Self Diagnosis Supported model

SERVICE MANUAL

WA1 CHASSIS

MODEL	COMMANDER	DEST
KLV-27HR3	RM-Y1108	AEP

KLV-27HR3

RM-Y1108

FLAT PANEL COLOR TV

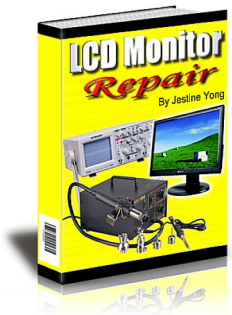
SONY®

If you need more information on Computer and Electronic Repair, please visit these websites to improve yourself.

http://www.fastrepairguide.com
http://www.protech2u.com
http://www.plasma-television-repair.com
http://www.lcd-television-repair.com

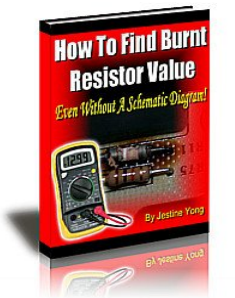
Happy Repairing!!

Highly Recommended Repair Ebook:



If you're a LCD Monitor repairer, then this is the best guide for you. Why? Because, the author revealed all his LCD Monitor Repairing secrets for you. I think, with just few Repair tips you learned from this guide you will get back your investment!
Click Here to read more.

This eBook will show you how to test the electronic component correctly and accurately. Some of you may say that I don't need this eBook because it is too simple! Do you know that, in fact there is lots of testing electronic components secrets I have learned from this guide? Do you know how to test a'TRIAC' correctly and accurately? If you answer no then I guess you have to get this EBook. Click Here to read more.



Are you tired of searching the service manuals to look for the value of a burnt resistor? If the answer is YES, then this eBook is a 'must have' guide for you. You can save a lot of time and be able to repair customer's Electronic equipment with burnt resistors in it.
Click here to read more.

TABLE OF CONTENTS

WARNING !!

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

SAFETY-RELATED COMPONENT WARNING !!

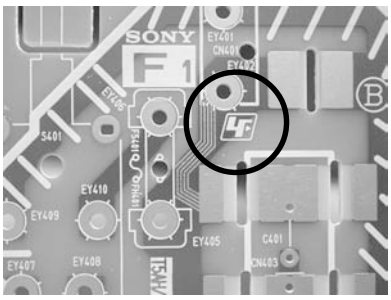
COMPONENTS IDENTIFIED BY SHADING AND MARKED ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

CAUTION

Lead Free Soldered Boards

The circuit boards listed below [Table 1] used in these models may have been processed using Lead Free Solder. The boards are identified by the LF logo located close to the board designation e.g. F1, H1 etc [see examples]. The servicing of these boards requires special precautions to be taken as outlined below.

example 1



example 2

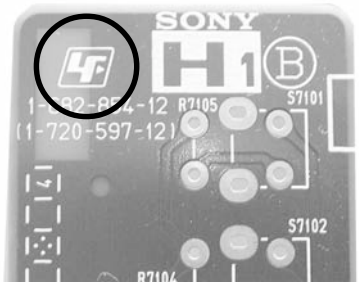


Table 1

Board	Function
A	Tuner, Audio, Chroma Decoder, Scart 1
G2	Power Supply
H1	Control Buttons
H2	Front Input, HP Output
H3	Scart 2
H5	IR Receiver & LED's

It is strongly recommended to use Lead Free Solder material in order to guarantee optimal quality of new solder joints. Lead Free Solder is available under the following part numbers :

Partnumber	Diameter	Remarks
7-640-005-19	0.3mm	0.25Kg
7-640-005-20	0.4mm	0.50Kg
7-640-005-21	0.5mm	0.50Kg
7-640-005-22	0.6mm	0.25Kg
7-640-005-23	0.8mm	1.00Kg
7-640-005-24	1.0mm	1.00Kg
7-640-005-25	1.2mm	1.00Kg
7-640-005-26	1.6mm	1.00Kg

Due to the higher melting point of Lead Free Solder the soldering iron tip temperature needs to be set to 370 degrees centigrade. This requires soldering equipment capable of accurate temperature control coupled with a good heat recovery characteristics.

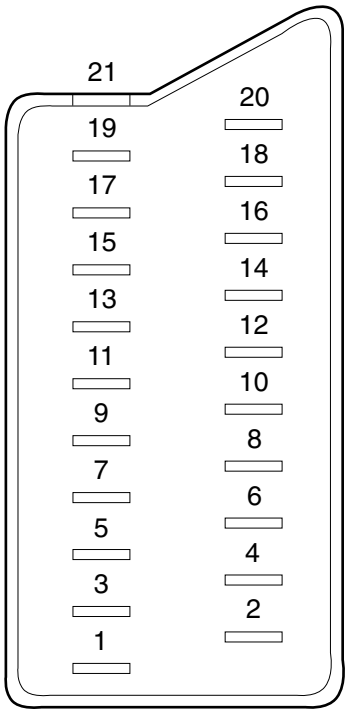
For more information on the use of Lead Free Solder, please refer to *http://www.sony-training.com*

ITEM MODEL	Television System	Stereo System	Channel Coverage	Color System
AEP	B/G/H, D/K, I, L	GERMAN/NICAM Stereo	VHF : E2-12, R1-R12, S01-S03, F02-F10, B-Q UHF : E21-69, F21-F69, B21-B69, R21-R69 CABLE TV : S01-S20 HYPER : S21-S41	PAL, SECAM NTSC3.58, NTSC4.43 (VIDEO IN)

Flat Panel	LCD (Liquid Crystal Display) Panel 27 inches (Approx. 68cm measured diagonally).	**Sound output**	
		Right and Left speaker	2 x 10W (RMS)
		General Specifications	
Input/Output Terminals [REAR]		Power Requirements	220 - 240V
1: 21-pin Euro connector (CENELEC standard)	Inputs for Audio and Video signals. Inputs for RGB. Outputs of TV Video and Audio signals.	Power Consumption/ Standby	110W/0.7W
2: 21-pin Euro connector (CENELEC standard)	Inputs for Audio and Video signals. Inputs for S Video. Outputs of TV Video and Audio signals. (Selectable). Smartlink interface.	Dimensions	Approx. 698 x 574 x 245mm (With stand) Approx. 504 x 526 x 119mm (Without stand)
		Weight	Approx. 14Kg (With stand) Approx. 12Kg (Without stand)
Phono Jacks	Variable Output for audio signals	Supplied Accessories	RM-Y1108 Remote Commander (1) IEC designated R6 battery (2) Mains (Type C-6) Cable (1)
Input/Output Terminals [SIDE]		Other Features	Teletext, Smartlink, Sleep Timer, Picture Freeze, TV system autodetection.
Headphone jack	Stereo mini jack	**Remote Control System : Infrared Control**	
Audio inputs	Phono jacks	Power requirements	3V dc 2 batteries IEC designation R6 (Size AA)
Video inputs	Phono jacks		
S Video input	4 pin mini DIN		
Design and specifications are subject to change without notice.			

Model Name Item	KLV-27HR3
PAP	OFF
PAT	OFF
RGB Priority	ON
DRC	OFF
Scart 1	ON
Scart 2	ON
Front in (3)	ON
Norm B/G	ON
Norm I	ON
Norm D/K	ON
Norm AUS	OFF
Norm L	ON
Norm SAT	OFF
Norm M	OFF
Teletext	ON
Nicam Stereo	ON

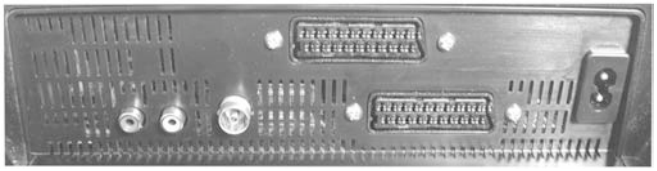
21 pin connector



Pin No	1	2	3	Signal	Signal level
1	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedence : Less than 1kohm*
2	○	○	○	Audio input B (right)	Standard level : 0.5V rms Output impedence : More than 10kohm*
3	○	○	○	Audio output A (left)	Standard level : 0.5V rms Output impedence : Less than 1kohm*
4	○	○	○	Ground (audio)	
5	○	○	○	Ground (blue)	
6	○	○	○	Audio input A (left)	Standard level : 0.5V rms Output impedence : More than 10kohm*
7	○	●	●	Blue input	0.7 +/- 3dB, 75 ohms positive
8	○	○	○	Function select (AV control)	High state (9.5-12V) : Part mode Low state (0-2V) : TV mode Input impedence : More than 10K ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (green)	
10	○	○	○	Open	
11	○	●	●	Green	Green signal : 0.7 +/- 3dB, 75 ohms, positive
12	○	○	○	Open	
13	○	○	○	Ground (red)	
14	○	○	○	Ground (blanking)	
15	○	–	–	Red input	0.7 +/- 3dB, 75 ohms, positive
	–	○	○	(S signal Chroma input)	0.3 +/- 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1-3V) Low state (0-0.4V) Input impedence : 75 ohms
17	○	○	○	Ground (video output)	
18	○	○	○	Ground (video input)	
19	○	○	○	Video output	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
20	○	–	–	Video input	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
	–	○	○	Video input Y (S signal)	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
21	○	○	○	Common ground (plug, shield)	

○ Connected ● Not Connected (open) * at 20Hz - 20kHz

Rear Connection Panel



Side Connection Panel

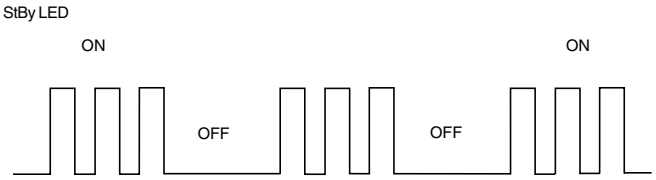
S-Video socket

S Video socket pin configuration		
Pin No	**Signal**	**Signal Level**
1	Ground	-
2	Ground	-
3	Y (S signal) input	1V+/- 3dB 75ohm, positive Sync. 0.3V -3 +10dB
4	C (S signal) input	0.3V+/- 3dB 75ohm, positive Sync.

WA1 SELF DIAGNOSTIC SOFTWARE

The identification of errors within the WA1 chassis is triggered in one of two ways :- 1: Busy or 2: Device failure to respond to IIC. In the event of one of these situations arising the software will first try to release the bus if busy (Failure to do so will report with a continuous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the LED (Series of flashes which must be counted).

Flash Timing Example : e.g. error number 3

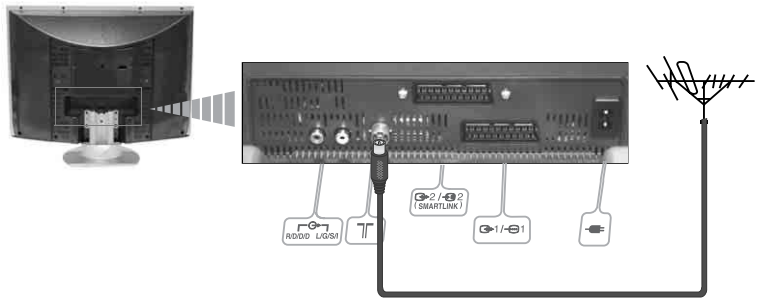


LED Error Code

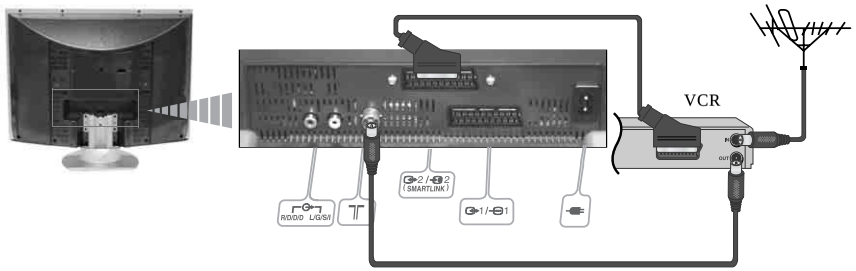
LED ERROR CODE	ERROR DESCRIPTION
02	A Board Error
03	B Board Error
04	Panel Error
05	EEPROM Error
06	IIC Bus Error
09	Tuner Error
10	Sound Processor Error
11	Panel TV-SVP Error
12	CXA2163 Error
13	Port Expander 1 Error
14	Port Expander 2 Error

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.

Connecting the Aerial and VCR



or



Make sure to connect the aerial before the Scart.

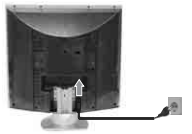
For more details regarding VCR connection, refer to “Connecting Equipment to the TV” on page 29.

First Time Operation

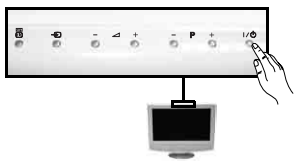
Switching On the TV and Automatically Tuning

The first time you switch on your TV, a sequence of menu screens appear on the TV enabling you to: 1) choose the language of the menu screen 2) choose the country in which you are going to operate the TV, 3) search and store all available channels (TV Broadcast) and 4) change the order in which the channels (TV Broadcast) appear on the screen.
However, if you need to change any of these settings at a later date, you can do that by selecting the appropriate option in the (Set Up menu) or by pressing and holding the Auto Start Up button on the top of TV set for more than three seconds, see page 11.

1 Connect the TV plug to the mains socket (220-240V AC, 50Hz).



2 The first time that the TV set is connected, it is usually turned on. If the TV is off, press the ⏻ on/off button to turn on the TV.
The first time you switch on the TV, a Language menu appears automatically on the TV screen.



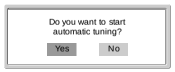
3 Press the ↑, ↓, ← or → buttons on the remote control to select your language, then press the **OK** button to confirm your selection. From now on all the menus will appear in your chosen language.

4 The Country menu appears automatically. Press the ↓ or ↑ button to select the country in which you are using the TV. Press the **OK** button to confirm your selection.

If the country in which you want to use the TV set does not appear in the list, select “-” instead of a country.

continued...

5 The Auto Tuning menu appears on the screen. Press the **OK** button to select Yes.



6 The TV starts to automatically search and store all available broadcast channels for you.

⚠ This procedure could take some minutes. Please be patient and do not press any buttons, otherwise automatic tuning will not be completed.

⚠ If no channels were found during the auto tune process, a message appears automatically on the screen asking you to connect the aerial. Check the aerial connection (refer to page 14). Press the **OK** button to restart the auto tuning process.

7 After all available channels are captured and stored, the Programme Sorting menu automatically appears on the screen enabling you to change the order in which the channels are stored.

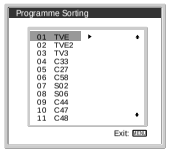
a) If you wish to keep the broadcast channels in the tuned order, go to step 8.

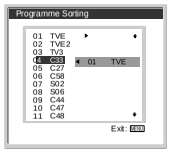
b) If you wish to store the channels in a different order:

1 Press the ↓ or ↑ button to select the programme number with the channel (TV Broadcast) you wish to move. Press the → button.

2 Press the ↓ or ↑ button to select the new programme number position for your selected channel (TV Broadcast). Press the **OK** button to store

3 Repeat steps b)1 and b)2 if you wish to change the order of the other channels.





8 Press the **MENU** button to remove the menu from the screen

Your TV set is now ready for use

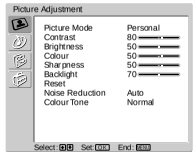
TV Functions

Introducing and Using the Menu System

Your TV set uses an On-Screen menu system to guide you through the operations. Use the following buttons on the Remote Control to operate the menu system:

1 To switch on the menu screens:

Press the **MENU** button to switch the first level menu on.



2 To navigate through the menus:

To highlight and select the desired menu or option, press ↓ or ↑.

To enter the selected menu or option, press →.

To return to the last menu or option, press ←.

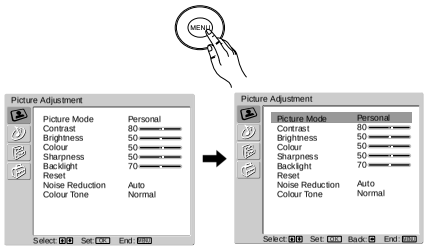
To alter the settings of your selected option, press ↓/↑/← or →.

To confirm and store your selection, press **OK**.

3 To switch off the menu screens:

Press the **MENU** button to remove the menu from the screen.

The Picture Adjustment Menu



The "Picture Adjustment" menu allows you to alter the picture settings.

To do this:
Press the **MENU** button and then press **OK** to enter this menu. Next, press ↓ or ↑ to select the desired option and press **OK**. Finally, read below how to operate into each option.

Picture Mode This option allows you to customise the picture mode based on the programme you are watching. After selecting this option press **OK**. Next, press repeatedly ↓ or ↑ to select:

- Live (for live broadcast programmes, DVD and Digital Set Top Box receivers).
- Personal (for individual settings).
- Movie (for films).

Once you have selected your desired option, press **OK** to store.

"Brightness", "Colour", "Sharpness" and "Backlight" level of "Live" and "Movie" mode are fixed on the factory to get the best picture quality.

Contrast Press ← or → to reduce or enhance picture contrast. Next, press **OK** to store.

Brightness Press ← or → to darken or brighten the picture. Next, press **OK** to store.

This option only appears and can only be adjusted if "Picture Mode" is set to "Personal".

Colour Press ← or → to decrease or to increase color intensity. Next press **OK** to store.

This option only appears and can only be adjusted if "Picture Mode" is set to "Personal".

Hue Press ← or → to decrease or to increase the green tones. Next press **OK** to store.

This option only appears for NTSC signal (e.g. USA video tapes).

Sharpness Press ← or → to soften or to sharpen the picture. Next press **OK** to store.

This option only appears and can only be adjusted if "Picture Mode" is set to "Personal".

Backlight Press ← or → to darken or brighten the backlight.

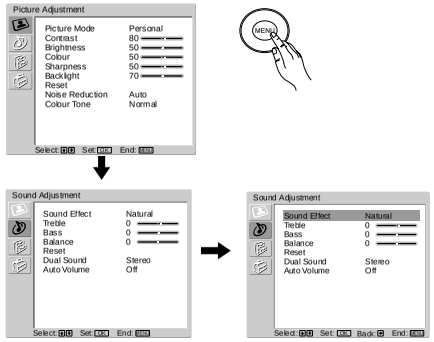
This option only appears and can only be adjusted if "Picture Mode" is set to "Personal".

Reset Press **OK** to reset the picture to the factory preset levels.

Noise Reduction This option is set to **Auto** to automatically reduce the snowy picture visible in the weak broadcast signal. However, it can be modified. After selecting this option press →. Next, press ↓ or ↑ to select Off. Finally, press **OK** to store.

Colour Tone This option allows you to alter the tint of the picture. After selecting this option press →. Next, press repeatedly ↓ or ↑ to select: Warm (gives the white colours a red tint), Normal (gives the white colours a neutral tint), Cool (gives the white colours a blue tint). Finally press **OK** to store.

The Sound Adjustment Menu



The "Sound Adjustment" menu allows you to alter the sound settings.

To do this:
Press the **MENU** button and press ↓ to select ♪, then press **OK** to enter this menu. Next, press ↓ or ↑ to select the desired option and press **OK**. Finally, read below how to operate into each option.

Sound Effect — This option allows you to customise the sound effect. After selecting this option press **OK**. Next, press repeatedly ↓ or ↑ to select:

- Natural — Enhances clarity, detail and presence of sound by using "BBE High Definition Sound system"*.
- Dynamic — "BBE High Definition Sound system"* intensifies clarity and presence of sound for better intelligibility and musical realism.
- Off — Flat response.

