DIODE 1SS355TE-17		FB603	1-410-397-21	FERRITE 1.1UH	
D512	8-719-988-61	DIODE 1SS355TE-17		FB604	1-412-911-31	FERRITE 0UH	
D513	8-719-908-03	DIODE GP08D		FB605	1-412-911-31	FERRITE 0UH	
D517	8-719-312-71	DIODE RS3FS		FB606	1-412-911-31	FERRITE 0UH	
D518	8-719-074-35	DIODE RU4AM-T4		FB607	1-410-397-21	FERRITE 1.1UH	
D519	8-719-312-71	DIODE RS3FS		FB608	1-412-911-31	FERRITE 0UH	
D521	8-719-302-43	DIODE EL1Z		FB611	1-410-397-21	FERRITE 1.1UH	
D522	8-719-028-45	DIODE D2L20U		FB612	1-410-397-21	FERRITE 1.1UH	
D523	8-719-302-43	DIODE EL1Z		FB615	1-410-397-21	FERRITE 1.1UH	
D527	8-719-908-03	DIODE GP08D				<IC>	
D528	8-719-908-03	DIODE GP08D		IC001	8-752-898-41	IC CXP750097-011S	
D531	8-719-988-61	DIODE 1SS355TE-17		IC002	8-759-371-21	IC MM1319AFBE	
D532	8-719-988-61	DIODE 1SS355TE-17		IC003	8-759-527-71	IC M24C08-BN6	
D534	8-719-988-61	DIODE 1SS355TE-17		IC100	8-759-042-02	IC S-80743AL-A7-S	
D600	8-719-911-19	DIODE 1SS119-25		IC301	8-752-090-41	IC CXA2139S	
D602	8-719-911-19	DIODE 1SS119-25					
D603	8-719-150-92	DIODE RD33EB3T					
D604	8-719-028-72	DIODE RGP02-17EL-6433					

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

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
IC502	8-759-700-07	IC NJM2903M		L601	1-412-527-11	INDUCTOR 15UH	
IC503	8-759-980-58	IC TDA8172		L905	1-414-856-11	INDUCTOR 10UH	
IC601	8-749-014-48	IC STR-F6656					
IC602	8-749-920-61	IC SE-135N				<PHOTO COUPLER>	
IC603	8-759-701-59	IC NJM78M09FA					
IC604	8-759-231-53	IC TA7805S		PH600 $\triangle$	8-749-924-35	PHOTO COUPLER ON3171-R	
		<CHIP CONDUCTOR>				<TRANSISTOR>	
JR001	1-216-295-91	SHORT 0		Q001	8-729-216-22	TRANSISTOR 2SA1162-G	
JR002	1-216-295-91	SHORT 0		Q002	8-729-230-49	TRANSISTOR 2SC2712-YG	
JR004	1-216-295-91	SHORT 0		Q003	8-729-424-08	TRANSISTOR UN2111	
JR005	1-216-295-91	SHORT 0		Q004	8-729-421-22	TRANSISTOR UN2211	
JR006	1-216-295-91	SHORT 0		Q101	8-729-230-49	TRANSISTOR 2SC2712-YG	
JR007	1-216-295-91	SHORT 0		Q301	8-729-216-22	TRANSISTOR 2SA1162-G	
JR008	1-216-295-91	SHORT 0		Q304	8-729-216-22	TRANSISTOR 2SA1162-G	
JR010	1-216-295-91	SHORT 0		Q305	8-729-216-22	TRANSISTOR 2SA1162-G	
JR012	1-216-295-91	SHORT 0		Q306	8-729-216-22	TRANSISTOR 2SA1162-G	
JR014	1-216-295-91	SHORT 0		Q307	8-729-230-49	TRANSISTOR 2SC2712-YG	
JR015	1-216-295-91	SHORT 0		Q308	8-729-216-22	TRANSISTOR 2SA1162-G	
JR016	1-216-295-91	SHORT 0		Q311	8-729-230-49	TRANSISTOR 2SC2712-YG	
JR102	1-216-295-91	SHORT 0		Q313	8-729-230-49	TRANSISTOR 2SC2712-YG	
JR107	1-216-295-91	SHORT 0		Q315	8-729-421-19	TRANSISTOR UN2213	
JR301	1-216-295-91	SHORT 0		Q501	8-729-216-22	TRANSISTOR 2SA1162-G	
JR303	1-216-295-91	SHORT 0		Q502	8-729-216-22	TRANSISTOR 2SA1162-G	
JR308	1-216-295-91	SHORT 0		Q503	8-729-230-49	TRANSISTOR 2SC2712-YG	
JR500	1-216-295-91	SHORT 0		Q505	8-729-931-45	TRANSISTOR IRF614	
JR501	1-216-295-91	SHORT 0		Q506	8-729-119-80	TRANSISTOR 2SC2688-LK	
JR502	1-216-295-91	SHORT 0		Q507	8-729-216-22	TRANSISTOR 2SA1162-G	
JR503	1-216-295-91	SHORT 0		Q509	8-729-230-49	TRANSISTOR 2SC2712-YG	
JR600	1-216-295-91	SHORT 0		Q511	8-729-048-07	TRANSISTOR 2SD2578-CA	
		<COIL>		Q600	8-729-119-78	TRANSISTOR 2SC2785-HFE	
L002	1-414-856-11	INDUCTOR 10UH		Q601	8-729-023-22	TRANSISTOR 2SD2114K	
L003	1-414-180-11	INDUCTOR 3.3UH		Q602	8-729-230-49	TRANSISTOR 2SC2712-YG	
L005	1-414-233-22	INDUCTOR CHIP 0UH		Q603	8-729-424-08	TRANSISTOR UN2111	
L101	1-414-856-11	INDUCTOR 10UH		Q604	8-729-200-17	TRANSISTOR 2SA1091-O	
L102	1-414-856-11	INDUCTOR 10UH		Q605	8-729-044-30	TRANSISTOR 2SK2845-LB102	
L103	1-414-856-11	INDUCTOR 10UH		Q606	8-729-230-49	TRANSISTOR 2SC2712-YG	
L104	1-414-856-11	INDUCTOR 10UH		Q607	8-729-922-37	TRANSISTOR 2SD2144S-UVW	
L105	1-414-856-11	INDUCTOR 10UH		Q608	8-729-230-49	TRANSISTOR 2SC2712-YG	
L301	1-414-189-31	INDUCTOR 100UH				<RESISTOR>	
L302	1-414-185-41	INDUCTOR 22UH		R001	1-414-233-22	INDUCTOR CHIP 0UH	
L501	1-412-525-31	INDUCTOR 10UH		R002	1-216-025-91	RES,CHIP 100	5% 1/10W
L502	1-422-613-11	COIL, AIR CORE		R003	1-216-073-00	RES,CHIP 10K	5% 1/10W
L503	1-412-525-31	INDUCTOR 10UH		R004	1-216-025-91	RES,CHIP 100	5% 1/10W
L504	1-412-525-31	INDUCTOR 10UH		R005	1-216-025-91	RES,CHIP 100	5% 1/10W
L505	1-412-525-31	INDUCTOR 10UH		R008	1-216-065-91	RES,CHIP 4.7K	5% 1/10W
L506	1-412-525-31	INDUCTOR 10UH		R010	1-216-065-91	RES,CHIP 4.7K	5% 1/10W
L507	1-459-111-00	INDUCTOR 10MMH		R011	1-216-065-91	RES,CHIP 4.7K	5% 1/10W
L508	1-412-525-31	INDUCTOR 10UH		R012	1-216-065-91	RES,CHIP 4.7K	5% 1/10W
L511	1-406-977-21	INDUCTOR 100UH		R013	1-216-065-91	RES,CHIP 4.7K	5% 1/10W
L512	1-412-549-31	INDUCTOR 1MMH		R014	1-216-025-91	RES,CHIP 100	5% 1/10W
L513	1-412-549-31	INDUCTOR 1MMH		R015	1-216-025-91	RES,CHIP 100	5% 1/10W
L515	1-459-104-00	COIL, WITH CORE		R017	1-216-049-91	RES,CHIP 1K	5% 1/10W
L518	1-414-187-11	INDUCTOR 47UH					