Once you have selected your desired option, press **OK** to store.

⚠ This function has no effect on headphones sound.

Treble — Press ← or → to decrease or to increase higher-frequency sounds. Next, press **OK** to store.

Bass — Press ← or → to decrease or to increase the lower-frequency sounds. Next, press **OK** to store.

Balance — Press ← or → to emphasise the left or the right speaker. Next, press **OK** to store.

Reset — Press OK to reset the sound to the factory preset levels.

Dual Sound — Press →. Next:

For a Stereo broadcast:
Press ↓ or ↑ to select Stereo or Mono. Next press **OK** to store.

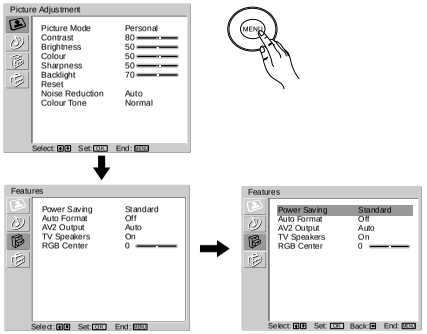
For a bilingual broadcast:
Press ↓ or ↑ to select Mono (for mono channel if available), A (for channel 1) or B (for channel 2). Next press **OK** to store.

Auto Volume — Press →. Next press ↓ or ↑ to select On (the volume level of the channels will stay the same, independent of the broadcast signal, e.g. in the case of advertisements) or Off (the volume level changes according to the broadcast signal). Next press **OK** to store.

⚠ This function has no effect on headphones sound.

* The "BBE High Definition Sound system" 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 BBE Symbol are trademarks of BBE Sound, Inc.

The Features Menu



The "Features" menu allows you to alter various settings of the TV.

To do this:
Press the **MENU** button and press ↓ twice to select , then press **OK** to enter this menu. Next, press ↓ or ↑ to select the desired option and press **OK**. Finally, read below how to operate into each option.

POWER SAVING

This option allows you to reduce the power consumption of this TV.

To do this:

After selecting the option, press **OK**. Then, press ↓ or ↑ to select **Reduce**. Next, press **OK** to store.

AUTO FORMAT

This option allows you to automatically change the aspect ratio of the screen.

To do this:
After selecting the option, press OK. Then, press ↓ or ↑ to select On (if you wish the TV set to automatically switch the screen format according to the broadcast signal) or Off (if you wish to keep your preference). Finally, press OK to store.

Even if you have selected "On" or "Off", you can always modify the format of the screen by pressing repeatedly on the remote control to select one of the following formats:

SMART: Imitation of wide screen effect for 4:3 broadcast.

4/3: Conventional 4:3 picture size, full picture information.

14/9: Compromise between 4:3 and 16:9 picture size.

ZOOM: Widescreen format for letterbox movies.

WIDE: For 16:9 broadcast. Full picture information.

In "SMART", "ZOOM" and "14/9" modes, parts of the top and bottom of the screen are cut off. Press ↓ or ↑ to adjust the position of the image on the screen (e.g. to read subtitles).

According to the format of diffusion, black bands can always appear whatever the selected mode.

continued...

AV2 OUTPUT

The "AV2 Ouptut" option allows you to select the source to be output from the Scart connector ⇨2/⇦ so that you can record from this Scart the signal coming from the TV or the signal that is being viewed on the TV.

If your VCR or DVD recorder supports SmartLink, this procedure is not necessary.

To do this:
Once you have entered into the "Features" menu as it is explained in the previous page and after selecting the option, press **OK**. Then press ↓ or ↑ to select the desired output signal:

TV to output the aerial source.
AUTO to output the signal that is being viewed on the TV.

If you select “AUTO”, the output signal will always be the same one that is displayed on the screen. If you have connected a decoder to the Scart ⇨2/⇦ 2 or to a VCR connected to this Scart, please remember to change back the "AV2 Output" to “TV” for correct unscrambling. Alternatively, set the "Decoder" option in the "Manual Programme Preset" menu to "On" for the scrambled programme. For more details refer to page 26.

TV SPEAKERS

This option allows you to turn off the TV speakers e.g. to listen to the sound through external audio equipment connected to the TV.

To do this:
Press the ↓ or ↑ buttons to select one of the following options, then press the **OK** button.

On — The sound is output from the TV speakers.

One Time Off — The TV speakers are temporarily turned off allowing you to listen to the sound from external audio equipment.

The "TV Speakers" option automatically returns to "On" when the TV set is switched off.

Permanent Off — The TV speakers are permanently turned off allowing you to listen to the sound from external audio equipment.

To turn on the TV speakers again, change the "TV Speakers" option to "On".

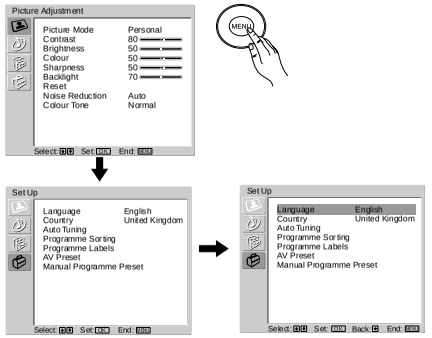
RGB CENTER

This option is only available if an RGB source has been connected to the Scart connector ⇨1/⇦ on the rear of TV.

When viewing an RGB signal, the picture may need some adjusting. This option allows you to adjust the horizontal picture position so that the picture is in the middle of the screen.

To do this:
Once you have entered the "Features" menu as it is explained in on page 21 and while watching an RGB source select the “RGB Center” option and press **OK**. Then press ← or → to adjust the centre of the picture between –5 and +5. Finally press **OK** to confirm and store.

The Set Up Menu



The “Set Up” menu allows you to alter various options on this TV.

To do this:
Press the **MENU** button and press ↓ three times to select , then press **OK** to enter this menu. Next, press ↓ or ↑ to select the desired option and press **OK**. Finally, read below how to operate into each option.

LANGUAGE

This option allows you to select the language that menus are displayed in.

To do this:
After selecting the option, press **OK** and then proceed in the same way as in step 3 of the section "Switching On the TV and Automatically Tuning" on page 15.

COUNTRY

This option allows you to select the country in which you wish to operate the TV set.

To do this:
After selecting the option, press **OK** and then proceed in the same way as in step 4 of the section "Switching On the TV and Automatically Tuning" on page 15.

AUTO TUNING

This option allows you to automatically search for and store all available TV channels.

To do this:
After selecting the option, press **OK** and then proceed in the same way as in the steps 5 and 6 of the section “Switching On the TV and Automatically Tuning” on page 16.

PROGRAMME SORTING

This option allows you to change the order in which the channels (TV Broadcast) appear on the screen.

To do this:
After selecting the option, press **OK** and then proceed in the same way as in the step 7 of the section “Switching On the TV and Automatically Tuning” on page 16.

continued...

PROGRAMME LABELS

This option allows you to name a channel using up to five characters (letters or numbers).

To do this:

1 Once you have entered the "Set Up" menu as it is explained in the previous page and after selecting this option, press **OK**, then press ↓ or ↑ to select the programme number with the channel you wish to name. Next press **OK**.

2 With the first element of the Label column highlighted, press **OK** and ↓, ↑, ← or → to select the letter, next press **OK**.
When you have finished, press ↓, ↑, ← or → to select the word "End" on the screen and finally press **OK** to turn off the menu from the screen.

To correct a letter, select "←" on the screen to go back and press **OK**.
For a blank, select "▯" on the screen and press **OK**.

AV PRESET

This option allows you to:

a) Designate a name to the external equipment you have connected to the input sockets of the TV set.

To do this:

1 Once you have entered the "Set Up" menu as it is explained in the previous page and after selecting this option, press **OK**, then press ↓ or ↑ to select the input source you wish to name: AV1 and AV2 for the rear Scarts and AV3 for side connectors. Next press **OK** twice.

2 A label automatically appears in the label column:

a) If you want to use one of the predefined labels, press ↓ or ↑ to select the desired label and finally press **OK**.

The total predefined labels are: VIDEO, DVD, CABLE, GAME, CAM (camcorder) or SAT (satellite).

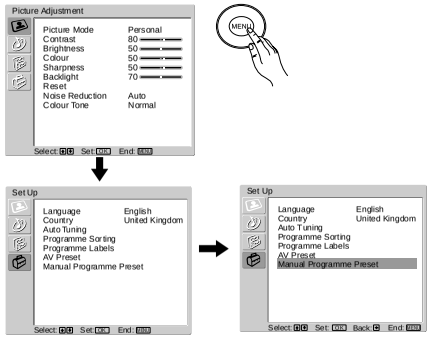
b) If you want to set a different label, select Edit and press **OK**. Then, with the first element highlighted, press ↓, ↑, ← or → to select the letter, next press **OK**. When you have finished, press ↓, ↑, ← or → to select the word "End" on the screen and finally press **OK** to turn off the menu from the screen.

To correct the letter, select "←" on the screen to go back and press **OK**.
For a blank, select "▯" on the screen and press **OK**.

b) Change the input sound level of the optional equipment connected.

To do this:
Once you have entered the "Set Up" menu as it is explained in the previous page and after selecting this option press **OK**, then press ↓ or ↑ to select the input source you want to alter the input sound level: AV1 and AV2 for the rear Scarts and AV3 for side connectors. Next press twice → to highlight the Sound Offset column. Finally press **OK** and ↓ or ↑ to alter the input sound level between -9 and +9.

The Manual Programme Preset Menu



The "Manual Programme Preset" option in the "Set Up" menu allows you to manually tune individual channels.

To do this:
Press the **MENU** button and press ↓ three times to select , then press **OK** to enter the "Set Up" menu. Next, press ↓ or ↑ to select "Manual Programme Preset" and press **OK**. Finally, read below how to operate into each option.

The Manual Programme Preset option allows you to:

a) Preset channels or the VCR channel one by one to the programme order of your choice.

To do this:

1 Once you have entered the "Set Up"menu as it is explained on page 23 and after selecting the "Manual Programme Preset" option, press **OK**. Next with Programme option highlighted press **OK**.
Press ↓ or ↑ to select which programme number you want to preset the channel on (for VCR, select programme number "0"). Then press ←.

2 The following option is only available depending on the country you have selected in the "Country" menu.
After selecting the System option, press **OK**. Then press ↓ or ↑ to select the TV Broadcast system (B/G for western European countries, D/K for eastern European countries, L for France or I for United Kingdom). Then press ←.

3 After selecting the Channel option, press **OK**. Next press ↓ or ↑ to select the channel tuning ("C" for terrestrial channels or "S" for cable channels). Then press the number buttons to enter directly the channel number of the TV Broadcast or the channel of the VCR signal. If you do not know the channel number, press → and ↓ or ↑ to search for it. When you have tuned the desired channel, press **OK** twice to store.

Repeat all the above steps to tune and store more channels.

b) Label a channel using up to five characters.

To do this:
Once you have entered the "Set Up"menu as it is explained on page 23 and after selecting the "Manual Programme Preset" option, press **OK**. Next with the Programme option, highlighted press the **PROG +/-** button to select the programme number with the channel you wish to name. When the programme you want to name appears on the screen, press ↓ or ↑ to select the Label option and press **OK**. Then, with the first element highlighted, press ↓, ↑, ← or → to select the letter, next press **OK**. When you have finished, press ↓, ↑, ← or → to select the word "End" on the screen and finally press **OK** to turn off the menu from the screen. Finally press **OK** to store.

To correct a letter, select "←" on the screen to go back and press **OK**.
For a blank, select "▯" on the screen and press **OK**.

continued...

c) Fine tune the broadcast reception. Normally the automatic fine tuning (AFT) will give the best possible picture, however you can manually fine tune the TV to obtain a better picture reception in case the picture is distorted.

To do this:
While watching the channel (TV Broadcast) you wish to fine tune, and once you have entered the “Set Up” menu as it is explained on page 23 and after selecting the "Manual Programme" option, press **OK**. Then press ↓ or ↑ to select the AFT option and press →. Next press ↓ or ↑ to adjust the fine tuning between -15 and +15. Finally press **OK** twice to store.

d) Improve the sound for individual channels in the case of distortion in mono broadcasts. (Not available when “System” is set to “L”.)
Sometimes a non standard broadcast signal can cause sound distortion or intermittent sound muting when watching mono programmes. The Audio Filter option allows you to reduce this effect.

ⓘ If you do not experience any sound distortion, we recommend that you leave the Audio Filter option set to the default setting of “Off”.

To do this:
Once you have entered the “Set Up” menu as it is explained on page 23 and after selecting the “Manual Programme Preset” option, press **OK**. Next, press ↓ or ↑ to select the Audio Filter option and press →. Next press ↓ or ↑ to select Off, Low or High.

ⓘ You can not receive stereo or dual sound when “Low” or “High” is selected.

e) Skip any unwanted programme numbers when they are selected with the **PROG +/-** buttons.

To do this:
Once you have entered the "Set Up" menu as it is explained on page 23 and after selecting the "Manual Programme Preset" option, press **OK**. Next with the Programme option highlighted, press the **PROG +/-** button to select the programme number you want to skip. When the programme you want to skip appears on the screen, press ↓ or ↑ to select the Skip option and press →. Next press ↓ or ↑ to select On. Finally press **OK** twice to confirm and store.

To cancel this function afterwards, select “Off” instead of “On” in the step above.

f) View and record scrambled channels (e.g. from a pay TV decoder) when using a decoder connected to Scart 2/ directly or through a VCR.

ⓘ This option is only available depending on the country you have selected in the “Country” menu.

To do this:
Once you have entered the "Set Up" menu as it is explained on page 23 and after selecting the "Manual Programme Preset" option, press **OK**. Next press ↓ or ↑ to select the Decoder option and press →. Next press ↓ or ↑ to select On. Finally press **OK** twice to confirm and store.

To cancel this function afterwards, select "Off" instead of "On" in the step above.

Other Functions

Sleep Timer

This function allows you to set the TV to switch itself automatically to standby mode after a specified time period. The following time periods can be selected: 30, 60, 90 and 120 minutes.

To do this:

Press the button on the remote control repeatedly until the desired time period appears on the screen.

When the Sleep Timer feature is on, the (Standby/Sleep) indicator on the TV lights up in red.

To cancel the Sleep Timer feature:

Press the button on the remote control repeatedly until “Off” appears on the screen.

If you switch off the TV and switch it on again, the Sleep Timer feature is reset to “Off”.
Press the button on the remote control to display the time remaining before the TV switches to standby mode.
The message “Sleep Timer will end soon. Power will be turned off.” Appears on the screen 1 minute before the TV switches to the standby mode.

Picture Freeze

This function allows you to freeze the TV picture (e.g. to make a note of a telephone number or recipe).

To do this:

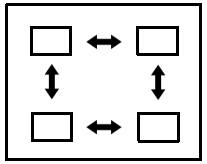
Press the button on the remote control to freeze the picture. A window is displayed in the bottom left of the screen showing the currently selected channel. Press the button again to remove the window. Press the button again to cancel the Picture Freeze and return to normal TV mode.

Adjusting the position of the Picture Freeze window

The position of the window displaying the currently selected channel can be adjusted.

To do this

With the TV in Picture Freeze mode, press the ←, →, ↓ or ↑ buttons to adjust the position of the window on the TV screen.



Teletext

Teletext is an information service transmitted by most TV stations. The index page of the Teletext service (usually page 100) gives you information on how to use the service. To operate Teletext, use the remote control buttons as indicated below.

Make sure you use a channel (TV Broadcast) with a strong signal, otherwise Teletext errors may occur.

To switch on Teletext

After selecting the TV channel which carries the Teletext service you want to view, press .

Each time you press , the screen changes cyclically as follows:

Teletext mode Teletext Superimpose mode → TV mode → Teletext mode → (repeat).

To select a Teletext page

Input three digits for the page number, using the number buttons.

If you make a mistake, retype the correct page number.

If the counter on the screen continues searching, it is because this page is not available. In this case, input another page number.

To access the next or preceding page

Press **PROG +** ( ) or **PROG -** ( ).

To freeze a Teletext page

Some Teletext pages have sub-pages which follow on automatically. To stop them, press / . Press it again to cancel the freeze.

To reveal concealed information (e.g. answers to a quiz)

Press / . Press it again to conceal the information.

To change brightness of Teletext:

Whilst you are viewing Teletext, press repeatedly to choose between four different options of brightness.

To switch off Teletext

Press .

If wrong Teletext characters appear for Cyrillic languages, we recommend you set the "Language" option in the "Set Up" menu to "Russia" if your country does not appear in the list. For details, refer to page 23.

Fastext

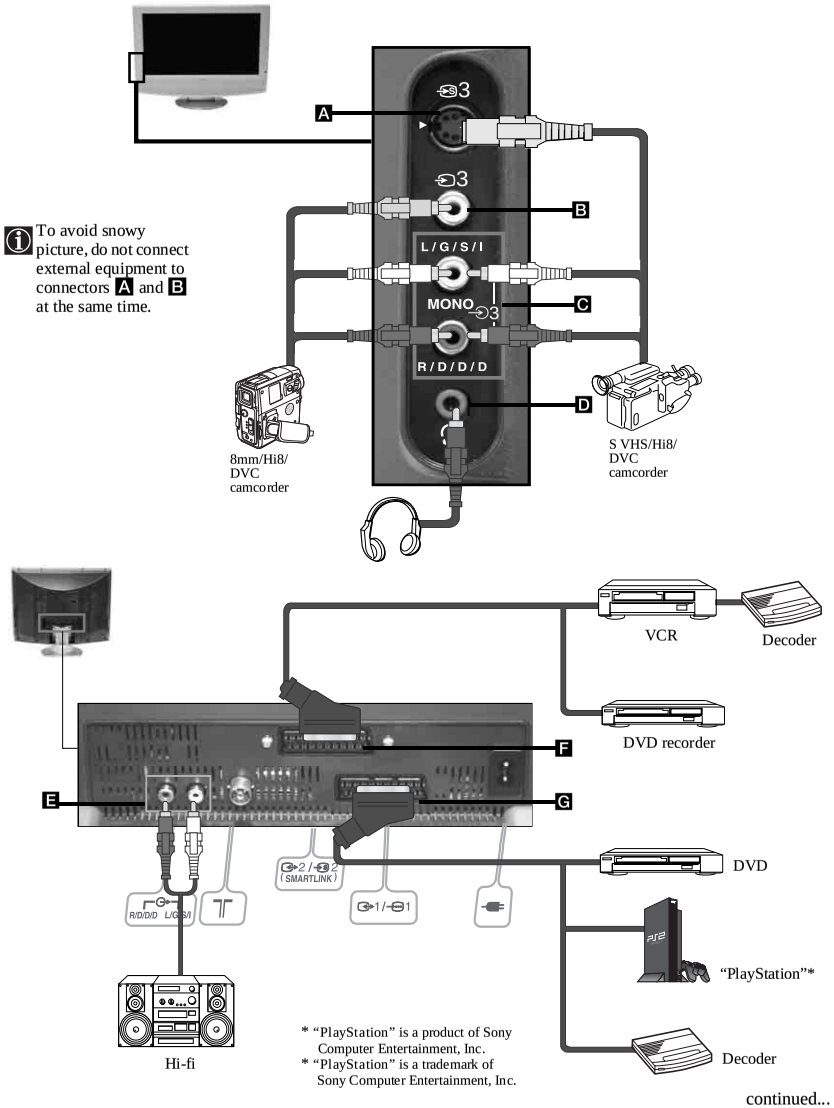
The Fastext service lets you access pages with one push of a button.
Whilst you are in the Teletext mode and Fastext is broadcast, a colour coded menu appears at the bottom of the Teletext page. Press the colour button (red, green, yellow or blue) to access the corresponding page.

Additional Information

Connecting Equipment to the TV

Using the following instructions you can connect a wide range of optional equipment to your TV set. Connecting cables are not supplied.

To avoid snowy picture, do not connect external equipment to connectors **A** and **B** at the same time.



* "PlayStation" is a product of Sony Computer Entertainment, Inc.
* "PlayStation" is a trademark of Sony Computer Entertainment, Inc.

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Connecting a VCR

To connect a VCR, please refer to the section “Connecting the aerial and VCR” of this instruction manual on page 14.

Connecting a VCR or a DVD recorder that supports SmartLink

SmartLink is a direct link between the TV set and a SmartLink compatible VCR/DVD recorder. For more information on SmartLink, please refer to the instruction manual of your SmartLink VCR/DVD recorder.

If you use a VCR or a DVD recorder that supports SmartLink, please connect the VCR or the DVD recorder to the TV using a Scart lead to the Scart ⇨2/⇦2 **F**.

If you have connected a decoder or a Set Top Box to the Scart ⇨2/⇦2 F or through a VCR connected to this Scart

Select the “Manual Programme Preset” option in the “Set Up” menu and after entering in the “Decoder**” option, select “On” (refer to page 26). Repeat this option for each scrambled signal.

**This option is only available depending on the country you have selected in the “Country” menu.

Connecting Audio Equipment to the TV

To listen to the sound from TV on Hi-fi equipment.

Connect your audio equipment to the audio output sockets **E** if you wish to amplify the audio output from the TV. Next, using the menu system, select the “Features” menu and set the “TV Speakers” to "Permanent Off" (see page 22).

The volume of the external speakers can be altered by pressing the volume buttons on the TV remote control. The treble and bass setting can also be altered through the “Sound Adjustment” menu (see page 20).

Viewing pictures from equipment connected to the TV

1 Connect your equipment to the designated TV socket, as indicated on page 29.

2 Switch on the connected equipment.

3 To watch the picture from the connected equipment, press the ⇦/⊕ button repeatedly until the correct input symbol appears on the screen.

Symbol	Input Signals
⇦1	Audio / video input signal through the Scart connector **G**
⇦1	RGB input signal through the Scart connector **G**. This symbol appears only if an RGB source has been connected.
⇦2	Audio/video input signal through the Scart connector **F**.
⇦2	S Video Input signal through the Scart connector **F**. This symbol appears only if an S Video source has been connected.
⇦3	Video input signal through the phono socket **B** and Audio input signal through **C**.
⇦3	S Video Input signal through the side S Video input jack **A** and Audio signal through **C**. This symbol appears only if an S Video source has been connected.

4 Press the ▭ button on the remote control to return to the normal TV picture.

For Mono Equipment

Connect the phono plug to the L/G/S/I socket on the side of the TV and select ⇦3 or ⇦3 input signal using the instructions above. Next, refer to the “Sound Adjustment” section of this manual and set “Dual Sound” option to “A” on the sound menu screen (see page 20).

Technical Specifications

Panel System:
LCD (Liquid Crystal Display) Panel

TV System:
(Depending on the Country/region selection)
B/G/H, D/K, L, I

Colour System:
PAL, SECAM
NTSC 3.58, 4.43 (Only Video In)

Aerial:
75 ohm external terminal for VHF/UHF

Channel Coverage:
(Depending on the Country/region selection)

VHF:	E2-E12
UHF:	E21-E69
CATV:	S1-S20
HYPER:	S21-S41
D/K:	R1-R12, R21-R69
L:	F2-F10, B-Q, F21-F69
I:	UHF B21-B69

Screen Size:
27 Inches (approx. 68 cm. measured diagonally)

Display Resolution:
1280 dots (horizontal) x 720 lines (vertical)

Power Requirement:
220-240V AC; 50/60 Hz

Power Consumption:
110 W

Standby Power Consumption:
0.7 W

Sound Output:
10 W + 10 W

Dimensions (w x h x d):
With stand, approx. 698 x 574 x 245 mm.
Without stand, approx. 504 x 526 x 119 mm.

Weight:
With stand, approx. 14 Kg.
Without stand, approx. 12 Kg.

Rear Terminals:
AV1: 1/ 1
21-pin Scart connector (CENELEC standard) including audio/video input, RGB input, TV audio/video output.

AV2: 2/ 2 (SMARTLINK)
21-pin Scart connector (CENELEC standard) including audio/video input, S video input, selectable audio/video output and Smartlink interface.

Audio Outputs (left/right) – phono jacks.

Aerial connector (RF In)

Side Terminals:
AV3:
3 S video input (4-pin mini DIN)
3 Video input (phono jack)
3 Audio input (phono jacks)

headphones jack

Accessories supplied:
One Remote Control (RM-Y1108),
Two Size AA batteries (R6 type),
One Mains lead (Type C-6)

Optional Accessory:
Wall-Mount Bracket SU-LW1.
TV Stand SU-PG100.

Other Features:
Teletext, Fastext, TOPtext (depending on availability)
Sleep Timer
Picture Freeze
Smartlink (Direct link between your TV and a compatible VCR or DVD recorder. For more information on Smartlink, please refer to the instruction manual of your VCR or DVD recorder.)
TV system autodetection

This TV is compatible with the VESA universal wall stand system.

Design and specifications are subject to change without notice.

This instruction manual has been printed on:
Ecological Paper - Totally Chlorine Free

Troubleshooting

Here are some simple solutions to problems which may affect the picture and sound.

Problem	Possible solution
No picture	
No picture (screen is dark) and no sound.	Check the aerial connection. Connect the TV to the mains, and press the power switch on the top side of the TV set. If the (standby) indicator is on, press TV I/ on the remote control.
The TV turns off automatically. (The TV enters the standby mode.)	Check if the Sleep Timer is activated (page 27).
No picture or no menu information from equipment connected to the Scart connector.	Check that the optional equipment is on and press the / button repeatedly on the remote control until the correct input symbol is displayed on the screen (page 31). Check the connection between the optional equipment and the TV.
Poor picture/Unstable picture	
Double images or ghosting.	Check aerial/cable connections. Check the aerial location and direction.
Only snow and noise appears on the screen.	Check if the aerial is broken or bent. Check if the aerial has reached the end of its serviceable life (3-5 years in normal use, 1-2 years at the seaside)
Dotted lines or stripes.	Keep the TV away from electrical noise sources such as cars, motorcycles, or hair-dryers.
No colour on colour programmes.	Using the menu system, select the “Picture Adjustment” menu and select “Reset” to return to the factory settings (page 19). If you set the “Power Saving” function to “Reduce,” picture colours may become dimmer (page 21).
Some tiny black points and/or bright points on the screen.	The picture of the display is composed of pixels. Tiny black points and/or bright points (pixels) on the screen, do not indicate a malfunction.
The picture is too bright.	Using the menu system, select the “Picture Adjustment” menu and select “Picture Mode” Then select the desired picture mode (page 18).
Picture (stripe) noise.	Make sure that the aerial is connected. Keep the aerial cable away from other connecting cords. Do not use 300-ohm twin lead cables as interference may occur.

continued...

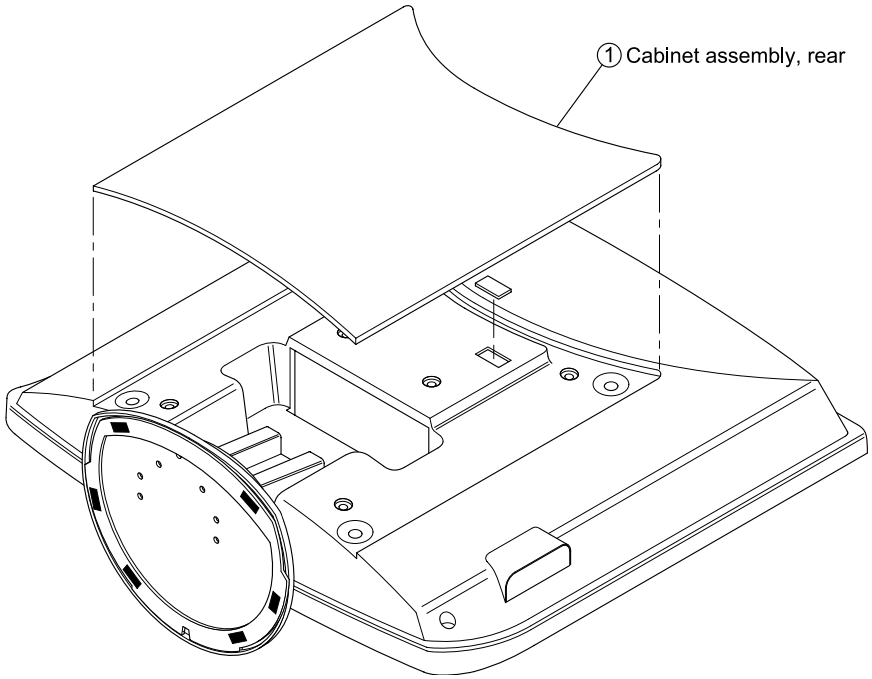
Problem	Possible solution
Stripe noise during playback/recording of a VCR.	Video head interference. Keep your VCR away from the TV. Leave a space of 30 cm between your VCR and the TV set to avoid noise. Avoid installing your VCR in front or at the side of the TV set.
Poor or no picture (screen is dark), but good sound.	Using the menu system, select the “Picture Adjustment” menu and select “Reset” to return to the factory settings (page 19).
Noisy picture when viewing a TV channel.	Using the menu system, select the “Manual Programme Preset” option in the “Set Up” menu and adjust Fine Tuning (AFT) to obtain better picture reception (page 26). Using the menu system, set the "Noise Reduction" option in the “Picture Adjustment” menu to reduce the noise in the picture (page 19).
Distorted picture when changing programmes or selecting teletext.	Turn off any equipment connected to the Scart connector on the rear of the TV set.
Cannot operate the menu	If the item you want to select appears in a pale colour is because you cannot select it.
Wrong characters appear when viewing teletext	Using the menu system, enter the “Country” option in the “Set Up” menu and select the country in which you operate the TV set (page 23).
No sound/Noisy sound	
Good picture, no sound.	Press the +/- or (mute) on the remote control. Check that “TV Speakers” option is set to “On” in the “Features” menu (page 22).
Audio noise.	Make sure that the aerial is connected. Keep the aerial cable away from other connecting cables. Do not use 300-ohm twin lead cables as interference may occur. Communication problems may occur if the infrared communication equipment (e.g. infrared cordless headphones) is used near the TV. Please use headphones other than infrared cordless headphones, move the infrared transceiver away from the TV until the noise is eliminated, or move the transmitter and receiver of the infrared communication equipment closer together. Using the menu system, select “Audio Filter” from the “Manual Programme Preset” menu. Next select “Low” or “High” (see page 26).
Unable to receive a stereo or dual sound broadcast	Check that the “Audio Filter” option in the “Manual Programme Preset” menu is set to “Off”.(see page 26).

Problem	Possible solution
Strange sound	
The TV cabinet creaks.	Changes in room temperature sometimes causes the TV cabinet to expand or contract, which can make slight noises. This does not indicate a malfunction.
The TV buzzes.	There might be a surge sound when turning on the TV. This does not indicate a malfunction.
Remote Control Remote control does not function.	Replace the batteries.
The (standby) or TV (power on) indicators on the TV flashes	Contact your nearest Sony service centre.

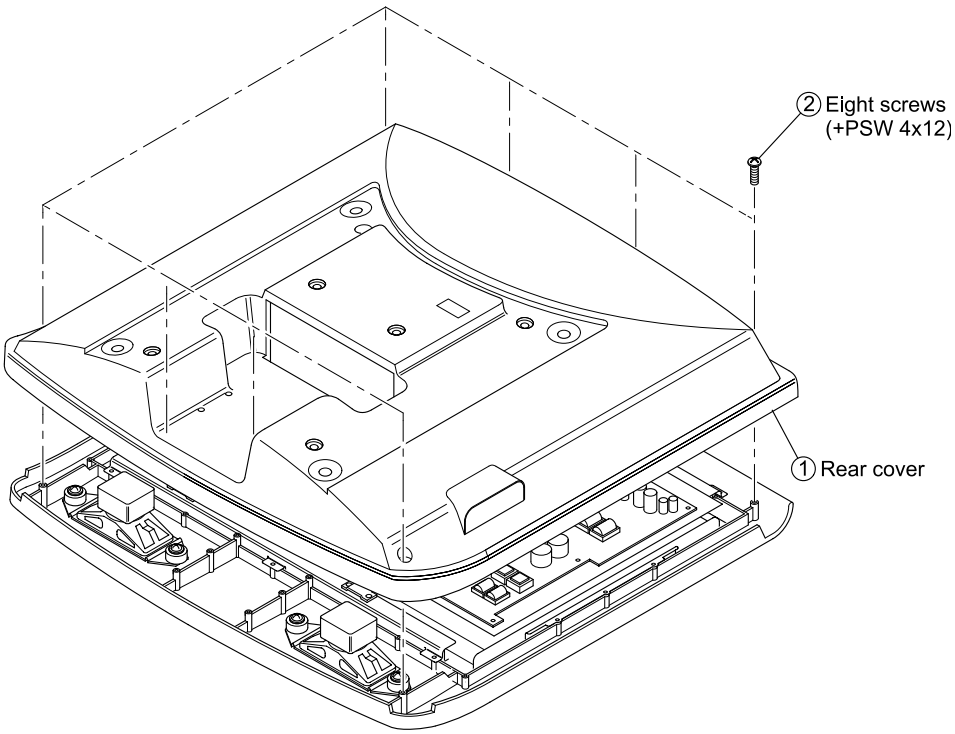
If you continue to experience problems, have your TV serviced by qualified personnel. Never open the casing yourself.