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REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
R018	1-216-033-00	RES,CHIP	220	5%	1/10W	R310	1-216-025-91	RES,CHIP	100	5%	1/10W
R019	1-216-073-00	RES,CHIP	10K	5%	1/10W	R315	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R021	1-216-073-00	RES,CHIP	10K	5%	1/10W	R316	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R022	1-216-025-91	RES,CHIP	100	5%	1/10W	R318	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R023	1-216-049-91	RES,CHIP	1K	5%	1/10W	R319	1-216-025-91	RES,CHIP	100	5%	1/10W
R024	1-216-063-91	RES,CHIP	3.9K	5%	1/10W	R320	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R025	1-216-063-91	RES,CHIP	3.9K	5%	1/10W	R321	1-216-073-00	RES,CHIP	10K	5%	1/10W
R026	1-216-063-91	RES,CHIP	3.9K	5%	1/10W	R322	1-216-033-00	RES,CHIP	220	5%	1/10W
R027	1-216-049-91	RES,CHIP	1K	5%	1/10W	R326	1-216-029-00	RES,CHIP	150	5%	1/10W
R028	1-216-073-00	RES,CHIP	10K	5%	1/10W	R327	1-216-033-00	RES,CHIP	220	5%	1/10W
R029	1-216-049-91	RES,CHIP	1K	5%	1/10W	R328	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R031	1-216-049-91	RES,CHIP	1K	5%	1/10W	R329	1-216-041-00	RES,CHIP	470	5%	1/10W
R032	1-216-025-91	RES,CHIP	100	5%	1/10W	R331	1-216-295-91	SHORT	0		
R034	1-216-049-91	RES,CHIP	1K	5%	1/10W	R332	1-216-033-00	RES,CHIP	220	5%	1/10W
R035	1-216-025-91	RES,CHIP	100	5%	1/10W	R333	1-216-083-00	RES,CHIP	27K	5%	1/10W
R036	1-216-025-91	RES,CHIP	100	5%	1/10W	R334	1-216-129-00	RES,CHIP	2.2M	5%	1/10W
R037	1-216-025-91	RES,CHIP	100	5%	1/10W	R335	1-216-045-00	RES,CHIP	680	5%	1/10W
R038	1-216-049-91	RES,CHIP	1K	5%	1/10W	R339	1-216-041-00	RES,CHIP	470	5%	1/10W
R040	1-216-025-91	RES,CHIP	100	5%	1/10W	R340	1-216-025-91	RES,CHIP	100	5%	1/10W
R041	1-216-025-91	RES,CHIP	100	5%	1/10W	R345	1-216-081-00	RES,CHIP	22K	5%	1/10W
R042	1-216-295-91	SHORT	0			R348	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R043	1-216-049-91	RES,CHIP	1K	5%	1/10W	R349	1-216-073-00	RES,CHIP	10K	5%	1/10W
R044	1-216-025-91	RES,CHIP	100	5%	1/10W	R350	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R045	1-414-233-22	INDUCTOR CHIP	0UH			R351	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R046	1-216-049-91	RES,CHIP	1K	5%	1/10W	R354	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R047	1-414-233-22	INDUCTOR CHIP	0UH			R355	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R048	1-216-073-00	RES,CHIP	10K	5%	1/10W	R356	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R050	1-216-073-00	RES,CHIP	10K	5%	1/10W	R357	1-216-079-00	RES,CHIP	18K	5%	1/10W
R052	1-216-053-00	RES,CHIP	1.5K	5%	1/10W	R358	1-216-049-91	RES,CHIP	1K	5%	1/10W
R053	1-216-049-91	RES,CHIP	1K	5%	1/10W	R359	1-216-033-00	RES,CHIP	220	5%	1/10W
R055	1-216-073-00	RES,CHIP	10K	5%	1/10W	R360	1-216-033-00	RES,CHIP	220	5%	1/10W
R056	1-216-073-00	RES,CHIP	10K	5%	1/10W	R361	1-216-073-00	RES,CHIP	10K	5%	1/10W
R061	1-216-295-91	SHORT	0			R362	1-216-075-00	RES,CHIP	12K	5%	1/10W
R062	1-216-041-00	RES,CHIP	470	5%	1/10W	R363	1-216-079-00	RES,CHIP	18K	5%	1/10W
R063	1-216-041-00	RES,CHIP	470	5%	1/10W	R364	1-216-295-91	SHORT	0		
R064	1-216-041-00	RES,CHIP	470	5%	1/10W	R365	1-216-033-00	RES,CHIP	220	5%	1/10W
R065	1-216-041-00	RES,CHIP	470	5%	1/10W	R366	1-216-073-00	RES,CHIP	10K	5%	1/10W
R066	1-216-049-91	RES,CHIP	1K	5%	1/10W	R367	1-216-073-00	RES,CHIP	10K	5%	1/10W
R067	1-216-049-91	RES,CHIP	1K	5%	1/10W	R368	1-216-073-00	RES,CHIP	10K	5%	1/10W
R101	1-216-025-91	RES,CHIP	100	5%	1/10W	R370	1-216-033-00	RES,CHIP	220	5%	1/10W
R102	1-216-025-91	RES,CHIP	100	5%	1/10W	R376	1-216-081-00	RES,CHIP	22K	5%	1/10W
R105	1-216-295-91	SHORT	0			R377	1-216-121-91	RES,CHIP	1M	5%	1/10W
R109	1-216-041-00	RES,CHIP	470	5%	1/10W	R378	1-216-295-91	SHORT	0		
R111	1-216-025-91	RES,CHIP	100	5%	1/10W	R500	1-249-417-11	CARBON	1K	5%	1/4W
R112	1-216-025-91	RES,CHIP	100	5%	1/10W	R501	1-216-049-91	RES,CHIP	1K	5%	1/10W
R113	1-216-025-91	RES,CHIP	100	5%	1/10W	R505	1-216-699-91	METAL CHIP	100K	0.50%	1/10W
R225	1-216-033-00	RES,CHIP	220	5%	1/10W	R506	1-216-081-00	RES,CHIP	22K	5%	1/10W
R226	1-216-033-00	RES,CHIP	220	5%	1/10W	R507	1-249-389-11	CARBON	4.7	5%	1/4W F
R227	1-216-033-00	RES,CHIP	220	5%	1/10W	R508	1-216-471-11	METAL OXIDE	27	5%	3W F
R237	1-216-295-91	SHORT	0			R509	1-216-473-11	METAL OXIDE	56	5%	3W F
R301	1-216-113-00	RES,CHIP	470K	5%	1/10W	R510	1-216-449-11	METAL OXIDE	56	5%	2W F
R302	1-216-295-91	SHORT	0			R511	1-215-908-00	METAL OXIDE	33	5%	3W F
R303	1-216-049-91	RES,CHIP	1K	5%	1/10W	R515	1-215-911-11	METAL OXIDE	100	5%	3W F
R304	1-216-073-00	RES,CHIP	10K	5%	1/10W	R517	1-208-798-11	METAL CHIP	4.7K	0.50%	1/10W
R306	1-216-085-00	RES,CHIP	33K	5%	1/10W	R518	1-247-807-31	CARBON	100	5%	1/4W
R308	1-216-025-91	RES,CHIP	100	5%	1/10W	R519	1-215-913-11	METAL OXIDE	220	5%	3W F
R309	1-216-025-91	RES,CHIP	100	5%	1/10W	R520	1-215-445-00	METAL	10K	1%	1/4W
						R522	1-208-806-11	METAL CHIP	10K	0.50%	1/10W

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

A (KV-XS29M97)