SECTION 2 DISASSEMBLY

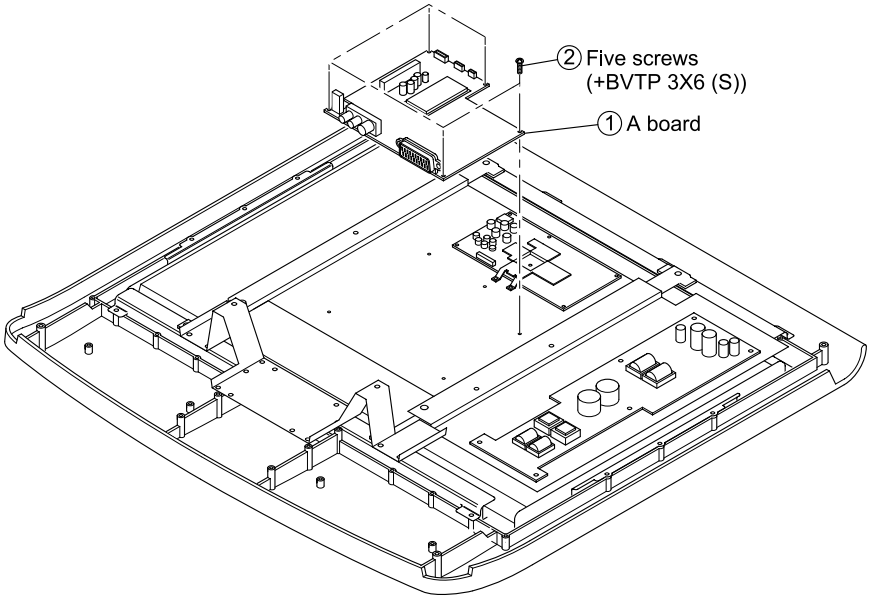
2-1. REAR CABINET ASSEMBLY REMOVAL



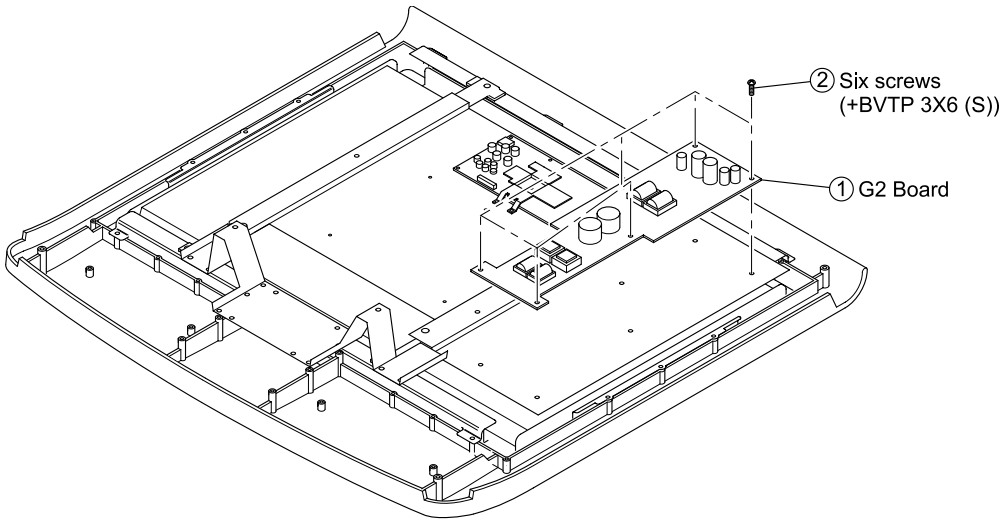
2-2. REAR COVER REMOVAL



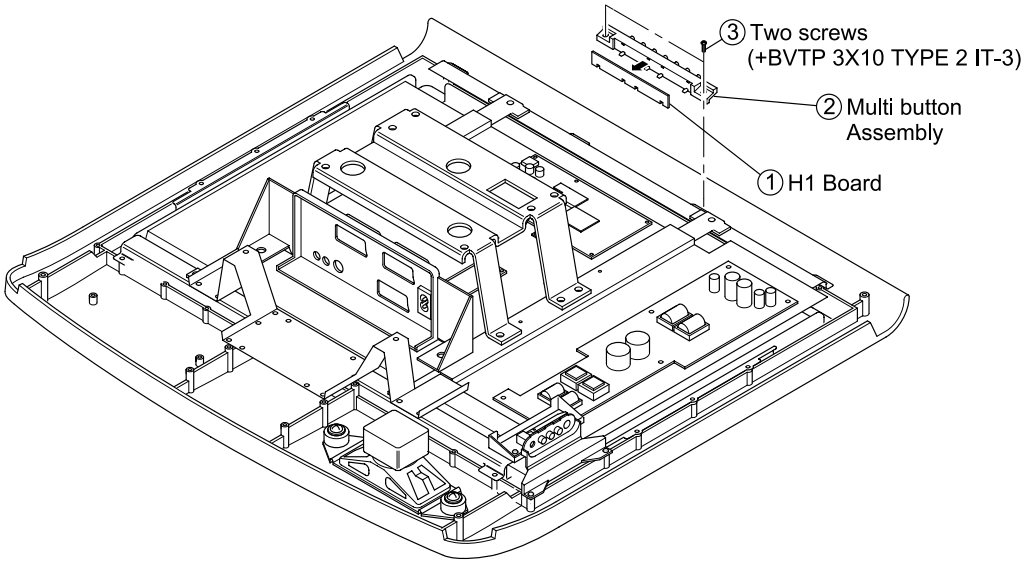
2-3. A BOARD REMOVAL



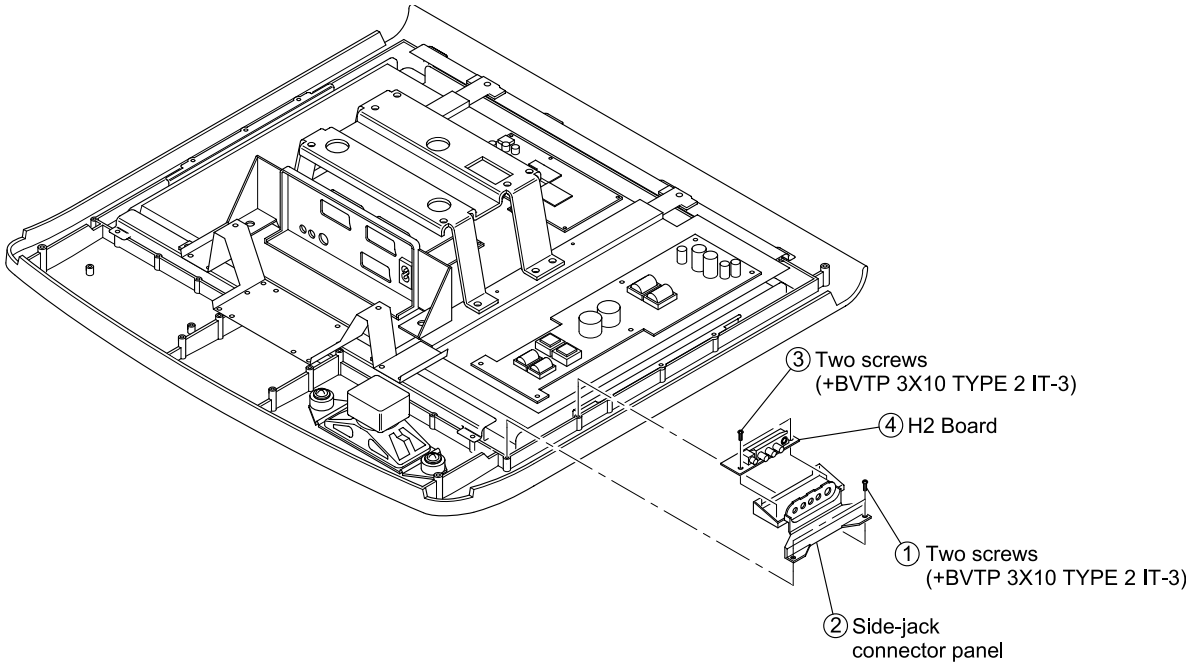
2-4. G2 BOARD REMOVAL



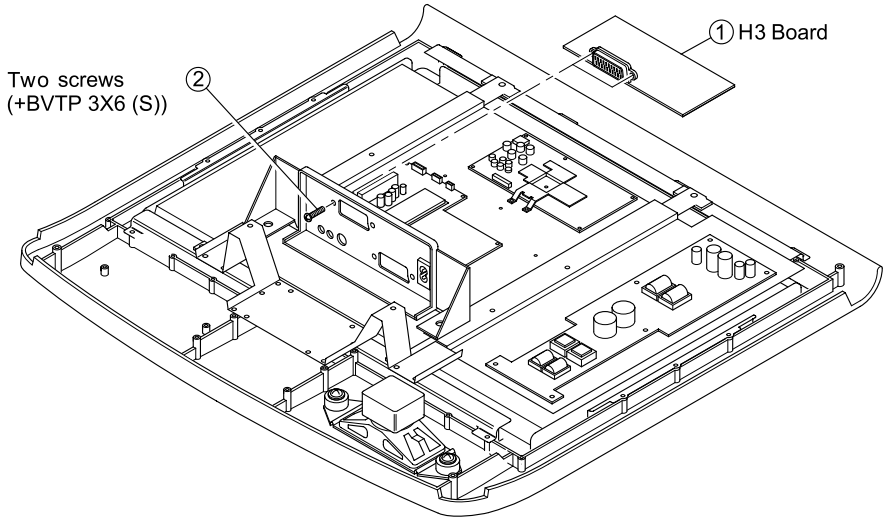
2-5. H1 BOARD REMOVAL



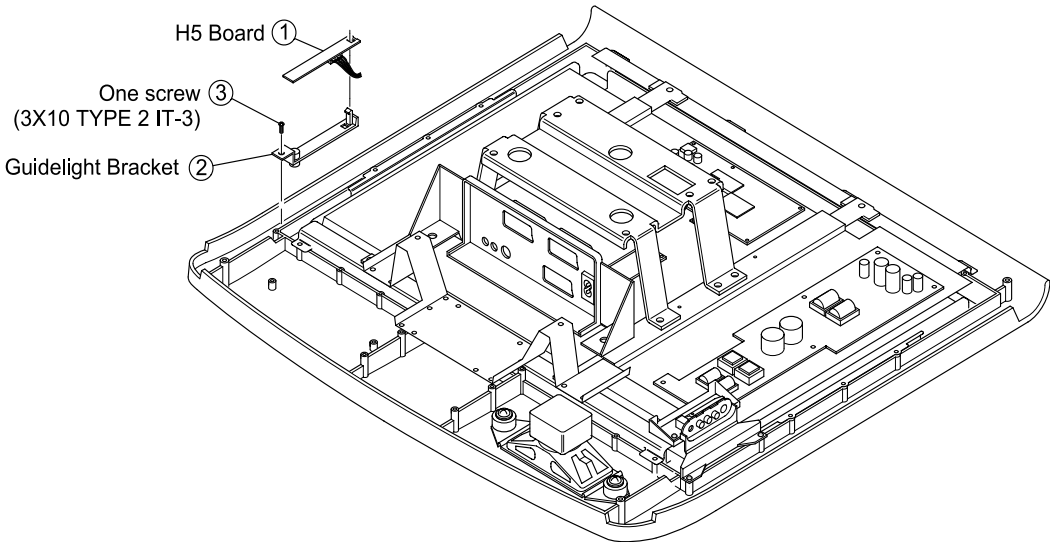
2-6. H2 BOARD REMOVAL



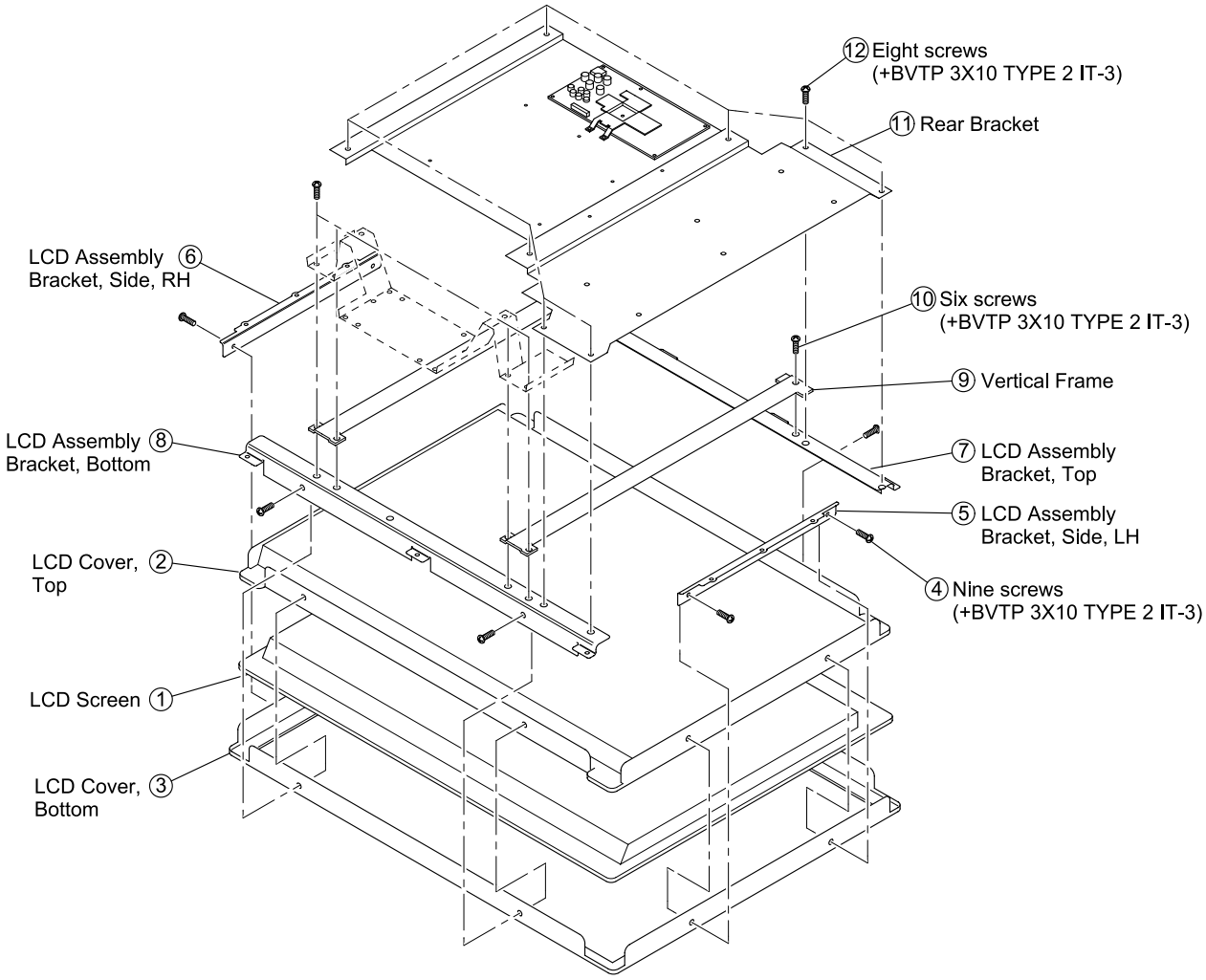
2-7. H3 BOARD REMOVAL



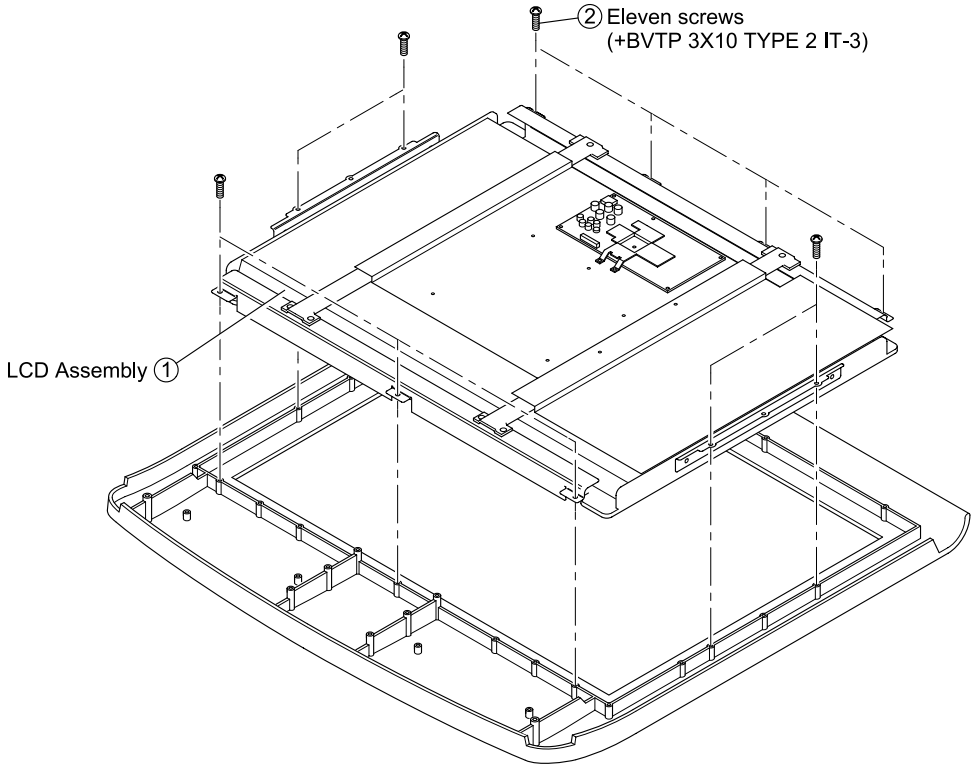
2-8. H5 BOARD REMOVAL



2-9. LCD BRACKET REMOVAL



2-10. LCD ASSEMBLY REMOVAL



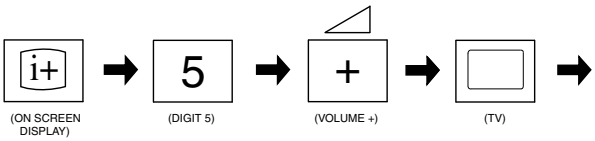
SECTION 3 SET-UP ADJUSTMENTS

3-1. Signal Adjustment

Service adjustments to this model can be performed using the supplied remote Commander RM-Y1108.

How to enter into the Service Mode

1. Turn on the power to the TV set and enter into the stand-by mode.
2. Press the following sequence of buttons on the Remote Commander.



'TT—' will appear in the upper right corner of the screen. Other status information will also be displayed.

3. Press 'MENU' on the remote commander to obtain the following menu on the screen.

TRIDENT PANEL TV
CHROMA DECODER
BACKLIGHT
SOUND
IF ADJUST
SERVICE MENU
ERROR MENU

WA1 v0.29
FACTORY DATA FFh FFh
SERIAL NUMBER : 4294967295

4. Move to the corresponding adjustment item using the up or down arrow buttons on the Remote Commander.
5. Press the right arrow button to enter into the required menu item.
6. Press the 'Menu' button on the Remote Commander to quit the Service Mode when all adjustments have been completed.

Note :

- After carrying out the service adjustments, to prevent the customer accessing the 'Service Menu' switch the TV set OFF and then ON.

3-1-1. PAL auto adjustment (CVBS)

1. Select AV1 and input PAL signal. (PAL CVBS: CB 75%Y/75%C from signal generator).
2. Change the TV to Personal Mode and set the following registers.

Contrast - 90
Brightness - 50
Colour - 50

3. Set the TV in Service Mode (See above) and send "TT51" command.

3-1-2. PAL auto adjustment (RGB)

1. Select AV1 and input RGB signal. (PAL RGB: CB 100%Y/75%C from signal generator).
2. Change the TV to Personal Mode and set the following registers.

Contrast - 90
Brightness - 50
Colour - 50

3. Set the TV in Service Mode (See above) and send "TT52" command.

3-1-3. SECAM auto adjustment (CVBS)

1. Select AV1 and input SECAM signal. (SECAM CVBS: CB 75%Y/75%C from signal generator).
2. Change the TV to Personal Mode and set the following registers.

Contrast - 90
Brightness - 50
Colour - 50

3. Set the TV in Service Mode (See above) and send "TT53" command.

Note :

- While Auto adjustment is in process the RED LED is ON, till it finishes.

3-2. White Balance Adjustment

3-2-1. White Balance adjustment (H/L)

1. Select AV1.
2. Change the TV to Personal Mode and set the following registers.

Contrast - Max
Brightness - 50
Colour - 50
Backlight - Max

3. Input PAL CVBS 70 IRE Full Field Signal to AV1.
4. Enter the 'SERVICE MENU' using the cursor keys on the remote commander.
5. Adjust Highlight registers:

NORMAL_PAL_RD (R Drive)
NORMAL_PAL_BD (B Drive)

High light adjustment value (10500K-6MPCD)

	KLV-27HR3	range
x	0.2798	0.8JND
y	0.2823	
Y	-	N/A

3-2-2. White Balance adjustment (C/O)

1. Select AV1.
2. Change the TV to Personal Mode and set the following registers.

   Contrast - Max
   Brightness - 50
   Colour - 50
   Backlight - Max

3. Input PAL CVBS 20 IRE Full Field Signal to AV1.
4. Enter the 'SERVICE MENU' using the cursor keys on the remote commander.
5. Adjust CutOff registers:

   NORMAL_PAL_RC (R cutoff)
   NORMAL_PAL_BC (B cutoff)

Low light (Cut Off) adjustment value (10500K-6MPCD)

	KLV-27HR3	range
x	0.2798	0.8JND
y	0.2823	
Y	-	N/A

3-2-3. Secam White Balance adjustment (C/O)

1. Select AV1.
2. Change the TV to Personal Mode and set the following registers.

   Contrast - Max
   Brightness - 50
   Colour - 50
   Backlight - Max

3. Input SECAM CVBS 20 IRE Full Field Signal to AV1.
4. Enter the 'SERVICE MENU' using the cursor keys on the remote commander.
5. Adjust CutOff registers:

   SECAM_OFFSET_RC (R cutoff)
   SECAM_OFFSET_BC (B cutoff)

Low light (Cut Off) adjustment value (10500K-6MPCD)

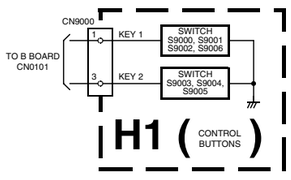
	KLV-27HR3	range
x	0.2760	0.8JND
y	0.2710	
Y	-	N/A

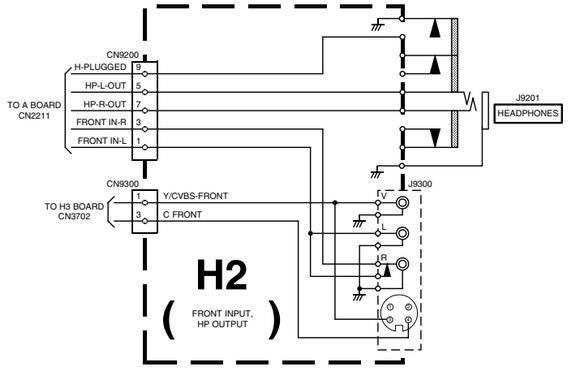
3-3. TEST TEST MODE

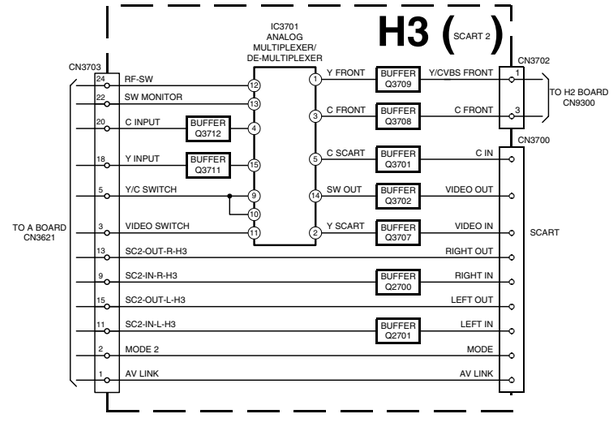
Test Test Mode is available in Service Mode, OSD 'TT' appears. The functions described below are available by selecting the two numbers. To release 'Test Test mode', press 00 or switch the TV set into Stand-by mode.