REF. NO.	PART NO.	DESCRIPTION	REMARK				REF. NO.	PART NO.	DESCRIPTION	REMARK			
R523	1-249-411-11	CARBON	330	5%	1/4W		R594	1-260-288-11	CARBON	0.47	5%	1/2W	F
R525	1-218-768-11	METAL CHIP	470K	0.50%	1/10W		R595	1-216-073-00	RES,CHIP	10K	5%	1/10W	
							R596	1-215-916-00	METAL OXIDE	680	5%	3W	F
R526	1-208-804-11	METAL CHIP	8.2K	0.50%	1/10W		R597	1-247-750-11	CARBON	680	5%	1/2W	F
R527	1-216-001-00	RES,CHIP	10	5%	1/10W		R598	1-249-438-11	CARBON	56K	5%	1/4W	
R528	1-208-814-91	METAL CHIP	22K	0.50%	1/10W		R599	1-249-389-11	CARBON	4.7	5%	1/4W	
R529	1-208-766-11	METAL CHIP	220	0.50%	1/10W		R600	1-249-438-11	CARBON	56K	5%	1/4W	
R531	1-247-843-11	CARBON	3.3K	5%	1/4W		R601	1-249-420-11	CARBON	1.8K	5%	1/4W	F
R533	1-249-417-11	CARBON	1K	5%	1/4W								
							R602	1-249-389-11	CARBON	4.7	5%	1/4W	F
R534	1-216-361-00	METAL OXIDE	0.22	5%	2W	F	R603	1-215-485-00	METAL	470K	1%	1/4W	
R535	1-216-067-00	RES,CHIP	5.6K	5%	1/10W		R604	1-216-097-91	RES,CHIP	100K	5%	1/10W	
R536	1-216-067-00	RES,CHIP	5.6K	5%	1/10W		R607	1-249-425-11	CARBON	4.7K	5%	1/4W	
R537	1-208-804-11	METAL CHIP	8.2K	0.50%	1/10W		R608	1-240-205-91	CARBON	22M	5%	1/2W	
R539	1-216-049-91	RES,CHIP	1K	5%	1/10W								
							R609	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R540	1-216-065-91	RES,CHIP	4.7K	5%	1/10W		R610	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R541	1-216-065-91	RES,CHIP	4.7K	5%	1/10W		R611	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R542	1-216-073-00	RES,CHIP	10K	5%	1/10W		R612	1-216-045-00	RES,CHIP	680	5%	1/10W	
R543	1-216-437-00	METAL OXIDE	5.6K	5%	1W	F	R614	1-216-041-00	RES,CHIP	470	5%	1/10W	
R544	1-215-917-11	METAL OXIDE	1K	5%	3W	F							
							R615	1-216-369-00	METAL OXIDE	1	5%	2W	F
R545	1-216-077-91	RES,CHIP	15K	5%	1/10W		R616	1-260-302-51	CARBON	6.8	5%	1/2W	F
R546	1-216-077-91	RES,CHIP	15K	5%	1/10W		R617	1-247-791-91	CARBON	22	5%	1/4W	
R547	1-216-085-00	RES,CHIP	33K	5%	1/10W		R619	1-260-128-11	CARBON	270K	5%	1/2W	
R548	1-208-796-11	METAL CHIP	3.9K	0.50%	1/10W		R621	1-215-859-00	METAL OXIDE	22	5%	1W	F
R549	1-215-452-00	METAL	20K	1%	1/4W								
							R623	1-216-095-00	RES,CHIP	82K	5%	1/10W	
R550	1-216-097-91	RES,CHIP	100K	5%	1/10W		R624	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R551	1-249-441-11	CARBON	100K	5%	1/4W		R626	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R552	1-216-057-00	RES,CHIP	2.2K	5%	1/10W		R627	1-240-251-11	CEMENTED	6.8	5%	10W	
R553	1-215-453-00	METAL	22K	1%	1/4W		R629	1-247-747-11	CARBON	470	5%	1/2W	F
R554	1-215-453-00	METAL	22K	1%	1/4W								
R556	1-215-437-00	METAL	4.7K	1%	1/4W		R630	1-249-429-11	CARBON	10K	5%	1/4W	F
							R631	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R558	1-247-843-11	CARBON	3.3K	5%	1/4W		R632	1-220-886-11	FUSIBLE	0.1	10%	1W	F
R559	1-249-429-11	CARBON	10K	5%	1/4W		R634	Δ 1-218-265-11	METAL	8.2M	5%	1W	
R560	1-216-073-00	RES,CHIP	10K	5%	1/10W		R635	1-216-492-21	METAL OXIDE	82K	5%	3W	F
R561	1-216-049-91	RES,CHIP	1K	5%	1/10W								
R562	1-249-401-11	CARBON	47	5%	1/4W		R636	1-215-924-00	METAL OXIDE	15K	5%	3W	F
							R637	1-216-492-21	METAL OXIDE	82K	5%	3W	F
R564	1-208-820-11	METAL CHIP	39K	0.50%	1/10W		R639	1-216-361-21	METAL OXIDE	0.22	5%	2W	F
R565	1-216-073-00	RES,CHIP	10K	5%	1/10W		R640	1-249-415-11	CARBON	680	5%	1/4W	
R567	1-216-105-91	RES,CHIP	220K	5%	1/10W		R641	1-216-361-21	METAL OXIDE	0.22	5%	2W	F
R568	1-249-383-11	CARBON	1.5	5%	1/4W	F							
R570	1-216-069-00	RES,CHIP	6.8K	5%	1/10W		R642	1-249-419-11	CARBON	1.5K	5%	1/4W	
							R643	1-247-843-11	CARBON	3.3K	5%	1/4W	
R571	1-215-443-00	METAL	8.2K	1%	1/4W		R644	1-249-419-11	CARBON	1.5K	5%	1/4W	
R573	1-216-083-00	RES,CHIP	27K	5%	1/10W		R646	1-215-924-00	METAL OXIDE	15K	5%	3W	F
R575	1-208-796-11	METAL CHIP	3.9K	0.50%	1/10W		R647	1-249-387-11	CARBON	3.3	5%	1/4W	
R577	1-215-913-11	METAL OXIDE	220	5%	3W	F							
R578	1-216-369-00	METAL OXIDE	1	5%	2W	F	R648	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
							R649	1-249-417-11	CARBON	1K	5%	1/4W	
R579	1-216-295-91	SHORT	0				R650	1-215-882-00	METAL OXIDE	22	5%	2W	F
R580	1-208-830-11	METAL CHIP	100K	0.50%	1/10W		R652	1-215-900-11	METAL OXIDE	22K	5%	2W	F
R581	1-208-790-11	METAL CHIP	2.2K	0.50%	1/10W		R653	1-215-873-00	METAL OXIDE	4.7K	5%	1W	F
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		R654	1-216-369-00	METAL OXIDE	1	5%	2W	F
							R656	1-249-417-11	CARBON	1K	5%	1/4W	
R587	1-216-295-91	SHORT	0				R657	1-260-127-11	CARBON	220K	5%	1/2W	
R588	1-215-888-00	METAL OXIDE	220	5%	2W	F	R659	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R589	1-215-888-00	METAL OXIDE	220	5%	2W	F	R660	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R590	1-215-465-00	METAL	68K	1%	1/4W								
R591	1-260-288-11	CARBON	0.47	5%	1/2W	F	R661	1-215-873-00	METAL OXIDE	4.7K	5%	1W	F
							R682	1-249-377-11	CARBON	0.47	5%	1/4W	F
R592	1-208-820-11	METAL CHIP	39K	0.50%	1/10W		R909	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R593	1-260-288-11	CARBON	0.47	5%	1/2W	F	R910	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	

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A (KV-XS29M97)**B₃ (KV-XS29M80)**

REF. NO.	PART NO.	DESCRIPTION	REMARK
<RELAY>			
RY600 $\triangle$	1-755-276-21	RELAY, POWER	
RY601 $\triangle$	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 $\triangle$	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 $\triangle$	1-431-946-11	TRANSFORMER, CONVERTER	
T604 $\triangle$	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