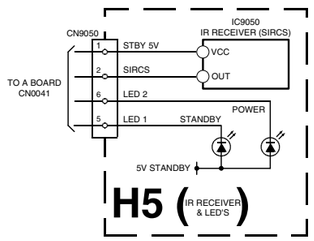
00	'TT' mode off
01	Picture maximum
02	Picture minimum
03	Set Volume to 35%
04	Set Volume to 50%
05	Set Volume to 65%
06	Set Volume to 80%
07	Ageing mode
08	Shipping Condition
16	Picture level 50%
19	Factory Mode toggle (on/off)
25	AEP Destination
27	CBA mode toggle (ON/OFF)
41	Re-initialise NVM
43	Select Dual Sound A
44	Select Dual Sound B
45	Select Dual Sound Mono
46	Select Dual Sound Stereo
48	Set NVM as non-virgin
49	Set NVM as virgin
51	LCD Auto adjustment Pal
52	LCD Auto adjustment RGB
53	LCD Auto adjustment Secam
63	AM from baseband (AFRIC dem) or from RF (MSP dem)
67	MSP Auto Carrier Mute function enable/disable
75	Balance to center position
76	Volume maximum
77	Volume minimum
78	Balance full left
79	Balance full right
81	Set 14:9 zoom mode
82	Set Smart zoom mode
83	Set Wide mode
84	Set Zoom mode
85	Set 4:3 mode
87	Local keys test
93	Set 20" settings
94	Set 17" settings
95	Set 30" settings
96	Set 27" settings
97	Freeze key
99	Display Error and Working Time menu

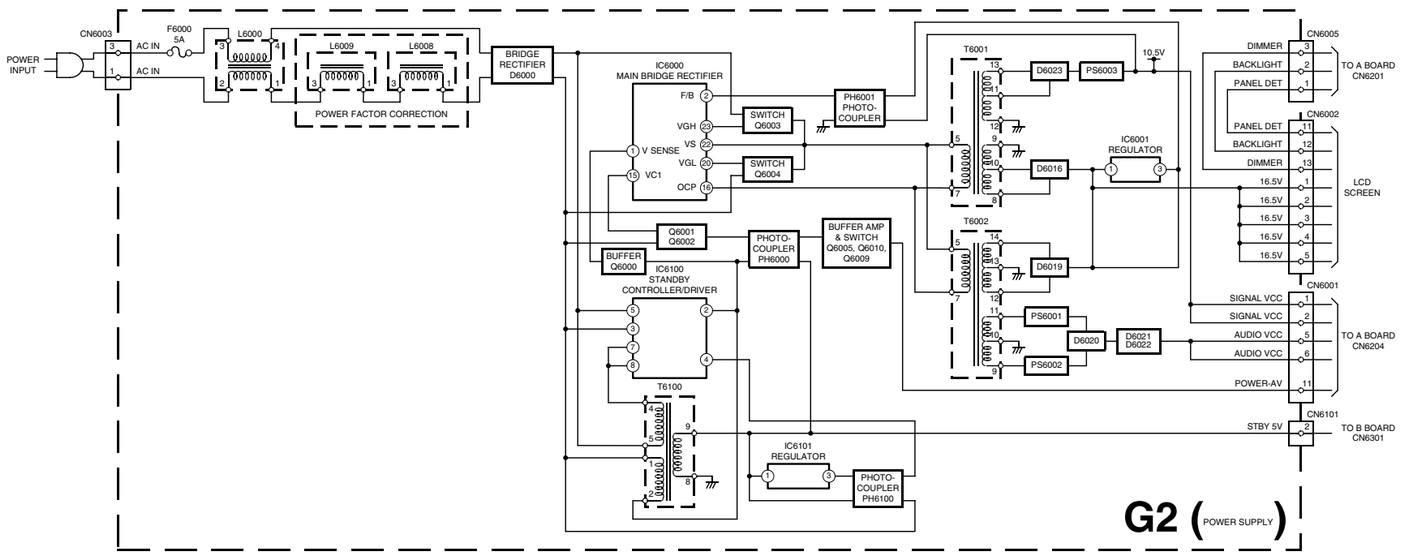
4-1. BLOCK DIAGRAMS (1)



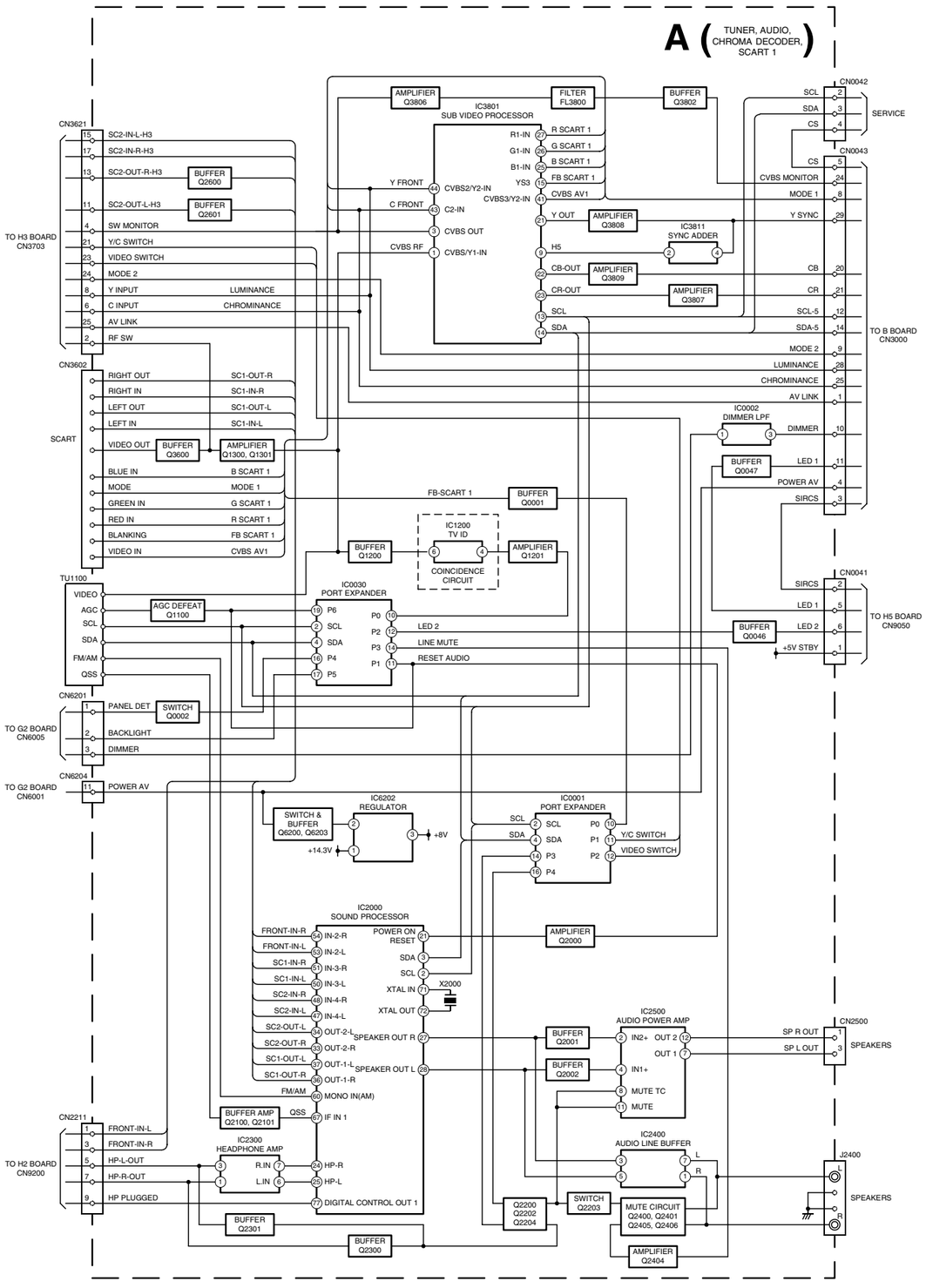




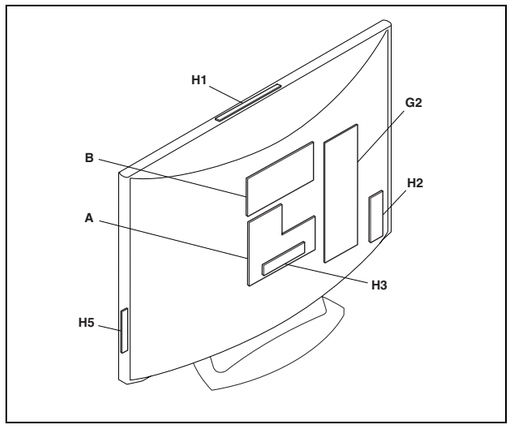




4-1. BLOCK DIAGRAMS (2)



4-2. CIRCUIT BOARD LOCATION



4-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

- All capacitors are in µF unless otherwise noted.
- pF : µµF 50WV or less are not indicated except for electrolytic types.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5mm Electrical power rating : 1/4W

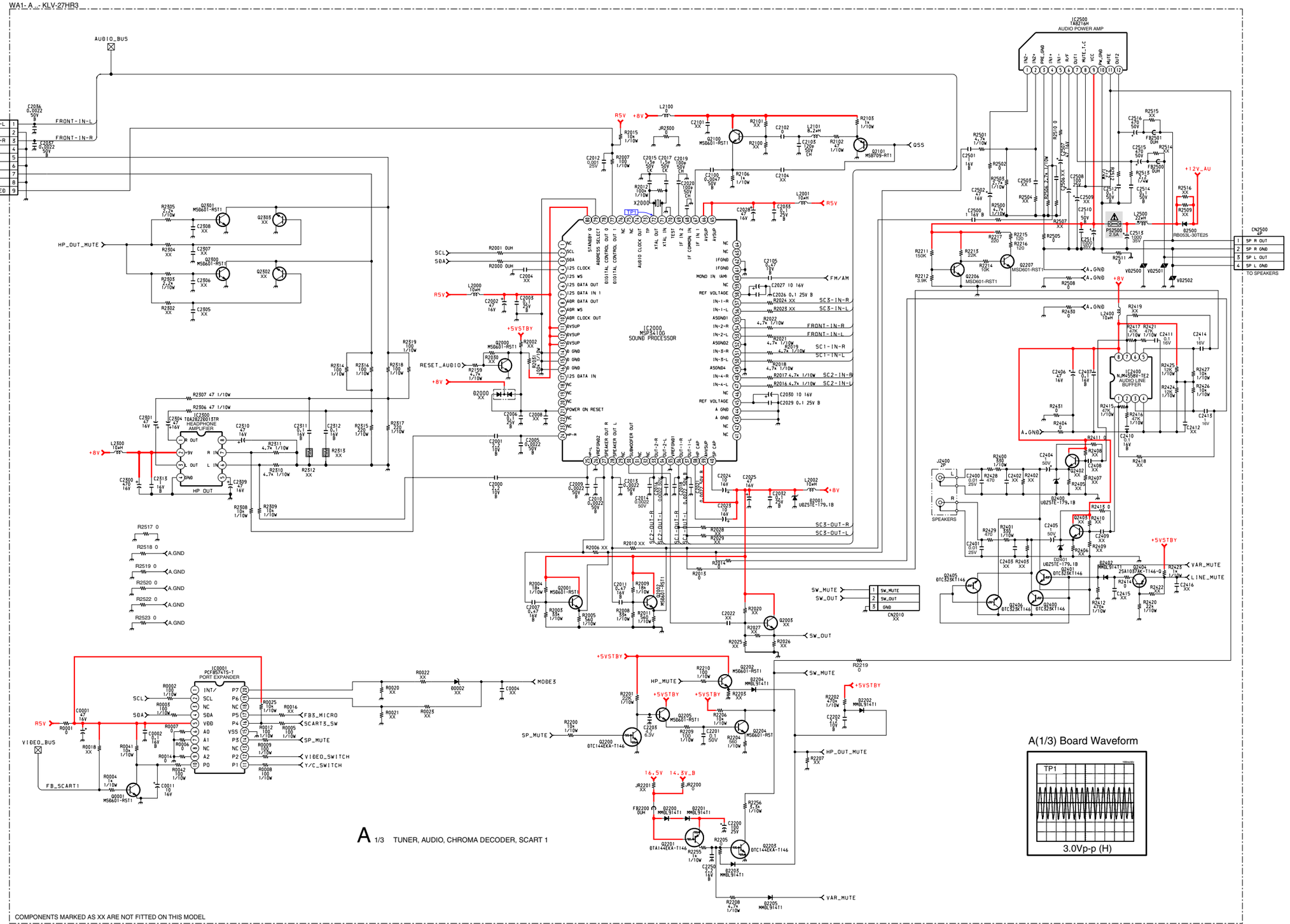
- Chip resistors are 1/10W
- All resistors are in ohms.
  k = 1000 ohms, M = 1000,000 ohms
- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in Volts.
- Readings are taken with a 10Mohm digital mutimeter.
- Readings are taken with a color bar input signal.
- Voltage variations may be noted due to normal production tolerences.
- : B + bus.
- : B - bus.
- : RF signal path.
- : earth - ground.
- : earth - chassis.

Reference Information

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

Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part numbers specified in the parts list.

Note : Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié. specified.



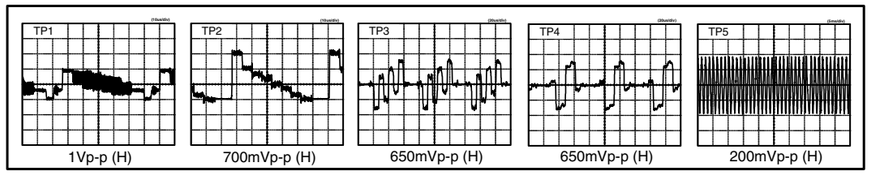
~ A Board Schematic Diagram [Tuner, Audio, Chroma Decoder, Scart 1] Page 1/3 ~

~ A Board Schematic Diagram [Tuner, Audio, Chroma Decoder, Scart 1] Page 2/3 ~

WA1- A .- KLV-27HR3

A 3/3

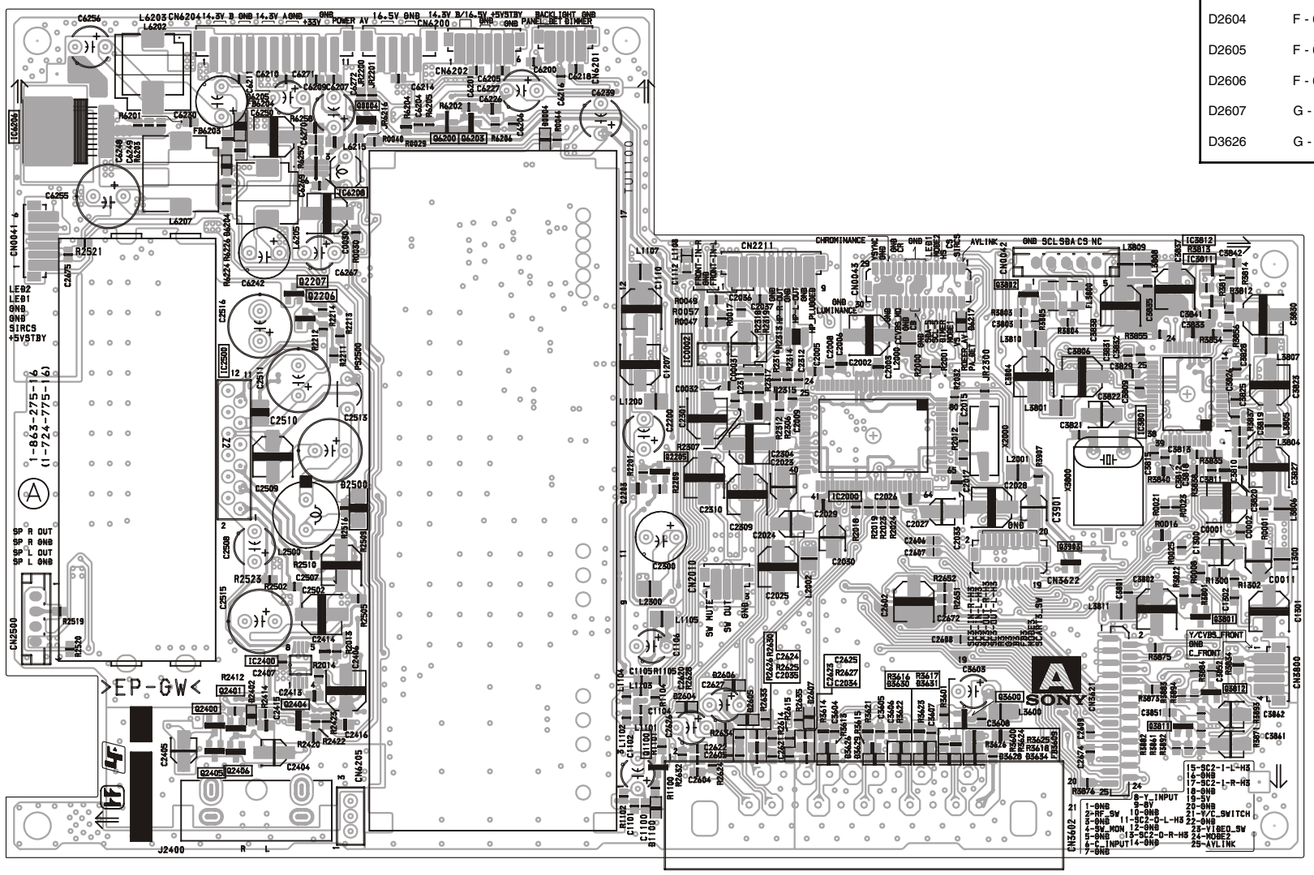
A(3/3) Board Waveforms



COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL

~ A Board Schematic Diagram [Tuner, Audio, Chroma Decoder, Scart 1] Page 3/3 ~

~ A Printed Wiring Board Conductor Side A ~



~ A Board Semiconductor Location Table Side A ~

DIODE		D3628	H - 6	D6217	H - 3	IC3811	I - 3	Q2404	C - 6
D2402	C - 6	D3629	G - 6	IC		IC6208	D - 3	Q2405	C - 6
D2604	F - 6	D3630	G - 6	IC0002	F - 4	TRANSISTOR		Q2406	C - 6
D2605	F - 6	D3631	G - 6	IC2000	G - 4	Q1100	F - 6	Q3600	H - 6
D2606	F - 6	D3634	H - 6	IC2400	C - 6	Q2205	F - 4	Q3801	I - 5
D2607	G - 6	D6204	C - 3	IC2500	C - 4	Q2400	C - 6	Q6200	D - 2
D3626	G - 6	D6205	C - 2	IC3801	I - 4	Q2401	C - 6	Q6203	E - 2

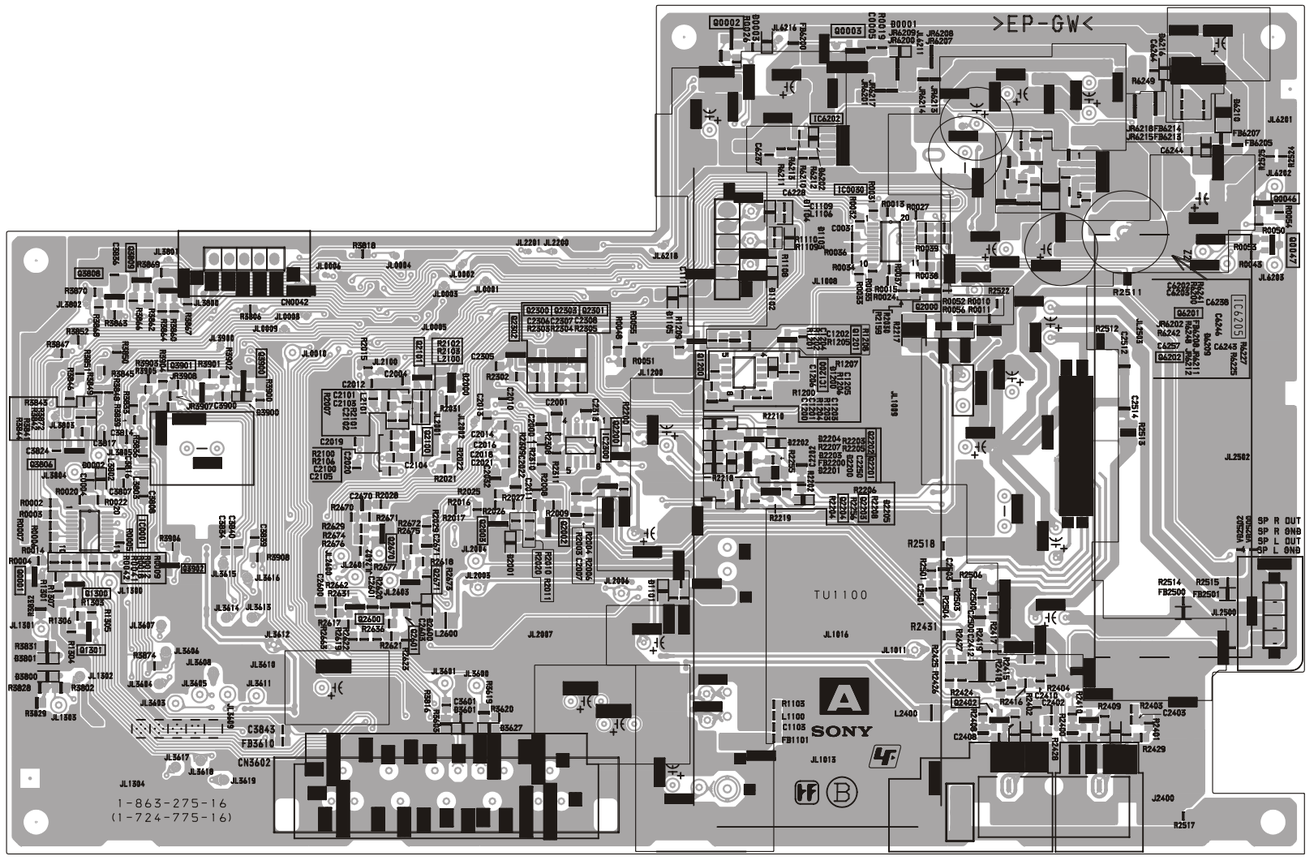
~ A Board Semiconductor Voltage Table ~

Ref	(e)(s)	(b)(g)	(c)(d)	Ref	(e)(s)	(b)(g)	(c)(d)	Ref	(e)(s)	(b)(g)	(c)(d)
Q1100	0	0	4.4	Q2404	0.6	0	0.6	Q3801	2.1	1.4	0
Q2205	0.3	0	5.0	Q2405	0	0.3	0	Q3802	2.0	1.3	0
Q2400	0	0.3	0	Q2406	0	0.3	0	Q6200	0	3.2	0
Q2401	0	0.3	0	Q3600	2.5	3.1	5.1	Q6203	0	0	7.1

~ A Board IC Voltage Table ~

Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)
IC0002	1	3.1	IC2000	13	5.0	IC2000	34	3.8	IC2000	53	3.7	IC2000	72	2.3	IC2500	1	1.5	IC3801	6	5.1	IC3801	18	0	IC3801	30	0	IC3801	42	5.0
	2	1.6		14	0		35	0		54	3.7		77	0		2	1.5		7	2.6		19	0		31	0		43	1.7
	3	1.6		15	0		36	3.7		56	3.7		79	0		3	0		8	0		20	2.4		32	5.0		44	2.0
	4	0		16	0		37	3.7		57	3.7		80	5.0		5	1.5		9	0.3		21	1.7		33	2.5	IC3801	45	5.0
	5	2.5		21	4.7		38	7.2		58	2.6	IC2400	1	4.1		7	13.5		10	0.8		22	1.8		34	2.5		46	2.3
	6	2.5		24	0		39	8.1		60	3.7		2	4.1		9	28.8		11	2.5		23	1.8		35	2.5		47	3.8
	7	2.5		25	0		40	7.1		65	5.0		3	4.1		11	2.9		12	5.1		24	0		36	0		48	1.8
	8	5.1		26	0		45	3.7		66	5.0		4	0	IC3801	1	2.4		13	3.7		25	2.5		37	1.1	IC3811	1	0
IC2000	2	3.5		27	0.2		47	3.7		67	1.5		5	4.1		2	2.1		14	3.7		26	2.5		38	4.0		2	0
	3	3.7		28	0.2		48	3.7		68	1.5		6	4.1		3	1.4		15	0		27	2.5		39	1.7		3	0.3
	11	5.0		30	0.2		50	3.7		70	0		7	4.1		4	0.2		16	0		28	0		40	3.1		4	4.4
	12	5.0		33	3.8		51	3.7		71	2.4		8	8.1		5	2.0		17	0		29	0		41	2.0		5	5.0

~ A Printed Wiring Board Conductor Side B ~

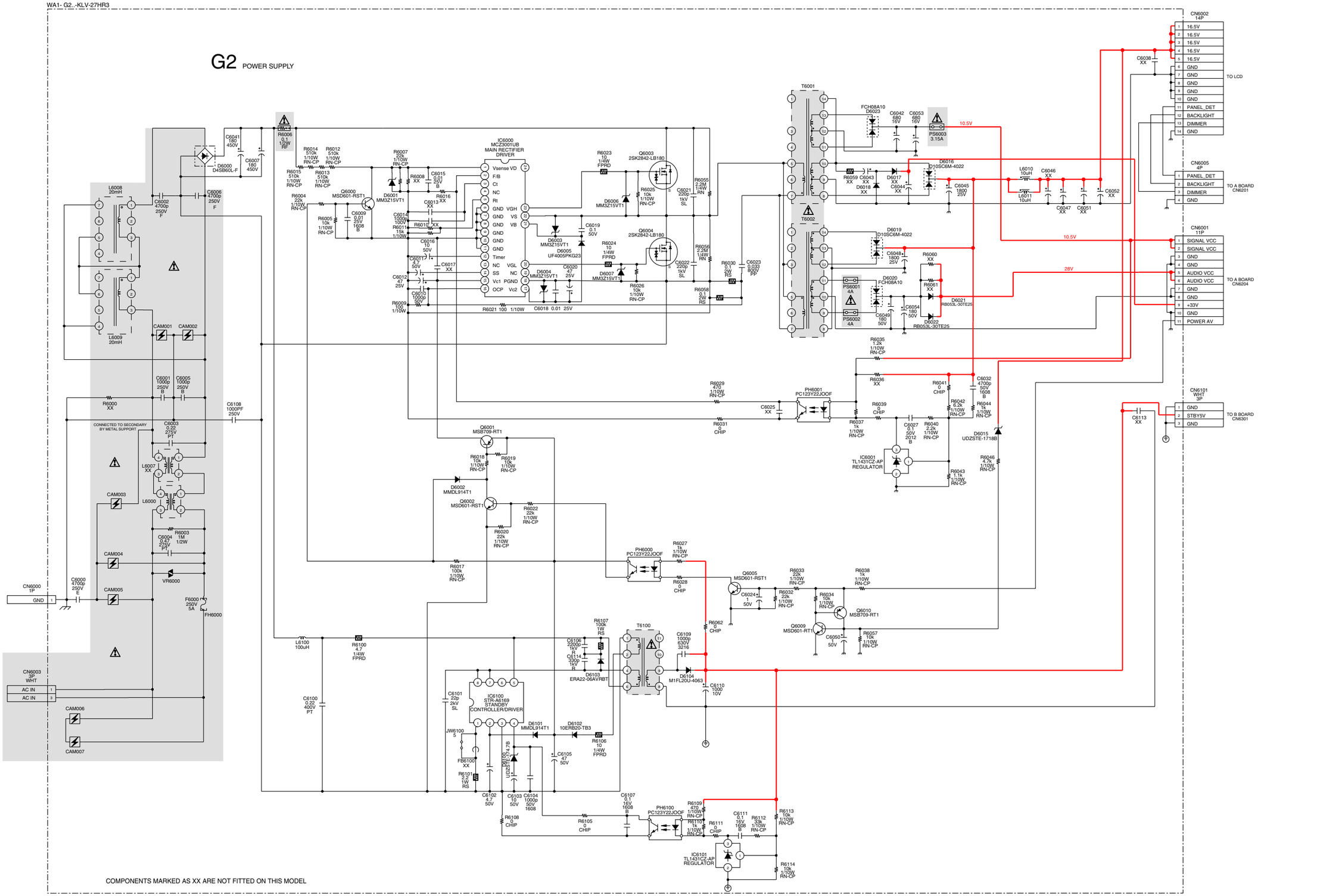


~ A Board Semiconductor Location Table Side B ~

DIODE		D2201	G - 4	D2600	D - 5	IC		IC6202	G - 2	Q0046	J - 3	Q1301	B - 6	Q2200	E - 4	Q2300	E - 4	Q3806	B - 4
D0002	B - 5	D2202	G - 4	D3601	D - 6	IC0001	B - 5	IC6205	J - 4	Q0047	J - 3	Q2000	H - 3	Q2201	G - 4	Q2301	E - 4	Q3808	B - 3
D1200	G - 4	D2203	G - 4	D3627	E - 6	IC0030	G - 3	TRANSISTOR		Q1200	F - 4	Q2002	E - 5	Q2202	G - 4	Q2600	D - 5	Q3809	B - 3
D2001	E - 5	D2204	G - 4	D6202	G - 3	IC1200	G - 4	Q0001	B - 5	Q1201	G - 4	Q2100	D - 4	Q2203	G - 5	Q2670	D - 5	Q3900	C - 4
D2200	G - 4	D2205	G - 5	D6209	I - 4	IC2300	E - 4	Q0002	F - 2	Q1300	B - 5	Q2101	D - 4	Q2204	G - 5	Q2671	D - 5	Q3901	C - 4

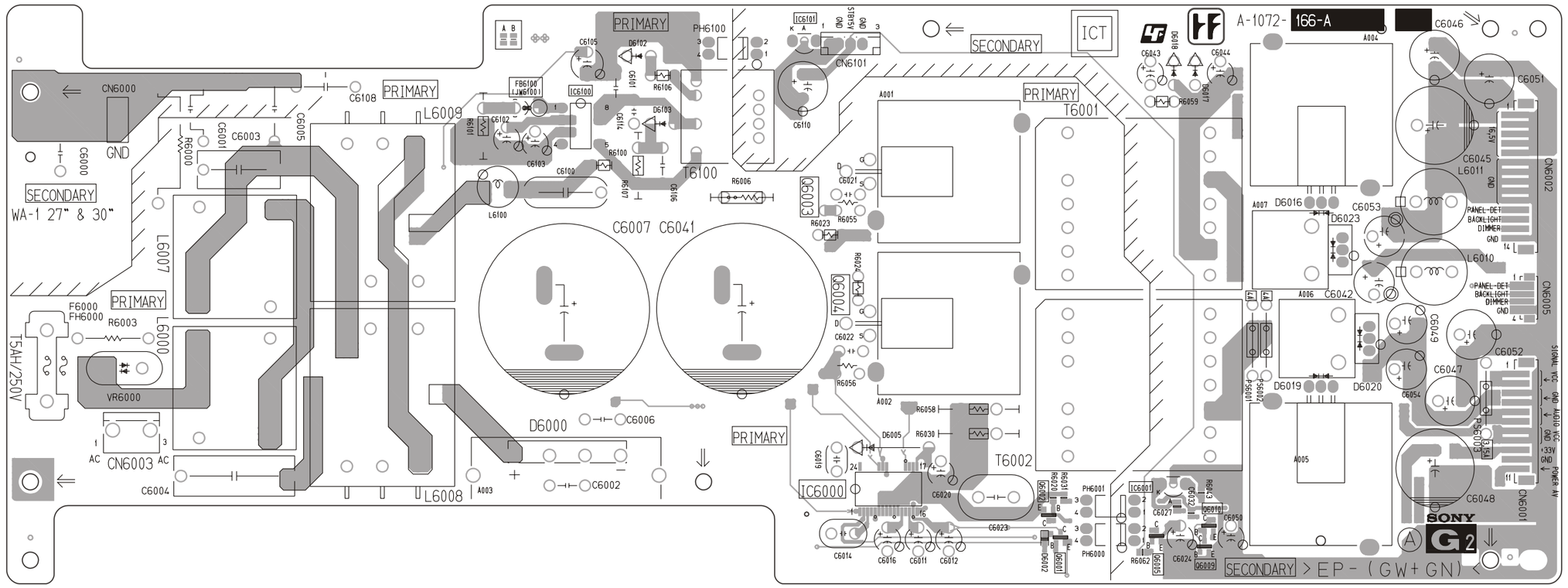
WA1- G2..-KLV-27HR3

G2 POWER SUPPLY



~ G2 Board Schematic Diagram [Power Supply] ~

~ G2 Printed Wiring Board Conductor Side A ~



~ G2 Board IC Voltage Table ~

Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)
IC6000	1	-0.3	IC6000	24	-0.3
	2	-0.3	IC6001	1	2.5
	3	-0.3		3	7.5
	5	-0.3	IC6100	1	-0.3
	12	-0.3		2	-0.3
	14	-0.3		3	-0.3
	15	-0.3		4	-0.3
	16	-0.3		5	0.3
	17	-0.3		7	0.3
	20	-0.3		8	0.3
	21	-0.3	IC6101	1	2.5
	23	-0.3		3	3.2

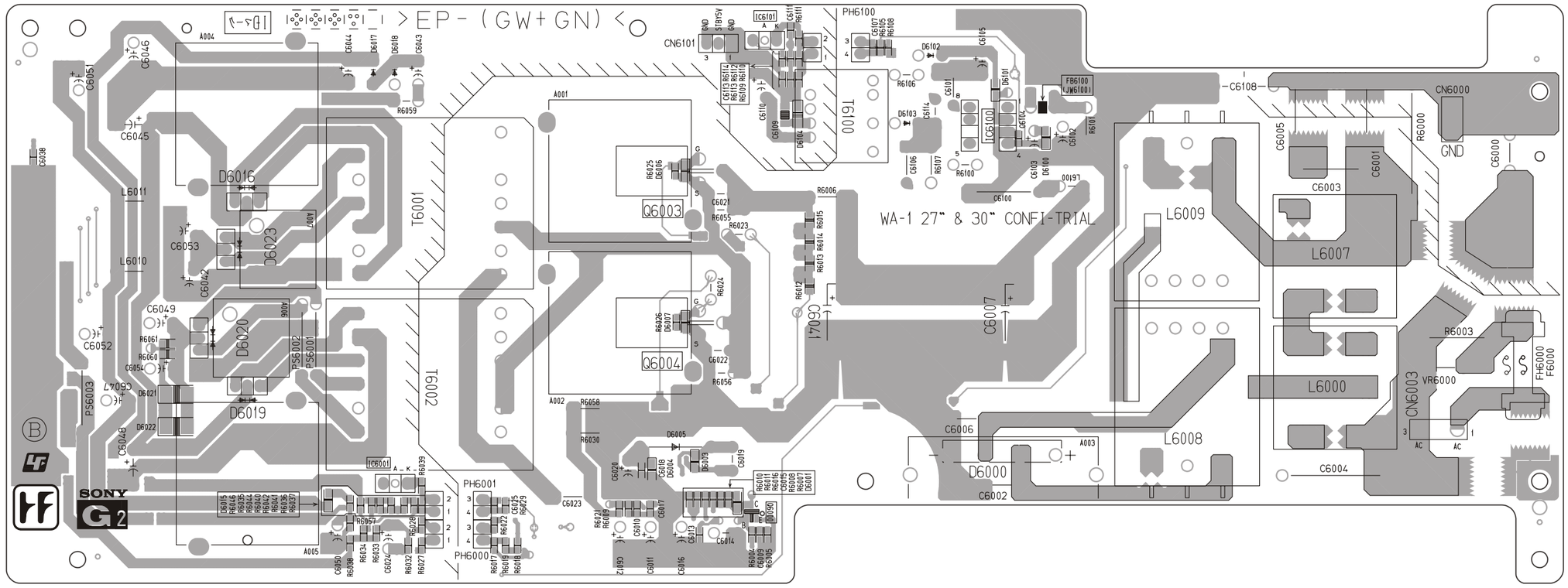
~ G2 Board Semiconductor Voltage Table ~

Ref	(e)(s)	(b)(g)	(c)(d)	Ref	(e)(s)	(b)(g)	(c)(d)	Ref	(e)(s)	(b)(g)	(c)(d)	Ref	(e)(s)	(b)(g)	(c)(d)
Q6000	0	0	0	Q6002	-0.3	-0.3	-0.3	Q6004	-0.3	-0.3	-0.3	Q6009	0	0	3.1
Q6001	-0.3	-0.3	-0.3	Q6003	0.3	0.3	0.3	Q6005	0	0.6	0	Q6010	3.1	3.1	0

~ G2 Board Semiconductor Location Table Side A ~

DIODE						IC				TRANSISTOR					
D6000	E - 5	D6005	H - 5	D6020	L - 4	D6103	F - 2	IC6001	J - 5	Q6001	J - 5	Q6003	H - 3	Q6009	K - 5
D6002	J - 5	D6016	L - 3	D6023	L - 3	IC6000	H - 5	IC6100	F - 2	Q6002	J - 5	Q6004	H - 4	Q6010	K - 5
		D6019	L - 4	D6102	F - 1			IC6101	G - 1			Q6005	J - 5		

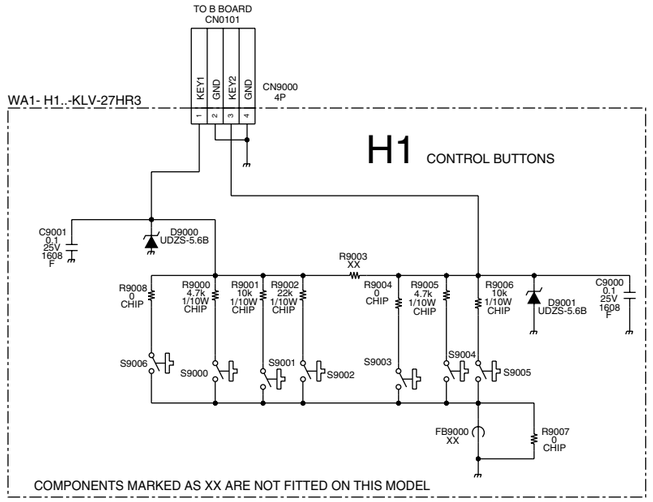
~ G2 Printed Wiring Board Conductor Side B ~



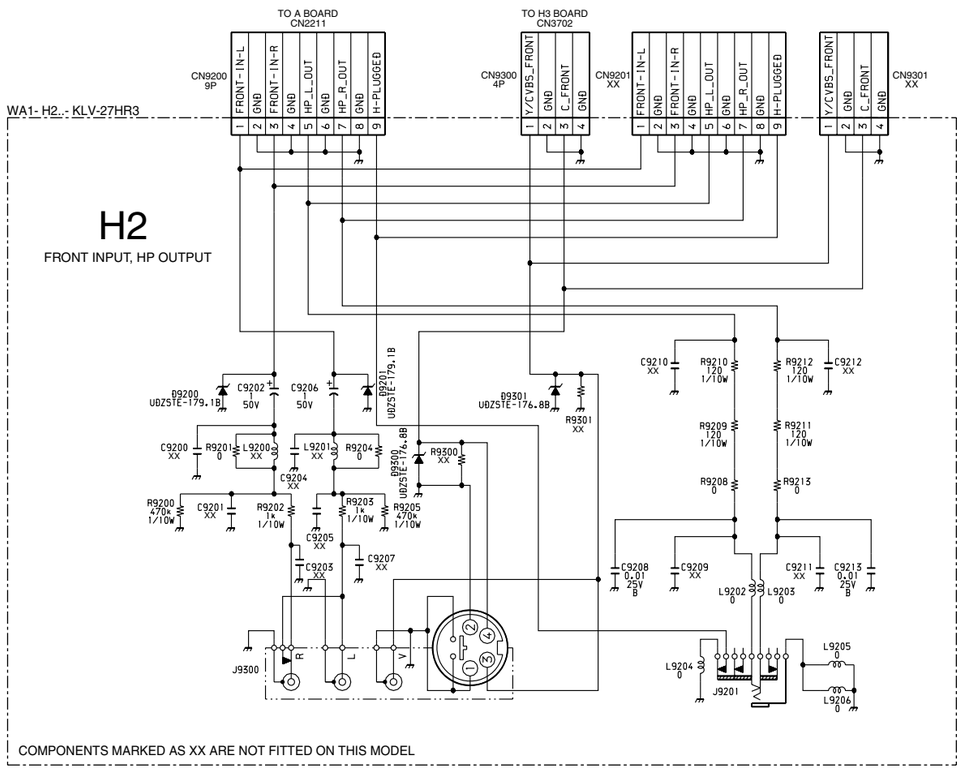
~ G2 Board Semiconductor Location Table Side B ~