REF. NO.	PART NO.	DESCRIPTION	REMARK
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
C3250	1-164-346-11	CERAMIC CHIP	1MF
C3251	1-126-964-11	ELECT	10MF
C3252	1-163-251-11	CERAMIC CHIP	100PF
C3253	1-126-933-11	ELECT	100MF
C3254	1-164-505-11	CERAMIC CHIP	2.2MF
C3255	1-163-243-11	CERAMIC CHIP	47PF
C3256	1-126-963-11	ELECT	4.7MF
C3257	1-164-346-11	CERAMIC CHIP	1MF
C3258	1-163-989-11	CERAMIC CHIP	0.033MF
C3259	1-126-963-11	ELECT	4.7MF
C3260	1-163-251-11	CERAMIC CHIP	100PF
C3262	1-104-664-11	ELECT	47MF
C3264	1-163-251-11	CERAMIC CHIP	100PF
C3265	1-126-964-11	ELECT	10MF
C3266	1-126-964-11	ELECT	10MF
C3268	1-164-004-11	CERAMIC CHIP	0.1MF
C3269	1-164-004-11	CERAMIC CHIP	0.1MF
C3270	1-163-275-11	CERAMIC CHIP	0.001MF
C3271	1-163-275-11	CERAMIC CHIP	0.001MF
C3272	1-126-965-11	ELECT	22MF
C3273	1-115-339-11	CERAMIC CHIP	0.1MF
C3274	1-126-964-11	ELECT	10MF
C3276	1-164-492-11	CERAMIC CHIP	0.15MF
C3277	1-164-492-11	CERAMIC CHIP	0.15MF
C3278	1-164-492-11	CERAMIC CHIP	0.15MF
C3279	1-164-492-11	CERAMIC CHIP	0.15MF
C3280	1-163-018-00	CERAMIC CHIP	0.0056MF
C3281	1-163-037-11	CERAMIC CHIP	0.022MF
C3282	1-126-964-11	ELECT	10MF
C3283	1-126-964-11	ELECT	10MF
C3284	1-115-339-11	CERAMIC CHIP	0.1MF
C3285	1-126-964-11	ELECT	10MF
C3286	1-126-964-11	ELECT	10MF
C3287	1-126-964-11	ELECT	10MF
C3288	1-163-037-11	CERAMIC CHIP	0.022MF
C3289	1-163-018-00	CERAMIC CHIP	0.0056MF
C3290	1-164-505-11	CERAMIC CHIP	2.2MF
C3291	1-164-505-11	CERAMIC CHIP	2.2MF
C6200	1-216-295-91	SHORT	0
C6202	1-128-550-11	ELECT	2200MF
C6203	1-163-021-91	CERAMIC CHIP	0.01MF
C6204	1-128-550-11	ELECT	2200MF
C6205	1-130-495-00	MYLAR	0.1MF
C6206	1-128-550-11	ELECT	2200MF
C6209	1-130-495-00	MYLAR	0.1MF
C6210	1-126-924-11	ELECT	330MF
C6211	1-126-924-11	ELECT	330MF
C6212	1-104-664-11	ELECT	47MF
C6213	1-126-964-11	ELECT	10MF
C6217	1-164-004-11	CERAMIC CHIP	0.1MF
C6220	1-164-505-11	CERAMIC CHIP	2.2MF
C6222	1-164-505-11	CERAMIC CHIP	2.2MF
C6223	1-126-960-11	ELECT	1MF
C6241	1-126-964-11	ELECT	10MF
C6244	1-163-017-00	CERAMIC CHIP	0.0047MF
C6245	1-163-017-00	CERAMIC CHIP	0.0047MF
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	REF. NO.	PART NO.	DESCRIPTION	REMARK
<CHIP CONDUCTOR>				R1430	1-216-025-91	RES,CHIP	100 5% 1/10W
JR1405	1-216-295-91	SHORT	0	R1431	1-216-025-91	RES,CHIP	100 5% 1/10W
JR1406	1-216-295-91	SHORT	0	R1433	1-216-025-91	RES,CHIP	100 5% 1/10W
JR1407	1-216-295-91	SHORT	0	R1435	1-216-022-00	RES,CHIP	75 5% 1/10W
JR1408	1-216-295-91	SHORT	0	R1436	1-216-025-91	RES,CHIP	100 5% 1/10W
JR1411	1-216-295-91	SHORT	0	R1437	1-216-022-00	RES,CHIP	75 5% 1/10W
JR3200	1-216-295-91	SHORT	0	R1438	1-216-025-91	RES,CHIP	100 5% 1/10W
JR3201	1-216-295-91	SHORT	0	R1441	1-216-025-91	RES,CHIP	100 5% 1/10W
JR3202	1-216-295-91	SHORT	0	R1442	1-216-049-91	RES,CHIP	1K 5% 1/10W
JR3203	1-216-295-91	SHORT	0	R1443	1-216-049-91	RES,CHIP	1K 5% 1/10W
JR3204	1-216-295-91	SHORT	0	R1445	1-216-025-91	RES,CHIP	100 5% 1/10W
JR3207	1-216-295-91	SHORT	0	R1446	1-216-105-91	RES,CHIP	220K 5% 1/10W
JR3208	1-216-295-91	SHORT	0	R1447	1-216-025-91	RES,CHIP	100 5% 1/10W
JR3209	1-216-295-91	SHORT	0	R1449	1-249-429-11	CARBON	10K 5% 1/4W
JR6200	1-216-295-91	SHORT	0	R1450	1-216-073-00	RES,CHIP	10K 5% 1/10W
JR6202	1-216-295-91	SHORT	0	R1451	1-216-073-00	RES,CHIP	10K 5% 1/10W
JR6203	1-216-295-91	SHORT	0	R1452	1-216-295-91	SHORT	0
JR6204	1-216-295-91	SHORT	0	R1453	1-216-025-91	RES,CHIP	100 5% 1/10W
<COIL>				R1455	1-216-073-00	RES,CHIP	10K 5% 1/10W
L1404	1-412-537-31	INDUCTOR	100UH	R1456	1-216-113-00	RES,CHIP	470K 5% 1/10W
L3202	1-414-856-11	INDUCTOR	10UH	R1457	1-216-073-00	RES,CHIP	10K 5% 1/10W
<TRANSISTOR>				R1458	1-216-073-00	RES,CHIP	10K 5% 1/10W
Q1402	8-729-216-22	TRANSISTOR 2SA1162-G		R1459	1-216-025-91	RES,CHIP	100 5% 1/10W
Q1403	8-729-230-49	TRANSISTOR 2SC2712-YG		R1460	1-216-033-00	RES,CHIP	220 5% 1/10W
Q1404	8-729-230-49	TRANSISTOR 2SC2712-YG		R1461	1-216-025-91	RES,CHIP	100 5% 1/10W
Q3201	8-729-224-62	TRANSISTOR 2SK246-GR		R1463	1-249-429-11	CARBON	10K 5% 1/4W
Q3202	8-729-230-49	TRANSISTOR 2SC2712-YG		R1464	1-216-113-00	RES,CHIP	470K 5% 1/10W
Q3203	8-729-230-49	TRANSISTOR 2SC2712-YG		R1465	1-216-113-00	RES,CHIP	470K 5% 1/10W
Q3204	8-729-224-62	TRANSISTOR 2SK246-GR		R1466	1-216-033-00	RES,CHIP	220 5% 1/10W
Q6201	8-729-421-19	TRANSISTOR UN2213		R1467	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
Q6203	8-729-421-19	TRANSISTOR UN2213		R1468	1-216-093-91	RES,CHIP	68K 5% 1/10W
Q6204	8-729-421-19	TRANSISTOR UN2213		R1469	1-216-105-91	RES,CHIP	220K 5% 1/10W
Q6208	8-729-421-19	TRANSISTOR UN2213		R1470	1-216-105-91	RES,CHIP	220K 5% 1/10W
<RESISTOR>				R1471	1-216-022-00	RES,CHIP	75 5% 1/10W
R1403	1-216-033-00	RES,CHIP	220 5% 1/10W	R1472	1-216-033-00	RES,CHIP	220 5% 1/10W
R1404	1-216-295-91	SHORT	0	R1473	1-216-033-00	RES,CHIP	220 5% 1/10W
R1406	1-216-017-91	RES,CHIP	47 5% 1/10W	R1477	1-216-047-91	RES,CHIP	820 5% 1/10W
R1407	1-216-033-00	RES,CHIP	220 5% 1/10W	R1478	1-216-051-00	RES,CHIP	1.2K 5% 1/10W
R1408	1-216-031-00	RES,CHIP	180 5% 1/10W	R1479	1-216-105-91	RES,CHIP	220K 5% 1/10W
R1409	1-216-105-91	RES,CHIP	220K 5% 1/10W	R1480	1-216-105-91	RES,CHIP	220K 5% 1/10W
R1410	1-216-105-91	RES,CHIP	220K 5% 1/10W	R1481	1-216-022-00	RES,CHIP	75 5% 1/10W
R1411	1-216-295-91	SHORT	0	R1482	1-216-025-91	RES,CHIP	100 5% 1/10W
R1412	1-216-295-91	SHORT	0	R1483	1-216-025-91	RES,CHIP	100 5% 1/10W
R1414	1-216-025-91	RES,CHIP	100 5% 1/10W	R1484	1-216-025-91	RES,CHIP	100 5% 1/10W
R1417	1-216-025-91	RES,CHIP	100 5% 1/10W	R1485	1-216-025-91	RES,CHIP	100 5% 1/10W
R1418	1-216-025-91	RES,CHIP	100 5% 1/10W	R1486	1-216-067-00	RES,CHIP	5.6K 5% 1/10W
R1426	1-216-025-91	RES,CHIP	100 5% 1/10W	R1490	1-216-025-91	RES,CHIP	100 5% 1/10W
R1428	1-216-025-91	RES,CHIP	100 5% 1/10W	R1491	1-216-025-91	RES,CHIP	100 5% 1/10W
R1429	1-216-295-91	SHORT	0	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	REF. NO.	PART NO.	DESCRIPTION	REMARK
R3200	1-216-121-91	RES,CHIP	1M 5% 1/10W	R3257	1-216-097-91	RES,CHIP	100K 5% 1/10W
R3201	1-216-121-91	RES,CHIP	1M 5% 1/10W	R3258	1-216-121-91	RES,CHIP	1M 5% 1/10W
R3202	1-216-097-91	RES,CHIP	100K 5% 1/10W	R3259	1-216-061-00	RES,CHIP	3.3K 5% 1/10W
R3203	1-216-121-91	RES,CHIP	1M 5% 1/10W	R3260	1-216-025-91	RES,CHIP	100 5% 1/10W
R3204	1-216-061-00	RES,CHIP	3.3K 5% 1/10W	R3261	1-216-025-91	RES,CHIP	100 5% 1/10W
R3205	1-216-069-00	RES,CHIP	6.8K 5% 1/10W	R3262	1-216-115-00	RES,CHIP	560K 5% 1/10W
R3206	1-216-039-00	RES,CHIP	390 5% 1/10W	R3263	1-216-093-91	RES,CHIP	68K 5% 1/10W
R3207	1-216-073-00	RES,CHIP	10K 5% 1/10W	R3264	1-216-053-00	RES,CHIP	1.5K 5% 1/10W
R3208	1-216-053-00	RES,CHIP	1.5K 5% 1/10W	R3266	1-216-295-91	SHORT	0
R3209	1-216-069-00	RES,CHIP	6.8K 5% 1/10W	R3267	1-216-049-91	RES,CHIP	1K 5% 1/10W
R3210	1-216-053-00	RES,CHIP	1.5K 5% 1/10W	R3268	1-216-049-91	RES,CHIP	1K 5% 1/10W
R3211	1-216-069-00	RES,CHIP	6.8K 5% 1/10W	R3269	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R3212	1-216-049-91	RES,CHIP	1K 5% 1/10W	R3270	1-216-295-91	SHORT	0
R3213	1-216-091-00	RES,CHIP	56K 5% 1/10W	R3271	1-216-069-00	RES,CHIP	6.8K 5% 1/10W
R3214	1-216-295-91	SHORT	0	R3272	1-216-069-00	RES,CHIP	6.8K 5% 1/10W
R3215	1-216-295-91	SHORT	0	R3273	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R3216	1-216-073-00	RES,CHIP	10K 5% 1/10W	R3274	1-216-069-00	RES,CHIP	6.8K 5% 1/10W
R3217	1-216-073-00	RES,CHIP	10K 5% 1/10W	R3277	1-216-073-00	RES,CHIP	10K 5% 1/10W
R3218	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R3278	1-216-061-00	RES,CHIP	3.3K 5% 1/10W
R3219	1-216-077-91	RES,CHIP	15K 5% 1/10W	R3279	1-216-061-00	RES,CHIP	3.3K 5% 1/10W
R3220	1-216-097-91	RES,CHIP	100K 5% 1/10W	R3280	1-216-033-00	RES,CHIP	220 5% 1/10W
R3221	1-216-073-00	RES,CHIP	10K 5% 1/10W	R3281	1-216-033-00	RES,CHIP	220 5% 1/10W
R3222	1-216-073-00	RES,CHIP	10K 5% 1/10W	R3282	1-216-079-00	RES,CHIP	18K 5% 1/10W
R3223	1-216-045-00	RES,CHIP	680 5% 1/10W	R3283	1-216-081-00	RES,CHIP	22K 5% 1/10W
R3224	1-216-115-00	RES,CHIP	560K 5% 1/10W	R3284	1-216-073-00	RES,CHIP	10K 5% 1/10W
R3225	1-216-073-00	RES,CHIP	10K 5% 1/10W	R3285	1-216-073-00	RES,CHIP	10K 5% 1/10W
R3226	1-216-073-00	RES,CHIP	10K 5% 1/10W	R3286	1-216-073-00	RES,CHIP	10K 5% 1/10W
R3227	1-216-129-00	RES,CHIP	2.2M 5% 1/10W	R3287	1-216-073-00	RES,CHIP	10K 5% 1/10W
R3228	1-216-085-00	RES,CHIP	33K 5% 1/10W	R3288	1-216-073-00	RES,CHIP	10K 5% 1/10W
R3229	1-216-095-00	RES,CHIP	82K 5% 1/10W	R3289	1-216-073-00	RES,CHIP	10K 5% 1/10W
R3230	1-216-055-00	RES,CHIP	1.8K 5% 1/10W	R3290	1-216-081-00	RES,CHIP	22K 5% 1/10W
R3231	1-216-091-00	RES,CHIP	56K 5% 1/10W	R3291	1-216-079-00	RES,CHIP	18K 5% 1/10W
R3232	1-216-089-91	RES,CHIP	47K 5% 1/10W	R3294	1-216-073-00	RES,CHIP	10K 5% 1/10W
R3233	1-216-069-00	RES,CHIP	6.8K 5% 1/10W	R3295	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R3234	1-216-039-00	RES,CHIP	390 5% 1/10W	R3296	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R3235	1-216-101-00	RES,CHIP	150K 5% 1/10W	R3297	1-216-069-00	RES,CHIP	6.8K 5% 1/10W
R3236	1-216-113-00	RES,CHIP	470K 5% 1/10W	R3298	1-216-069-00	RES,CHIP	6.8K 5% 1/10W
R3237	1-216-045-00	RES,CHIP	680 5% 1/10W	R3299	1-216-069-00	RES,CHIP	6.8K 5% 1/10W
R3238	1-216-073-00	RES,CHIP	10K 5% 1/10W	R6201	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R3239	1-216-073-00	RES,CHIP	10K 5% 1/10W	R6202	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R3240	1-216-081-00	RES,CHIP	22K 5% 1/10W	R6203	1-216-295-91	SHORT	0
R3241	1-216-093-91	RES,CHIP	68K 5% 1/10W	R6209	1-216-049-91	RES,CHIP	1K 5% 1/10W
R3242	1-216-081-00	RES,CHIP	22K 5% 1/10W	R6213	1-216-073-00	RES,CHIP	10K 5% 1/10W
R3243	1-216-073-00	RES,CHIP	10K 5% 1/10W	R6214	1-216-073-00	RES,CHIP	10K 5% 1/10W
R3244	1-216-073-00	RES,CHIP	10K 5% 1/10W	R6219	1-216-089-91	RES,CHIP	47K 5% 1/10W
R3245	1-216-097-91	RES,CHIP	100K 5% 1/10W	R6245	1-216-053-00	RES,CHIP	1.5K 5% 1/10W
R3246	1-216-045-00	RES,CHIP	680 5% 1/10W	R6246	1-216-053-00	RES,CHIP	1.5K 5% 1/10W
R3247	1-216-101-00	RES,CHIP	150K 5% 1/10W	R6254	1-216-017-91	RES,CHIP	47 5% 1/10W
R3248	1-216-081-00	RES,CHIP	22K 5% 1/10W	R6255	1-216-308-00	RES,CHIP	4.7 5% 1/10W
R3249	1-216-073-00	RES,CHIP	10K 5% 1/10W	R6258	1-216-017-91	RES,CHIP	47 5% 1/10W
R3250	1-216-049-91	RES,CHIP	1K 5% 1/10W	R6259	1-216-308-00	RES,CHIP	4.7 5% 1/10W
R3251	1-216-101-00	RES,CHIP	150K 5% 1/10W	R6278	1-216-295-91	SHORT	0
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				