DIODE		D6019	C - 4	D6104	H - 2
D6000	I - 5	D6020	C - 4	**IC**	
D6001	G - 5	D6021	B - 4	IC6001	D - 5
D6003	G - 5	D6022	B - 5	IC6100	I - 2
D6004	F - 5	D6023	C - 3	IC6101	G - 1
D6005	F - 5	D6100	J - 2	**TRANSISTOR**	
D6006	F - 2	D6101	I - 2	Q6000	G - 5
D6007	F - 4	D6102	I - 1	Q6003	F - 3
D6015	D - 5	D6103	H - 2	Q6004	F - 4

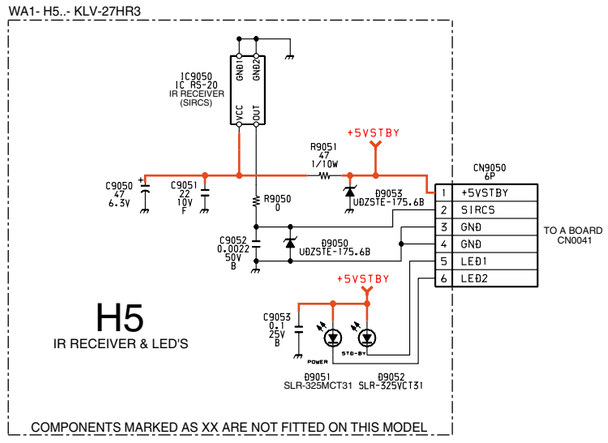
~ H1 Board Schematic Diagram [Control Buttons] ~



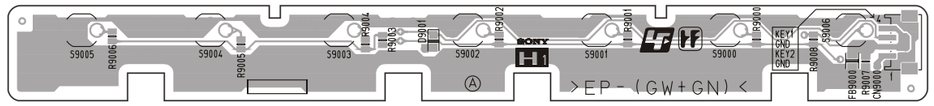
~ H2 Board Schematic Diagram [Front Input, HP Output] ~



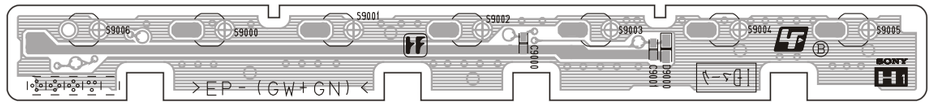
~ H5 Board Schematic Diagram [IR Receiver & LED's] ~



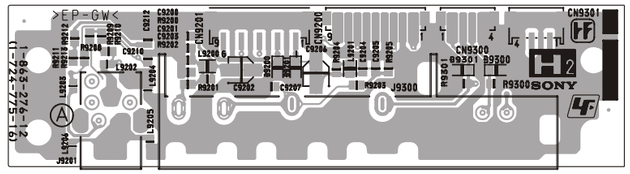
~ H1 Printed Wiring Board Conductor Side A ~



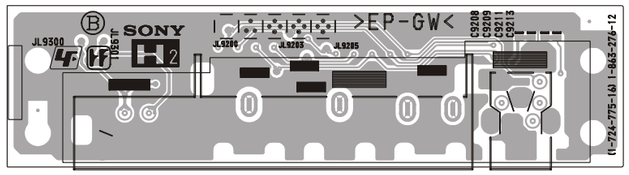
~ H1 Printed Wiring Board Conductor Side B ~



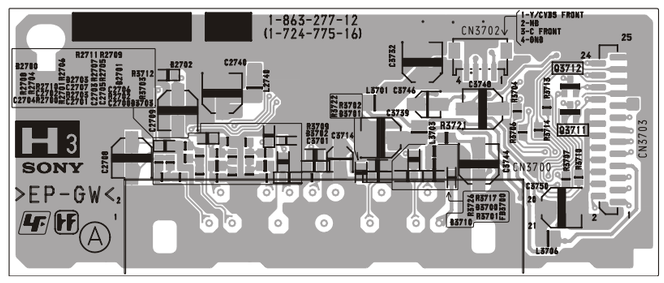
~ H2 Printed Wiring Board Conductor Side A ~



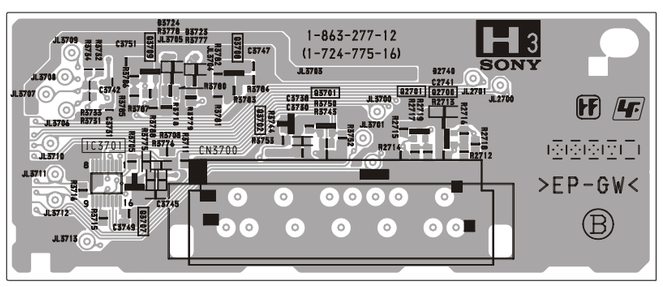
~ H2 Printed Wiring Board Conductor Side B ~



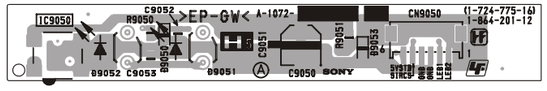
~ H3 Printed Wiring Board Conductor Side A ~



~ H3 Printed Wiring Board Conductor Side B ~

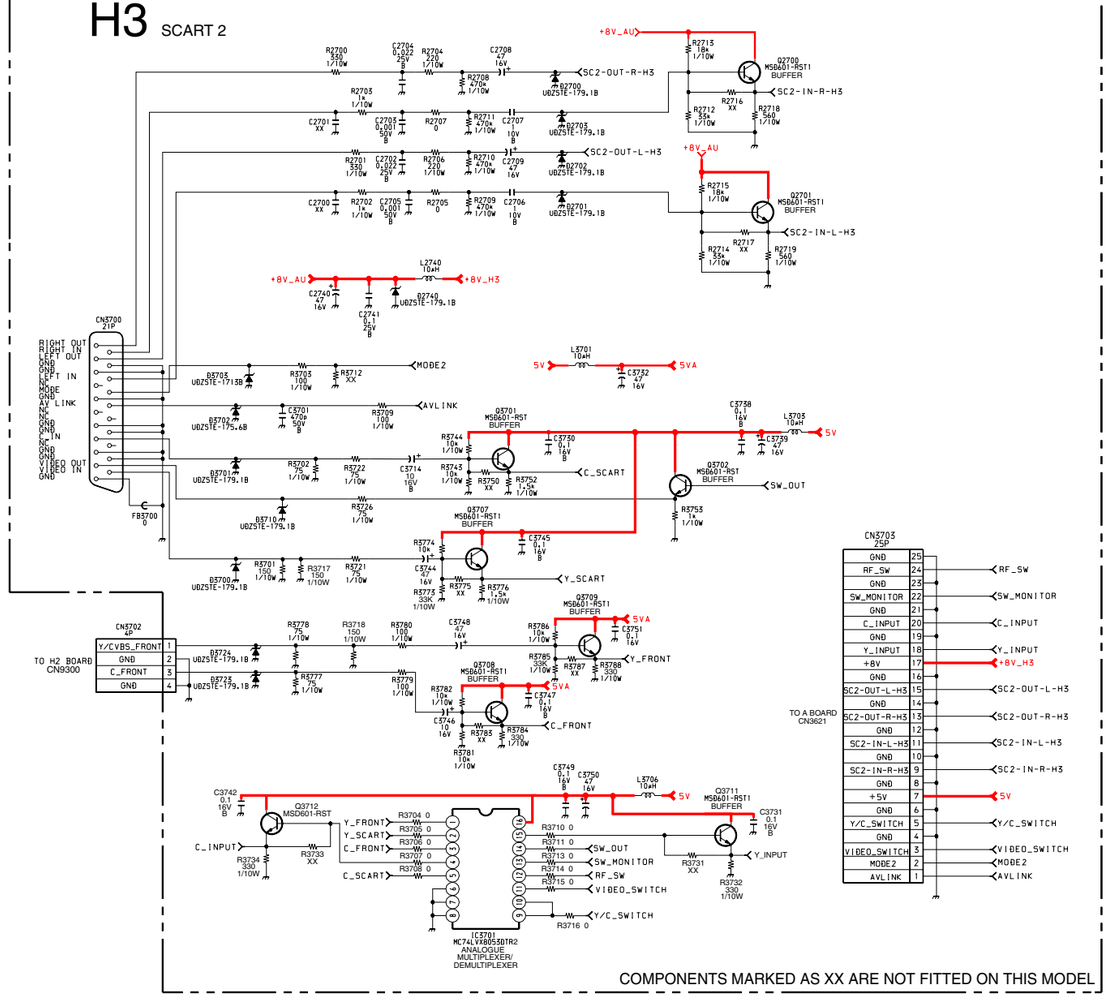


~ H5 Printed Wiring Board Conductor Side A ~



~ H5 Printed Wiring Board Conductor Side B ~

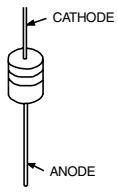
WA1- H3..- KLV-27HR3



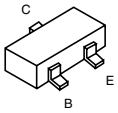
~ H3 Board Schematic Diagram [Scart 2] ~

4-4. SEMICONDUCTORS

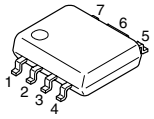
10ERB20-TB3
ERA22-08



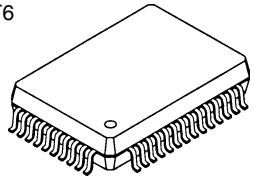
2SA1037AK-T146
2SK2036(TE85L)
2SK2158-T2B
DTA144EKA-T146
DTC144EKA
DTC323TK
MSB709-RT1
MSD601-RST1
MSD601-RT1



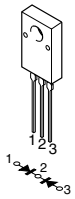
BA7046F
MM1115XFBE



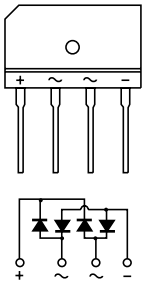
CXA2163AQ-T6



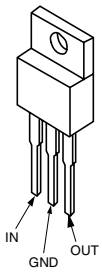
D10SC6M-4022



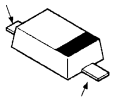
D4SBS60L



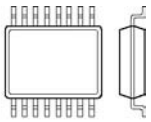
FCH08A10



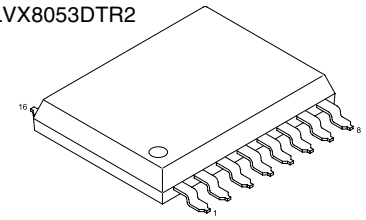
M1FL20U-4063
RB160M-30TR



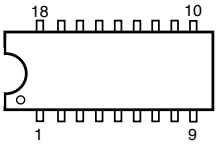
MC74HC4053AFEL



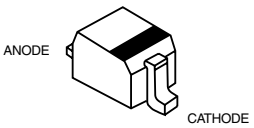
MC74LVX8053DTR2



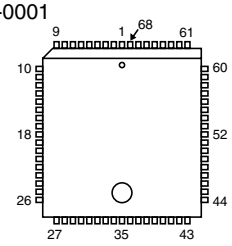
MCZ3001UB



DTZ-TT11-6.8B
MMDL914T1
MM3Z15VT1
UDZSTE-1713B
UDZSTE-1718B
UDZSTE-174.7B
UDZSTE-175.6B
UDZSTE-176.2B
UDZSTE-179.1B

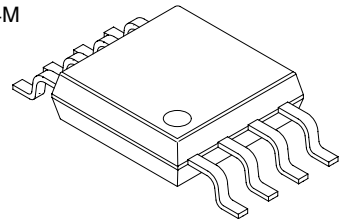


MSP3410G-QA-C12-0001

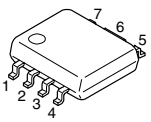


(TOP VIEW)

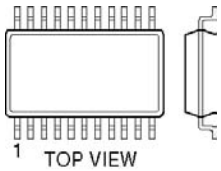
NJM2904M



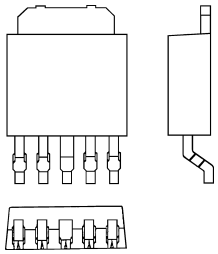
NJM4558V-TE2



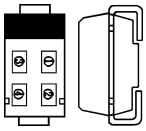
PCF8574TS-T



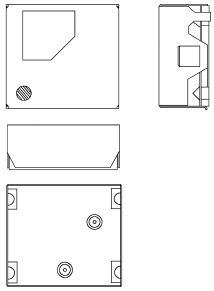
PQ1CZ41H2ZPH
PQ20WZ1UJ00H



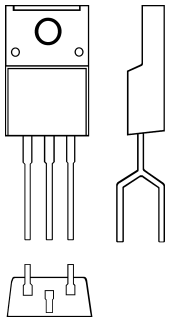
PTZ-TE25-30B
RB053L-30TE25



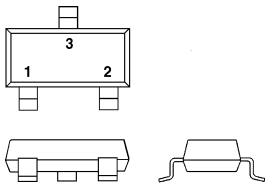
RS-20



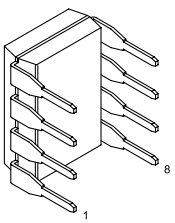
S2K2842-LB180



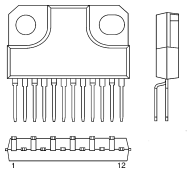
SI2301DS-T1



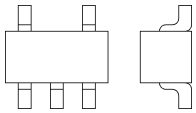
STR-A6169



TA8216H



TC7SET02FU(TE85R)



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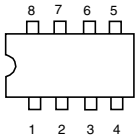
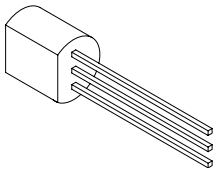


TL1431CZ-AP



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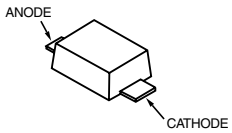


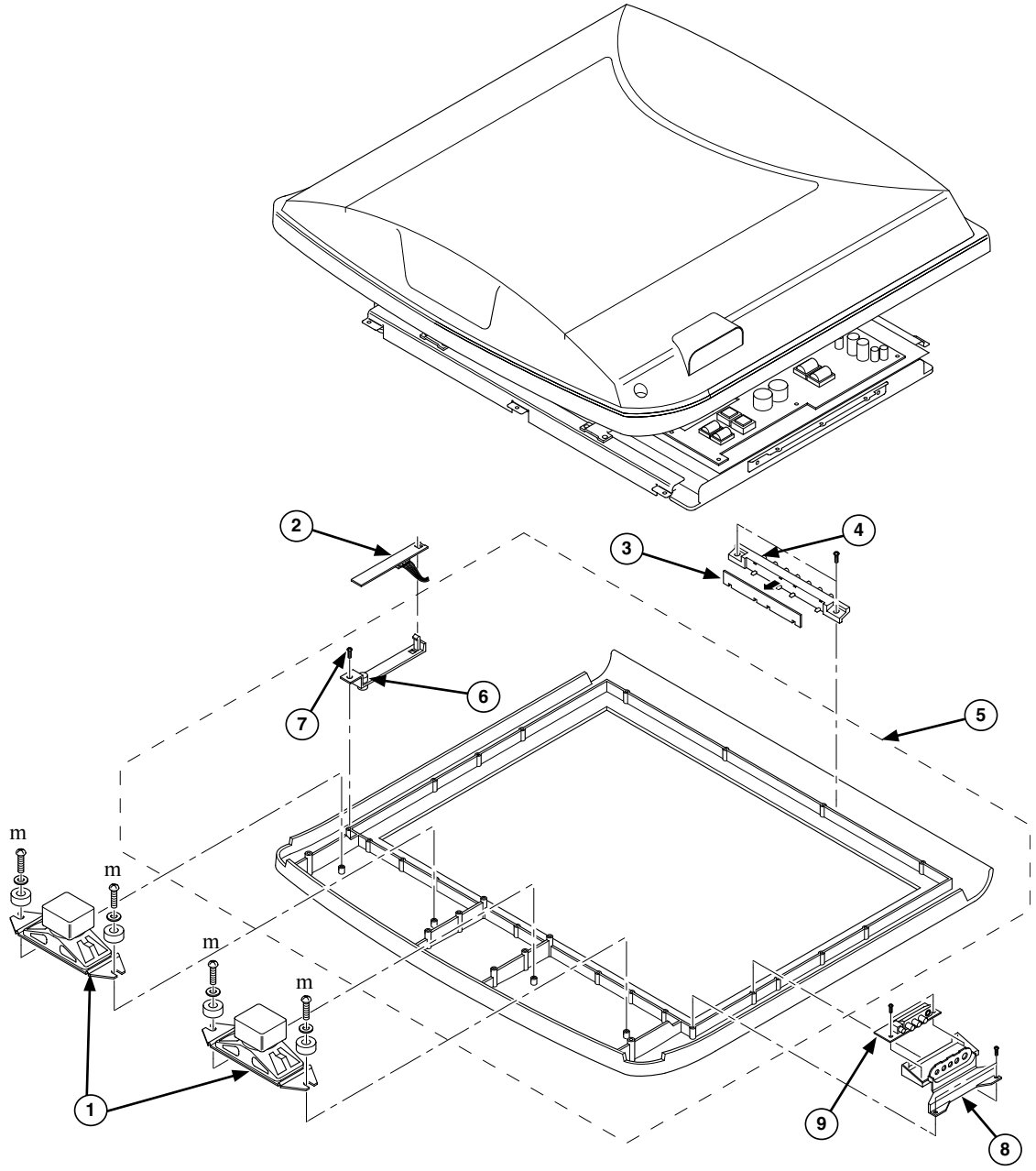
SECTION 5
EXPLODED VIEWS

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

5-1. FRONT CABINET ASSY

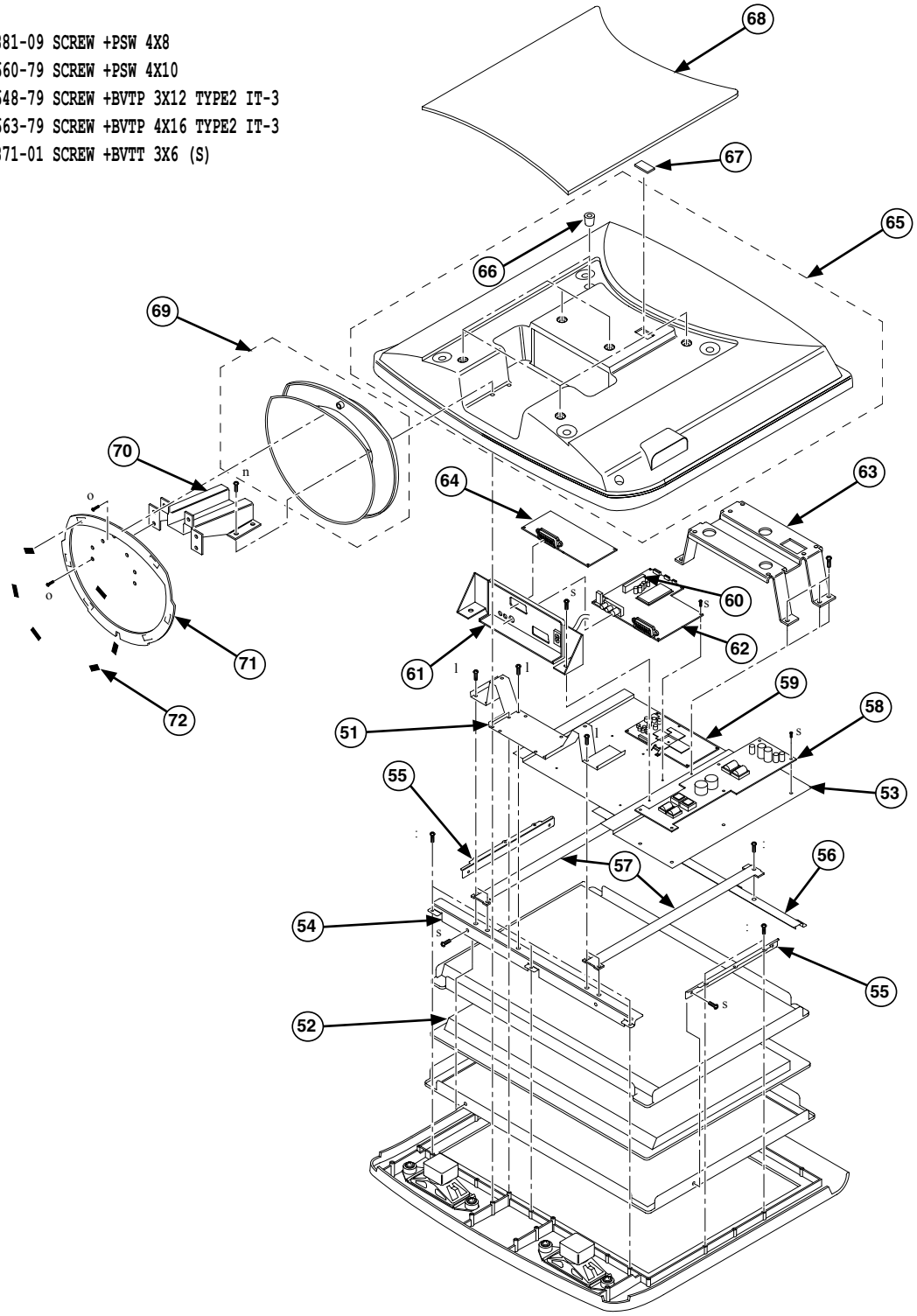
m 4-058-870-01 SCREW, (4X16) W (+) P TAPPING