B₃ (KV-XS29M97)

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

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C3283	1-126-964-11	ELECT	10MF20%50V	<CONNECTOR>			
C3284	1-115-339-11	CERAMIC CHIP	0.1MF10%50V	CN1400*	1-564-512-11	PLUG, CONNECTOR 9P	
C3285	1-126-964-11	ELECT	10MF20%50V	CN1401*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P	
C3286	1-126-964-11	ELECT	10MF20%50V	CN1402*	1-564-507-11	PLUG, CONNECTOR 4P	
C3287	1-126-964-11	ELECT	10MF20%50V	CN1403*	1-564-506-11	PLUG, CONNECTOR 3P	
C3288	1-163-037-11	CERAMIC CHIP	0.022MF10%50V	CN1404*	1-779-891-11	CONNECTOR, BOARD TO BOARD 8P	
C3289	1-163-018-00	CERAMIC CHIP	0.0056MF10%50V	CN1405*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
C3290	1-164-505-11	CERAMIC CHIP	2.2MF16V	CN1406*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
C3291	1-164-505-11	CERAMIC CHIP	2.2MF16V	CN1407*	1-779-891-11	CONNECTOR, BOARD TO BOARD 8P	
C6200	1-216-295-91	SHORT	0	CN1408	1-764-818-11	CONNECTOR, BOARD TO BOARD 10P	
C6201	1-126-964-11	ELECT	10MF20%50V	CN1409	1-764-818-11	CONNECTOR, BOARD TO BOARD 10P	
C6202	1-126-953-11	ELECT	2200MF20%35V	CN6200*	1-564-507-11	PLUG, CONNECTOR 4P	
C6203	1-163-021-91	CERAMIC CHIP	0.01MF10%50V	CN6202*	1-564-507-11	PLUG, CONNECTOR 4P	
C6204	1-128-550-11	ELECT	2200MF20%50V	CN6204*	1-564-509-11	PLUG, CONNECTOR 6P	
C6205	1-130-495-00	MYLAR	0.1MF5%50V	CN6205*	1-564-507-11	PLUG, CONNECTOR 4P	
C6206	1-128-550-11	ELECT	2200MF20%50V	CN6206*	1-564-508-11	PLUG, CONNECTOR 5P	
C6207	1-115-339-11	CERAMIC CHIP	0.1MF10%50V	<DIODE>			
C6208	1-115-339-11	CERAMIC CHIP	0.1MF10%50V	D1401	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6209	1-130-495-00	MYLAR	0.1MF5%50V	D1402	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6210	1-126-924-11	ELECT	330MF20%10V	D1403	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6211	1-126-924-11	ELECT	330MF20%10V	D1404	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6212	1-104-664-11	ELECT	47MF20%25V	D1405	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6213	1-136-161-00	FILM	0.047MF5%50V	D1406	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6215	1-126-933-11	ELECT	100MF20%16V	D1407	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6216	1-126-960-11	ELECT	1MF20%50V	D1408	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6217	1-164-004-11	CERAMIC CHIP	0.1MF10%25V	D1409	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6218	1-115-339-11	CERAMIC CHIP	0.1MF10%50V	D1410	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6219	1-126-961-11	ELECT	2.2MF20%50V	D1411	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6220	1-164-505-11	CERAMIC CHIP	2.2MF16V	D1412	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6221	1-126-960-11	ELECT	1MF20%50V	D1415	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6222	1-164-505-11	CERAMIC CHIP	2.2MF16V	D1416	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6223	1-126-960-11	ELECT	1MF20%50V	D1417	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6225	1-115-339-11	CERAMIC CHIP	0.1MF10%50V	D6200	8-719-109-86	DIODE RD5.1ESB3	
C6226	1-115-339-11	CERAMIC CHIP	0.1MF10%50V	D6205	8-719-988-61	DIODE 1SS355TE-17	
C6227	1-128-550-11	ELECT	2200MF20%50V	D6211	8-719-073-01	DIODE MA111-(K8).S0	
C6228	1-115-339-11	CERAMIC CHIP	0.1MF10%50V	D6212	8-719-073-01	DIODE MA111-(K8).S0	
C6229	1-164-505-11	CERAMIC CHIP	2.2MF16V	<FERRITE BEAD>			
C6230	1-115-339-11	CERAMIC CHIP	0.1MF10%50V	FB6201	1-410-397-21	FERRITE1.1UH	
C6231	1-128-550-11	ELECT	2200MF20%50V	FB6202	1-410-397-21	FERRITE1.1UH	
C6232	1-163-275-11	CERAMIC CHIP	0.001MF5%50V	<IC>			
C6233	1-163-007-11	CERAMIC CHIP	680PF10%50V	IC1401	8-752-068-46	IC CXA1855S	
C6234	1-163-017-00	CERAMIC CHIP	0.0047MF10%50V	IC1402	8-759-100-96	IC UPC4558G2	
C6235	1-163-251-11	CERAMIC CHIP	100PF5%50V	IC1403	8-759-231-53	IC TA7805S	
C6236	1-115-339-11	CERAMIC CHIP	0.1MF10%50V	IC1404	8-759-701-59	IC NJM78M09FA	
C6237	1-136-177-00	FILM	1MF5%50V	IC3200	8-759-100-96	IC UPC4558G2	
C6238	1-163-009-11	CERAMIC CHIP	0.001MF10%50V	IC3200	8-759-100-96	IC UPC4558G2	
C6239	1-127-682-51	ELECT MELF	2200MF20%25V	IC3201	8-759-100-96	IC UPC4558G2	
C6240	1-130-495-00	MYLAR	0.1MF5%50V	IC3201	8-759-553-44	IC NJM2187L	
C6241	1-136-161-00	FILM	0.047MF5%50V	IC3202	8-759-100-96	IC UPC4558G2	
C6244	1-163-019-00	CERAMIC CHIP	0.0068MF10%50V	IC3203	8-759-711-10	IC NJU4066BM	
C6245	1-163-019-00	CERAMIC CHIP	0.0068MF10%50V	IC3205	8-752-057-18	IC CXA1315P	
C6249	1-216-295-91	SHORT	0				
C6251	1-126-965-11	ELECT	22MF20%50V				
C6252	1-126-965-11	ELECT	22MF20%50V				
C6253	1-126-960-11	ELECT	1MF20%50V				

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
IC3206	8-759-496-02	IC NJM2150D		Q1409	8-729-230-49	TRANSISTOR 2SC2712-YG	
IC3207	8-759-273-12	IC TDA7315D013TR		Q1410	8-729-230-49	TRANSISTOR 2SC2712-YG	
IC6200	8-759-168-24	IC TA8200AH		Q6200	8-729-230-49	TRANSISTOR 2SC2712-YG	
IC6201	8-759-553-45	IC TDA7481		Q6201	8-729-421-19	TRANSISTOR UN2213	
		<JACK>		Q6202	8-729-230-49	TRANSISTOR 2SC2712-YG	
J1401	1-784-646-11	TERMINAL, S		Q6203	8-729-421-19	TRANSISTOR UN2213	
J1402	1-778-387-11	JACK BLOCK, PIN 12P		Q6204	8-729-421-19	TRANSISTOR UN2213	
		<CHIP CONDUCTOR>		Q6205	8-729-230-49	TRANSISTOR 2SC2712-YG	
JR1401	1-216-295-91	SHORT	0	Q6206	8-729-230-49	TRANSISTOR 2SC2712-YG	
JR1402	1-216-295-91	SHORT	0	Q6207	8-729-224-62	TRANSISTOR 2SK246-GR	
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					

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REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
R1448	1-216-043-91	RES,CHIP	560	5%	1/10W	R3209	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1449	1-249-429-11	CARBON	10K	5%	1/4W	R3210	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
						R3211	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1450	1-216-073-00	RES,CHIP	10K	5%	1/10W	R3212	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1451	1-216-073-00	RES,CHIP	10K	5%	1/10W	R3213	1-216-091-00	RES,CHIP	56K	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	R3214	1-216-295-91	SHORT	0		
R1454	1-216-091-00	RES,CHIP	56K	5%	1/10W	R3215	1-216-295-91	SHORT	0		
						R3216	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1455	1-216-073-00	RES,CHIP	10K	5%	1/10W	R3217	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1456	1-216-113-00	RES,CHIP	470K	5%	1/10W	R3218	1-216-065-91	RES,CHIP	4.7K	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	R3219	1-216-077-91	RES,CHIP	15K	5%	1/10W
R1459	1-216-025-91	RES,CHIP	100	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
R1460	1-216-033-00	RES,CHIP	220	5%	1/10W	R3226	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1461	1-216-025-91	RES,CHIP	100	5%	1/10W	R3227	1-216-129-00	RES,CHIP	2.2M	5%	1/10W
R1463	1-249-429-11	CARBON	10K	5%	1/4W						
R1464	1-216-113-00	RES,CHIP	470K	5%	1/10W	R3228	1-216-085-00	RES,CHIP	33K	5%	1/10W
R1465	1-216-113-00	RES,CHIP	470K	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
R1466	1-216-033-00	RES,CHIP	220	5%	1/10W	R3231	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1467	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	R3232	1-216-089-91	RES,CHIP	47K	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	R3238	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1470	1-216-105-91	RES,CHIP	220K	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
R1471	1-216-022-00	RES,CHIP	75	5%	1/10W	R3241	1-216-093-91	RES,CHIP	68K	5%	1/10W
R1472	1-216-033-00	RES,CHIP	220	5%	1/10W	R3242	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1473	1-216-033-00	RES,CHIP	220	5%	1/10W						
R1474	1-216-295-91	SHORT	0			R3243	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1475	1-216-089-91	RES,CHIP	47K	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
R1476	1-216-091-00	RES,CHIP	56K	5%	1/10W	R3248	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1477	1-216-047-91	RES,CHIP	820	5%	1/10W	R3249	1-216-073-00	RES,CHIP	10K	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	R3250	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1480	1-216-105-91	RES,CHIP	220K	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
R1481	1-216-022-00	RES,CHIP	75	5%	1/10W	R3262	1-216-101-00	RES,CHIP	150K	5%	1/10W
R1482	1-216-025-91	RES,CHIP	100	5%	1/10W	R3263	1-216-093-91	RES,CHIP	68K	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	R3264	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1485	1-216-025-91	RES,CHIP	100	5%	1/10W	R3266	1-216-295-91	SHORT	0		
						R3267	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1486	1-216-067-00	RES,CHIP	5.6K	5%	1/10W	R3268	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1487	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	R3269	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	R3270	1-216-295-91	SHORT	0		
R1490	1-216-025-91	RES,CHIP	100	5%	1/10W	R3271	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
						R3272	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1491	1-216-025-91	RES,CHIP	100	5%	1/10W	R3273	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1492	1-216-021-00	RES,CHIP	68	5%	1/10W	R3274	1-216-069-00	RES,CHIP	6.8K	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	R3275	1-216-295-91	SHORT	0		
R1495	1-216-033-00	RES,CHIP	220	5%	1/10W	R3276	1-216-295-91	SHORT	0		
						R3277	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1496	1-216-041-00	RES,CHIP	470	5%	1/10W	R3278	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1497	1-216-041-00	RES,CHIP	470	5%	1/10W	R3279	1-216-081-00	RES,CHIP	22K	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	R3280	1-216-033-00	RES,CHIP	220	5%	1/10W
R1500	1-216-025-91	RES,CHIP	100	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
R1501	1-216-045-00	RES,CHIP	680	5%	1/10W	R3283	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1502	1-216-025-91	RES,CHIP	100	5%	1/10W	R3284	1-216-073-00	RES,CHIP	10K	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						

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

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	Δ 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	

REF. NO.	PART NO.	DESCRIPTION	REMARK
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 $\triangle$ 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)	

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 $\triangle$	1-104-708-11	FILM 0.47MF 20% 250V	
C4602 $\triangle$	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 $\triangle$	1-532-299-00	FUSE, TIME-LAG 5A/250V	
<RESISTOR>			
R4601 $\triangle$	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 $\triangle$	1-803-830-31	VARISTOR (ERZV14D621)	
VDR461*	$\triangle$ 4-374-846-01	COVER, CAPACITOR, CAP TYPE	

	* 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)

H5 (KV-XS29M80)

REF. NO.	PART NO.	DESCRIPTION	REMARK				REF. NO.	PART NO.	DESCRIPTION	REMARK								
<CONNECTOR>						R3915	1-249-429-11	CARBON	10K	5%	1/4W	R3916	1-249-401-11	CARBON	47	5%	1/4W	
CN3601*	1-580-844-11	PIN, CONNECTOR (POWER)					R3917	1-247-804-11	CARBON	75	5%	1/4W	R3918	1-247-815-91	CARBON	220	5%	1/4W
CN3602*	1-695-292-11	PIN, CONNECTOR (POWER)					R3919	1-247-815-91	CARBON	220	5%	1/4W	R3920	1-247-807-31	CARBON	100	5%	1/4W
CN3603	1-695-915-11	TAB (CONTACT)					R3921	1-247-807-31	CARBON	100	5%	1/4W	R3922	1-249-421-11	CARBON	2.2K	5%	1/4W
CN3901*	1-564-507-11	PLUG, CONNECTOR 4P					R3923	1-247-815-91	CARBON	220	5%	1/4W	R3924	1-247-804-11	CARBON	75	5%	1/4W
CN3902*	1-564-509-11	PLUG, CONNECTOR 6P					<SWITCH>											
<DIODE>						S3601	1-571-433-21	SWITCH, PUSH (AC POWER)										
D3900	8-719-070-16	DIODE NNCD9.1A-T1					S3902	1-692-431-21	SWITCH, TACTILE									
D3901	8-719-070-16	DIODE NNCD9.1A-T1					S3903	1-692-431-21	SWITCH, TACTILE									
D3902	8-719-070-16	DIODE NNCD9.1A-T1					S3904	1-692-431-21	SWITCH, TACTILE									
D3905	8-719-070-16	DIODE NNCD9.1A-T1					S3905	1-692-431-21	SWITCH, TACTILE									
D3906	8-719-045-19	DIODE SPB-26MVWF					S3906	1-692-431-21	SWITCH, TACTILE									
D3907	8-719-070-16	DIODE NNCD9.1A-T1					S3907	1-692-431-21	SWITCH, TACTILE									
D3908	8-719-070-16	DIODE NNCD9.1A-T1					S3908	1-692-431-21	SWITCH, TACTILE									
<IC>						*****												
IC3901	8-742-014-11	HYB IC SBX1981-51					* A-1372-755-A	H5 BOARD MOUNTED (KV-XS29M80)										
<JACK>						*****												
J3901	1-750-264-11	JACK					* 4-055-304-01	HOLDER, LED										
J3902	1-784-646-11	TERMINAL, S					<CAPACITOR>											
J3903	1-770-329-11	JACK, PIN 3P					C3900	1-136-153-00	FILM	0.01MF	5%	50V	C3902	1-136-153-00	FILM	0.01MF	5%	50V
<COIL>						C3904	1-104-664-11	ELECT	47MF	20%	25V	C3905	1-126-965-11	ELECT	22MF	20%	50V	
L3901	1-414-183-41	INDUCTOR	10UH				C3906	1-126-965-11	ELECT	22MF	20%	50V	C3910	1-104-664-11	ELECT	47MF	20%	16V
L3902	1-414-183-41	INDUCTOR	10UH				C3911	1-104-664-11	ELECT	47MF	20%	16V	C3912	1-102-114-00	CERAMIC	470PF	10%	50V
L3903	1-416-966-11	INDUCTOR	0UH				C3913	1-126-960-11	ELECT	1MF	20%	50V	C3914	1-126-965-11	ELECT	22MF	20%	50V
<TRANSISTOR>						<CONNECTOR>												
Q3901	8-729-030-02	TRANSISTOR DTC144ESA					CN3601*	1-580-844-11	PIN, CONNECTOR (POWER)									
Q3902	8-729-030-02	TRANSISTOR DTC144ESA					CN3602*	1-695-292-11	PIN, CONNECTOR (POWER)									
<RESISTOR>						CN3603	1-695-915-11	TAB (CONTACT)										
R3900	1-249-411-11	CARBON	330	5%	1/4W	CN3901*	1-564-507-11	PLUG, CONNECTOR 4P										
R3901	1-249-411-11	CARBON	330	5%	1/4W	CN3902*	1-564-509-11	PLUG, CONNECTOR 6P										
R3902	1-247-804-11	CARBON	75	5%	1/4W	CN3904*	1-564-512-11	PLUG, CONNECTOR 9P										
R3904	1-249-429-11	CARBON	10K	5%	1/4W	CN3905*	1-564-512-11	PLUG, CONNECTOR 9P										
R3905	1-249-429-11	CARBON	10K	5%	1/4W	<DIODE>												
R3907	1-249-426-11	CARBON	5.6K	5%	1/4W	D3900	8-719-070-16	DIODE NNCD9.1A-T1										
R3908	1-249-413-11	CARBON	470	5%	1/4W	D3901	8-719-070-16	DIODE NNCD9.1A-T1										
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													

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	

REF. NO.	PART NO.	DESCRIPTION	REMARK
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	

* A-1388-266-A J4 BOARD MOUNTED (KV-XS29M97)			

<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	

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

REF. NO.	PART NO.	DESCRIPTION	REMARK
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	

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK		
IC4501	8-752-057-18	IC CXA1315P		Q4326	8-729-421-19	TRANSISTOR UN2213			
IC4502	8-759-439-64	IC HEF4053BT		Q4327	8-729-216-22	TRANSISTOR 2SA1162-G			
IC4503	8-759-439-64	IC HEF4053BT		Q4328	8-729-216-22	TRANSISTOR 2SA1162-G			
				Q4362	8-729-216-22	TRANSISTOR 2SA1162-G			
				Q4363	8-729-216-22	TRANSISTOR 2SA1162-G			
		<CHIP CONDUCTOR>		Q4364	8-729-216-22	TRANSISTOR 2SA1162-G			
				Q4365	8-729-230-49	TRANSISTOR 2SC2712-YG			
JR4300	1-216-295-91	SHORT	0						
JR4502	1-216-295-91	SHORT	0	Q4366	8-729-230-49	TRANSISTOR 2SC2712-YG			
JR4504	1-216-295-91	SHORT	0	Q4368	8-729-230-49	TRANSISTOR 2SC2712-YG			
				Q4369	8-729-230-49	TRANSISTOR 2SC2712-YG			
				Q4371	8-729-230-49	TRANSISTOR 2SC2712-YG			
		<COIL>		Q4372	8-729-230-49	TRANSISTOR 2SC2712-YG			
L4302	1-412-537-31	INDUCTOR	100UH	Q4373	8-729-230-49	TRANSISTOR 2SC2712-YG			
L4304	1-408-603-31	INDUCTOR	10UH	Q4374	8-729-230-49	TRANSISTOR 2SC2712-YG			
L4305	1-408-603-31	INDUCTOR	10UH	Q4501	8-729-230-49	TRANSISTOR 2SC2712-YG			
L4306	1-408-603-31	INDUCTOR	10UH	Q4502	8-729-216-22	TRANSISTOR 2SA1162-G			
L4307	1-408-412-00	INDUCTOR	18UH	Q4503	8-729-230-49	TRANSISTOR 2SC2712-YG			
L4308	1-408-611-31	INDUCTOR	47UH	Q4505	8-729-230-49	TRANSISTOR 2SC2712-YG			
L4309	1-408-603-31	INDUCTOR	10UH	Q4507	8-729-216-22	TRANSISTOR 2SA1162-G			
L4310	1-408-611-31	INDUCTOR	47UH	Q4509	8-729-230-49	TRANSISTOR 2SC2712-YG			
L4311	1-408-603-31	INDUCTOR	10UH	Q4510	8-729-230-49	TRANSISTOR 2SC2712-YG			
L4312	1-408-603-31	INDUCTOR	10UH	Q4511	8-729-216-22	TRANSISTOR 2SA1162-G			
L4313	1-414-188-41	INDUCTOR	68UH	Q4514	8-729-230-49	TRANSISTOR 2SC2712-YG			
L4314	1-414-856-11	INDUCTOR	10UH	Q4515	8-729-230-49	TRANSISTOR 2SC2712-YG			
L4315	1-414-856-11	INDUCTOR	10UH	Q4515	8-729-422-27	TRANSISTOR 2SD601A-Q			
L4316	1-414-856-11	INDUCTOR	10UH	Q4516	8-729-216-22	TRANSISTOR 2SA1162-G			
L4317	1-414-856-11	INDUCTOR	10UH	Q4520	8-729-230-49	TRANSISTOR 2SC2712-YG			
L4501	1-414-856-11	INDUCTOR	10UH	Q4522	8-729-230-49	TRANSISTOR 2SC2712-YG			
L4502	1-414-856-11	INDUCTOR	10UH	Q4523	8-729-216-22	TRANSISTOR 2SA1162-G			
L4506	1-414-857-11	INDUCTOR	100UH	Q4571	8-729-230-49	TRANSISTOR 2SC2712-YG			
L4507	1-414-187-11	INDUCTOR	47UH	Q4572	8-729-230-49	TRANSISTOR 2SC2712-YG			
L4508	1-414-187-11	INDUCTOR	47UH	Q4573	8-729-216-22	TRANSISTOR 2SA1162-G			
L4509	1-414-857-11	INDUCTOR	100UH	Q4574	8-729-230-49	TRANSISTOR 2SC2712-YG			
L4510	1-414-187-11	INDUCTOR	47UH	Q4575	8-729-216-22	TRANSISTOR 2SA1162-G			
L4511	1-414-187-11	INDUCTOR	47UH	Q4576	8-729-216-22	TRANSISTOR 2SA1162-G			
L4570	1-410-470-11	INDUCTOR	10UH	Q4577	8-729-216-22	TRANSISTOR 2SA1162-G			
		<TRANSISTOR>				<RESISTOR>			
Q4301	8-729-230-49	TRANSISTOR 2SC2712-YG		R4300	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
Q4302	8-729-216-22	TRANSISTOR 2SA1162-G		R4301	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
Q4303	8-729-424-59	TRANSISTOR UN2212		R4302	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
Q4304	8-729-027-43	TRANSISTOR DTC114EKA-T146		R4304	1-216-089-91	RES,CHIP	47K	5%	1/10W
Q4305	8-729-027-43	TRANSISTOR DTC114EKA-T146		R4305	1-216-025-91	RES,CHIP	100	5%	1/10W
Q4306	8-729-230-49	TRANSISTOR 2SC2712-YG		R4306	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
Q4307	8-729-027-43	TRANSISTOR DTC114EKA-T146		R4307	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
Q4308	8-729-216-22	TRANSISTOR 2SA1162-G		R4308	1-216-081-00	RES,CHIP	22K	5%	1/10W
Q4313	8-729-216-22	TRANSISTOR 2SA1162-G		R4309	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
Q4314	8-729-216-22	TRANSISTOR 2SA1162-G		R4310	1-216-025-91	RES,CHIP	100	5%	1/10W
Q4315	8-729-216-22	TRANSISTOR 2SA1162-G		R4311	1-216-025-91	RES,CHIP	100	5%	1/10W
Q4316	8-729-216-22	TRANSISTOR 2SA1162-G		R4312	1-216-025-91	RES,CHIP	100	5%	1/10W
Q4317	8-729-230-49	TRANSISTOR 2SC2712-YG		R4313	1-216-049-91	RES,CHIP	1K	5%	1/10W
Q4318	8-729-230-49	TRANSISTOR 2SC2712-YG		R4314	1-216-049-91	RES,CHIP	1K	5%	1/10W
Q4322	8-729-230-49	TRANSISTOR 2SC2712-YG		R4315	1-216-049-91	RES,CHIP	1K	5%	1/10W
Q4323	8-729-230-49	TRANSISTOR 2SC2712-YG		R4316	1-216-025-91	RES,CHIP	100	5%	1/10W
Q4324	8-729-230-49	TRANSISTOR 2SC2712-YG		R4317	1-216-025-91	RES,CHIP	100	5%	1/10W
Q4325	8-729-216-22	TRANSISTOR 2SA1162-G		R4318	1-216-033-00	RES,CHIP	220	5%	1/10W

P2 (KV-XS29M97)

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R4319	1-216-045-00	RES,CHIP	680 5% 1/10W	R4382	1-216-025-91	RES,CHIP	100 5% 1/10W
R4320	1-216-081-00	RES,CHIP	22K 5% 1/10W	R4383	1-216-675-91	METAL CHIP	10K 0.50% 1/10W
R4321	1-216-045-00	RES,CHIP	680 5% 1/10W	R4384	1-216-081-00	RES,CHIP	22K 5% 1/10W
R4324	1-216-049-91	RES,CHIP	1K 5% 1/10W	R4385	1-216-073-00	RES,CHIP	10K 5% 1/10W
R4325	1-216-027-00	RES,CHIP	120 5% 1/10W	R4386	1-216-073-00	RES,CHIP	10K 5% 1/10W
R4326	1-216-053-00	RES,CHIP	1.5K 5% 1/10W	R4387	1-216-073-00	RES,CHIP	10K 5% 1/10W
R4327	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R4388	1-216-025-91	RES,CHIP	100 5% 1/10W
R4328	1-216-067-00	RES,CHIP	5.6K 5% 1/10W	R4389	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R4329	1-216-041-00	RES,CHIP	470 5% 1/10W	R4390	1-216-025-91	RES,CHIP	100 5% 1/10W
R4330	1-216-053-00	RES,CHIP	1.5K 5% 1/10W	R4391	1-216-025-91	RES,CHIP	100 5% 1/10W
R4332	1-216-089-91	RES,CHIP	47K 5% 1/10W	R4392	1-216-073-00	RES,CHIP	10K 5% 1/10W
R4333	1-216-025-91	RES,CHIP	100 5% 1/10W	R4393	1-216-025-91	RES,CHIP	100 5% 1/10W
R4334	1-216-025-91	RES,CHIP	100 5% 1/10W	R4394	1-216-075-00	RES,CHIP	12K 5% 1/10W
R4335	1-216-025-91	RES,CHIP	100 5% 1/10W	R4395	1-216-025-91	RES,CHIP	100 5% 1/10W
R4336	1-216-041-00	RES,CHIP	470 5% 1/10W	R4396	1-216-081-00	RES,CHIP	22K 5% 1/10W
R4337	1-216-041-00	RES,CHIP	470 5% 1/10W	R4397	1-216-049-91	RES,CHIP	1K 5% 1/10W
R4338	1-216-049-91	RES,CHIP	1K 5% 1/10W	R4398	1-216-053-00	RES,CHIP	1.5K 5% 1/10W
R4339	1-216-041-00	RES,CHIP	470 5% 1/10W	R4400	1-216-033-00	RES,CHIP	220 5% 1/10W
R4340	1-216-085-00	RES,CHIP	33K 5% 1/10W	R4401	1-216-041-00	RES,CHIP	470 5% 1/10W
R4341	1-216-081-00	RES,CHIP	22K 5% 1/10W	R4402	1-216-295-91	SHORT	0 5% 1/10W
R4343	1-216-049-91	RES,CHIP	1K 5% 1/10W	R4408	1-216-041-00	RES,CHIP	470 5% 1/10W
R4344	1-216-025-91	RES,CHIP	100 5% 1/10W	R4414	1-216-025-91	RES,CHIP	100 5% 1/10W
R4345	1-216-041-00	RES,CHIP	470 5% 1/10W	R4416	1-216-041-00	RES,CHIP	470 5% 1/10W
R4346	1-216-041-00	RES,CHIP	470 5% 1/10W	R4431	1-216-049-91	RES,CHIP	1K 5% 1/10W
R4347	1-216-025-91	RES,CHIP	100 5% 1/10W	R4432	1-216-689-11	RES,CHIP	39K 5% 1/10W
R4348	1-216-085-00	RES,CHIP	33K 5% 1/10W	R4433	1-216-073-00	RES,CHIP	10K 5% 1/10W
R4349	1-216-025-91	RES,CHIP	100 5% 1/10W	R4434	1-216-045-00	RES,CHIP	680 5% 1/10W
R4350	1-216-085-00	RES,CHIP	33K 5% 1/10W	R4506	1-216-025-91	RES,CHIP	100 5% 1/10W
R4351	1-216-049-91	RES,CHIP	1K 5% 1/10W	R4507	1-216-081-00	RES,CHIP	22K 5% 1/10W
R4352	1-216-041-00	RES,CHIP	470 5% 1/10W	R4508	1-216-073-00	RES,CHIP	10K 5% 1/10W
R4353	1-216-049-91	RES,CHIP	1K 5% 1/10W	R4511	1-216-033-00	RES,CHIP	220 5% 1/10W
R4354	1-216-049-91	RES,CHIP	1K 5% 1/10W	R4512	1-216-005-00	RES,CHIP	15 5% 1/10W
R4355	1-216-049-91	RES,CHIP	1K 5% 1/10W	R4515	1-216-041-00	RES,CHIP	470 5% 1/10W
R4356	1-216-647-11	METAL CHIP	680 0.50% 1/10W	R4516	1-216-025-91	RES,CHIP	100 5% 1/10W
R4357	1-216-043-91	RES,CHIP	560 5% 1/10W	R4517	1-216-075-00	RES,CHIP	12K 5% 1/10W
R4358	1-216-645-11	METAL CHIP	560 0.50% 1/10W	R4520	1-216-079-00	RES,CHIP	18K 5% 1/10W
R4359	1-216-025-91	RES,CHIP	100 5% 1/10W	R4522	1-216-049-91	RES,CHIP	1K 5% 1/10W
R4360	1-216-049-91	RES,CHIP	1K 5% 1/10W	R4523	1-216-049-91	RES,CHIP	1K 5% 1/10W
R4361	1-216-041-00	RES,CHIP	470 5% 1/10W	R4528	1-216-033-00	RES,CHIP	220 5% 1/10W
R4362	1-216-055-00	RES,CHIP	1.8K 5% 1/10W	R4529	1-216-053-00	RES,CHIP	1.5K 5% 1/10W
R4363	1-216-033-00	RES,CHIP	220 5% 1/10W	R4531	1-216-045-00	RES,CHIP	680 5% 1/10W
R4364	1-216-089-91	RES,CHIP	47K 5% 1/10W	R4537	1-216-041-00	RES,CHIP	470 5% 1/10W
R4365	1-216-081-00	RES,CHIP	22K 5% 1/10W	R4538	1-216-041-00	RES,CHIP	470 5% 1/10W
R4366	1-216-295-91	SHORT	0 5% 1/10W	R4540	1-216-049-91	RES,CHIP	1K 5% 1/10W
R4368	1-216-049-91	RES,CHIP	1K 5% 1/10W	R4541	1-216-041-00	RES,CHIP	470 5% 1/10W
R4369	1-216-025-91	RES,CHIP	100 5% 1/10W	R4542	1-216-041-00	RES,CHIP	470 5% 1/10W
R4370	1-216-041-00	RES,CHIP	470 5% 1/10W	R4543	1-216-049-91	RES,CHIP	1K 5% 1/10W
R4371	1-216-039-00	RES,CHIP	390 5% 1/10W	R4545	1-216-041-00	RES,CHIP	470 5% 1/10W
R4372	1-216-025-91	RES,CHIP	100 5% 1/10W	R4547	1-216-049-91	RES,CHIP	1K 5% 1/10W
R4373	1-216-077-91	RES,CHIP	15K 5% 1/10W	R4548	1-216-025-91	RES,CHIP	100 5% 1/10W
R4374	1-216-073-00	RES,CHIP	10K 5% 1/10W	R4549	1-216-075-00	RES,CHIP	12K 5% 1/10W
R4375	1-216-073-00	RES,CHIP	10K 5% 1/10W	R4551	1-216-081-00	RES,CHIP	22K 5% 1/10W
R4376	1-216-053-00	RES,CHIP	1.5K 5% 1/10W	R4552	1-216-049-91	RES,CHIP	1K 5% 1/10W
R4377	1-216-047-91	RES,CHIP	820 5% 1/10W	R4553	1-216-049-91	RES,CHIP	1K 5% 1/10W
R4378	1-216-047-91	RES,CHIP	820 5% 1/10W	R4554	1-216-033-00	RES,CHIP	220 5% 1/10W
R4379	1-216-649-11	METAL CHIP	820 0.50% 1/10W	R4556	1-216-049-91	RES,CHIP	1K 5% 1/10W
R4380	1-216-053-00	RES,CHIP	1.5K 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			

* 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

REF. NO.	PART NO.	DESCRIPTION	REMARK		
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 Δ are critical for safety. Replace only with part number specified.

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

MISCELLANEOUS			

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		
Δ 1-574-062-61	CORD, POWER (WITH CONNECTOR) 2.5A/250V (KV-XS29M80)		
Δ 1-769-609-21	CORD, POWER (WITH CONNECTOR) (KV-XS29M97)		
8-451-494-31	DEFLECTION YOKE (Y29RSA-S)		
Δ 8-735-057-05	PICTURE TUBE (M68LNH070X)		

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		

ACCESSORIES AND PACKING MATERIALS			

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)		