REF.NO.	PART.NO	DESCRIPTION	REMARK
1	1-826-042-11	LOUDSPEAKER (5X15CM)	
2	*A-1057-434-A	H5 BOARD, COMPLETE	
3	*A-1072-345-A	H1 BOARD, COMPLETE	
4	2-021-161-01	BUTTON, MULTI	
5	X-2024-916-1	FRONT CABINET ASSY(27) BLACK	6, 7
	X-2024-912-1	FRONT CABINET ASSY(27) SILVER	6, 7
6	2-349-912-01	GUIDE LIGHT (PAINTED) BLACK	
	2-178-831-01	GUIDE LIGHT (PAINTED) SILVER	
7	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	
8	*2-178-821-01	SIDE TERMINAL BRACKET	
9	*A-1068-281-A	H2 BOARD, COMPLETE	

5-2. REAR COVER, REAR CABINET ASSY, STAND ASSY AND CHASSIS

l 7-685-881-09 SCREW +PSW 4X8
o 7-685-660-79 SCREW +PSW 4X10
: 7-685-648-79 SCREW +BVTP 3X12 TYPE2 IT-3
n 7-685-663-79 SCREW +BVTP 4X16 TYPE2 IT-3
s 7-685-871-01 SCREW +BVTT 3X6 (S)



REF.NO.	PART.NO	DESCRIPTION	REMARK
51	*2-178-834-01	LW1 BRACKET	
52	1-805-758-11	DISPLAY MODULE, LIQUID CRYSTAL	
53	*2-178-832-01	MAIN BRACKET	
54	*2-178-830-01	PANEL BRACKET,LOWER	
55	*2-178-815-01	PANEL BRACKET,SIDE	
56	*2-178-829-01	PANEL BRACKET,UPPER	
57	*2-178-833-01	VERTICAL FRAME	
58	*A-1096-787-A	G2 BOARD, COMPLETE	
59	*A-1081-018-A	B BOARD, COMPLETE	
60	8-597-936-00	TUNER, FSS BTF-EF411Z	
61	*2-178-820-11	TERMINAL BRACKET	
62	*A-1081-021-A	A BOARD, COMPLETE	
63	*2-178-818-01	VESA BRACKET	
64	*A-1057-432-A	H3 BOARD, COMPLETE	
65	X-2024-911-1	REAR CABINET ASSY(27)	66
66	4-095-322-01	BUSHING, RUBBER	
67	*2-109-144-11	SERVICE,PLATE	
68	*2-178-828-01	REAR COVER	
69	X-2024-173-1	STAND ASSY	
70	*2-178-825-01	STAND FOOT	
71	*2-178-824-01	STAND METAL BASE	
72	2-021-805-01	FOOT	

SECTION 6
ELECTRICAL PARTS LIST

PARTS LISTING TABLE OF CONTENTS

Note: The B Board Schematic Diagram, Printed Wiring Board and Parts List are not indicated in this manual as the PWB is regarded as a non service item for exchange only.

Note : Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
Parts indicated (XX) on the Schematic Diagram are not used in this model and therefore do not appear in the Parts List.

* A-1057-432-A H3 Board, Complete

REF.NO.	PART.NO	DESCRIPTION	REMARK
		< CAPACITOR >	
C2702	1-164-227-11	CERAMIC CHIP 0.022UF	10.00% 25V
C2703	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C2704	1-164-227-11	CERAMIC CHIP 0.022UF	10.00% 25V
C2705	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C2706	1-165-908-11	CERAMIC CHIP 1UF	10% 10V
C2707	1-165-908-11	CERAMIC CHIP 1UF	10% 10V
C2708	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2709	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2740	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2741	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C3701	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V
C3714	1-126-394-11	ELECT CHIP 10UF	20.00% 16V
C3730	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C3731	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C3732	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C3738	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C3739	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C3742	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C3744	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C3745	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C3746	1-126-394-11	ELECT CHIP 10UF	20.00% 16V
C3747	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C3748	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C3749	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C3750	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C3751	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
		< CONNECTOR >	
CN3700	*1-770-130-11	CONNECTOR (SQUARE TYPE) 21P	
CN3702	1-580-057-11	PIN, CONNECTOR (SMD) 4P	
CN3703	1-774-769-11	CONNECTOR, FFC/FPC 25P	
		< DIODE >	
D2700	8-719-069-60	DIODE UDZSTE-179.1B	
D2701	8-719-069-60	DIODE UDZSTE-179.1B	
D2702	8-719-069-60	DIODE UDZSTE-179.1B	
D2703	8-719-069-60	DIODE UDZSTE-179.1B	
D2740	8-719-069-60	DIODE UDZSTE-179.1B	
D3700	8-719-069-60	DIODE UDZSTE-179.1B	
D3701	8-719-069-60	DIODE UDZSTE-179.1B	
D3702	8-719-069-55	DIODE UDZSTE-175.6B	
D3703	8-719-083-63	DIODE UDZSTE-1713B	
D3710	8-719-069-60	DIODE UDZSTE-179.1B	
D3723	8-719-069-60	DIODE UDZSTE-179.1B	
D3724	8-719-069-60	DIODE UDZSTE-179.1B	
		< FERRITE BEAD >	
FB3700	1-216-864-11	SHORT CHIP 0	
		< IC >	
IC3701	6-704-465-01	IC MC74LVX8053DTR2	
		< COIL >	
L2740	1-412-029-11	INDUCTOR 10UH	
L3701	1-412-029-11	INDUCTOR 10UH	
L3703	1-412-029-11	INDUCTOR 10UH	
L3706	1-412-029-11	INDUCTOR 10UH	
		< TRANSISTOR >	
Q2700	8-729-010-29	TRANSISTOR MSD601-RST1	
Q2701	8-729-010-29	TRANSISTOR MSD601-RST1	
Q3701	8-729-010-29	TRANSISTOR MSD601-RST1	
Q3702	8-729-010-29	TRANSISTOR MSD601-RST1	
Q3707	8-729-010-29	TRANSISTOR MSD601-RST1	
Q3708	8-729-010-29	TRANSISTOR MSD601-RST1	
Q3709	8-729-010-29	TRANSISTOR MSD601-RST1	
Q3711	8-729-010-29	TRANSISTOR MSD601-RST1	
Q3712	8-729-010-29	TRANSISTOR MSD601-RST1	
		< RESISTOR >	
R2700	1-216-815-11	METAL CHIP 330 5% 1/10W	
R2701	1-216-815-11	METAL CHIP 330 5% 1/10W	
R2702	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R2703	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R2704	1-216-813-11	METAL CHIP 220 5% 1/10W	
R2705	1-216-864-11	SHORT CHIP 0	
R2706	1-216-813-11	METAL CHIP 220 5% 1/10W	
R2707	1-216-864-11	SHORT CHIP 0	
R2708	1-216-853-11	METAL CHIP 470K 5% 1/10W	
R2709	1-216-853-11	METAL CHIP 470K 5% 1/10W	
R2710	1-216-853-11	METAL CHIP 470K 5% 1/10W	
R2711	1-216-853-11	METAL CHIP 470K 5% 1/10W	
R2712	1-216-839-11	METAL CHIP 33K 5% 1/10W	
R2713	1-216-836-11	METAL CHIP 18K 5% 1/10W	
R2714	1-216-839-11	METAL CHIP 33K 5% 1/10W	
R2715	1-216-836-11	METAL CHIP 18K 5% 1/10W	
R2718	1-218-841-11	METAL CHIP 560 0.5% 1/10W	
R2719	1-218-841-11	METAL CHIP 560 0.5% 1/10W	
R3701	1-216-029-00	RES-CHIP 150 5% 1/10W	
R3702	1-216-022-00	RES-CHIP 75 5% 1/10W	
R3703	1-216-025-11	RES-CHIP 100 5% 1/10W	
R3704	1-216-864-11	SHORT CHIP 0	
R3705	1-216-864-11	SHORT CHIP 0	
R3706	1-216-864-11	SHORT CHIP 0	
R3707	1-216-864-11	SHORT CHIP 0	

REF.NO.	PART.NO	DESCRIPTION			REMARK
R3708	1-216-864-11	SHORT CHIP	0		
R3709	1-216-025-11	RES-CHIP	100	5%	1/10W
R3710	1-216-864-11	SHORT CHIP	0		
R3711	1-216-864-11	SHORT CHIP	0		
R3713	1-216-864-11	SHORT CHIP	0		
R3714	1-216-864-11	SHORT CHIP	0		
R3715	1-216-864-11	SHORT CHIP	0		
R3716	1-216-864-11	SHORT CHIP	0		
R3717	1-216-029-00	RES-CHIP	150	5%	1/10W
R3718	1-216-029-00	RES-CHIP	150	5%	1/10W
R3721	1-216-022-00	RES-CHIP	75	5%	1/10W
R3722	1-216-022-00	RES-CHIP	75	5%	1/10W
R3726	1-216-022-00	RES-CHIP	75	5%	1/10W
R3732	1-216-815-11	METAL CHIP	330	5%	1/10W
R3734	1-216-815-11	METAL CHIP	330	5%	1/10W
R3743	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3744	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3752	1-216-815-11	METAL CHIP	330	5%	1/10W
R3753	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3773	1-216-839-11	METAL CHIP	33K	5%	1/10W
R3774	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3776	1-216-815-11	METAL CHIP	330	5%	1/10W
R3777	1-216-022-00	RES-CHIP	75	5%	1/10W
R3778	1-216-029-00	RES-CHIP	150	5%	1/10W
R3779	1-216-025-11	RES-CHIP	100	5%	1/10W
R3780	1-216-025-11	RES-CHIP	100	5%	1/10W
R3781	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3782	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3784	1-216-815-11	METAL CHIP	330	5%	1/10W
R3785	1-216-839-11	METAL CHIP	33K	5%	1/10W
R3786	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3788	1-216-815-11	METAL CHIP	330	5%	1/10W

* A-1057-434-A H5 Board Complete

< CAPACITOR >

C9050	1-128-589-11	ELECT CHIP	47UF	20.00% 6.3V
C9051	1-119-667-11	CERAMIC CHIP	22UF	10V
C9052	1-162-966-11	CERAMIC CHIP	0.0022UF	10.00% 50V
C9053	1-100-566-91	CERAMIC CHIP	0.1UF	10.00% 25V

< CONNECTOR >

CN9050	1-580-789-22	PIN, CONNECTOR (SMD) 6P

< DIODE >

D9050	8-719-069-55	DIODE UDZSTE-175.6B
D9051	8-719-060-27	DIODE SLR-325MCT31
D9052	8-719-053-43	DIODE SLR-325VCT31
D9053	8-719-069-55	DIODE UDZSTE-175.6B

< IC >

IC9050	8-759-515-60	IC RS-20

< RESISTOR >

R9050	1-216-864-11	SHORT CHIP	0		
R9051	1-216-805-11	METAL CHIP	47	5%	1/10W

* A-1068-281-A H2 Board Complete

< CAPACITOR >

C9202	1-126-401-21	ELECT CHIP	1UF	20.00% 50V
C9206	1-126-401-21	ELECT CHIP	1UF	20.00% 50V
C9208	1-162-970-11	CERAMIC CHIP	0.01UF	10.00% 25V
C9213	1-162-970-11	CERAMIC CHIP	0.01UF	10.00% 25V

< CONNECTOR >

CN9200	*1-766-376-11	PIN, CONNECTOR (1.5MM)(SMD) 9P
CN9300	1-573-290-21	PIN, CONNECTOR (1.5MM) (SMD)4P

< DIODE >

D9200	8-719-069-60	DIODE UDZSTE-179.1B
D9201	8-719-069-60	DIODE UDZSTE-179.1B
D9300	8-719-978-33	DIODE DTZ-TT11-6.8B
D9301	8-719-978-33	DIODE DTZ-TT11-6.8B

< SOCKET >

J9201	1-750-264-31	JACK
J9300	1-770-054-11	TERMINAL BLOCK, S(LIGHT ANGLE)

< COIL >

L9202	1-216-864-11	SHORT CHIP	0		
L9203	1-216-864-11	SHORT CHIP	0		
L9204	1-216-864-11	SHORT CHIP	0		
L9205	1-216-864-11	SHORT CHIP	0		
L9206	1-216-864-11	SHORT CHIP	0		

< RESISTOR >

R9200	1-216-853-11	METAL CHIP	470K	5%	1/10W
R9201	1-216-864-11	SHORT CHIP	0		
R9202	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9203	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9204	1-216-864-11	SHORT CHIP	0		
R9205	1-216-853-11	METAL CHIP	470K	5%	1/10W
R9208	1-216-864-11	SHORT CHIP	0		
R9209	1-216-810-11	METAL CHIP	120	5%	1/10W
R9210	1-216-810-11	METAL CHIP	120	5%	1/10W
R9211	1-216-810-11	METAL CHIP	120	5%	1/10W
R9212	1-216-810-11	METAL CHIP	120	5%	1/10W
R9213	1-216-864-11	SHORT CHIP	0		

Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part numbers specified in the parts list.

* A-1096-787-A G2 Board Complete

REF.NO.		PART.NO	DESCRIPTION		REMARK
		4-382-854-01	SCREW (M3X8), P, SW (+)		
			< CAPACITOR >		
C6000		1-113-924-11	CERAMIC	0.0047UF	20.00% 250V
C6001	⚠	1-119-899-51	CERAMIC	1000PF	10.00% 250V
C6002	⚠	1-161-964-91	CERAMIC	0.0047UF	250V
C6003	⚠	1-165-529-11	MYLAR	0.22UF	10 275V
C6004	⚠	1-165-530-11	MYLAR	0.47UF	10 275V
C6005	⚠	1-119-899-51	CERAMIC	1000PF	10.00% 250V
C6006	⚠	1-161-964-91	CERAMIC	0.0047UF	250V
C6007		1-135-361-11	ELECT	180UF	20% 450V
C6009		1-162-970-11	CERAMIC CHIP	0.01UF	10.00% 25V
C6010		1-162-964-11	CERAMIC CHIP	0.001UF	10.00% 50V
C6011		1-107-905-11	ELECT	4.7UF	20.00% 50V
C6012		1-107-888-11	ELECT	47UF	20.00% 25V
C6014		1-136-479-11	FILM	0.001UF	5.00% 100V
C6015		1-162-970-11	CERAMIC CHIP	0.01UF	10.00% 25V
C6016		1-107-906-11	ELECT	10UF	20.00% 50V
C6018		1-162-970-11	CERAMIC CHIP	0.01UF	10.00% 25V
C6019		1-136-165-00	FILM	0.1UF	5.00% 50V
C6020		1-107-888-11	ELECT	47UF	20.00% 25V
C6021		1-107-824-11	CERAMIC	220PF	5.00% 1KV
C6022		1-107-824-11	CERAMIC	220PF	5.00% 1KV
C6023		1-165-610-11	FILM	33000PF	3% 800V
C6024		1-107-902-11	ELECT	1UF	20.00% 50V
C6027		1-115-339-11	CERAMIC CHIP	0.1UF	10.00% 50V
C6032		1-162-968-11	CERAMIC CHIP	0.0047UF	10.00% 50V
C6041		1-135-361-11	ELECT	180UF	20% 450V
C6042		1-165-730-31	ELECT	680UF	20% 16V
C6045		1-165-737-31	ELECT	1800UF	20% 25V
C6048		1-165-737-31	ELECT	1800UF	20% 25V
C6049		1-165-749-31	ELECT	180UF	20% 50V
C6050		1-107-902-11	ELECT	1UF	20.00% 50V
C6053		1-165-730-31	ELECT	680UF	20% 16V
C6054		1-165-749-31	ELECT	180UF	20% 50V
C6100		1-136-201-61	MYLAR	0.22UF	10.00% 400V
C6101		1-109-879-11	CERAMIC	22PF	5.00% 2KV
C6102		1-107-905-11	ELECT	4.7UF	20.00% 50V
C6103		1-107-906-11	ELECT	10UF	20.00% 50V
C6104		1-162-964-11	CERAMIC CHIP	0.001UF	10.00% 50V
C6105		1-107-909-11	ELECT	47UF	20.00% 50V
C6106		1-104-331-11	CERAMIC	0.0022UF	10.00% 1KV
C6107		1-107-826-11	CERAMIC CHIP	0.1UF	10.00% 16V
C6108		1-119-899-51	CERAMIC	1000PF	10.00% 250V
C6109		1-131-872-91	CERAMIC CHIP	1000PF	10% 630V
C6110		1-128-945-31	ELECT	1000UF	20% 10V
C6111		1-107-826-11	CERAMIC CHIP	0.1UF	10.00% 16V
C6114		1-162-115-00	CERAMIC	330PF	10.00% 1KV

REF.NO.		PART.NO	DESCRIPTION	REMARK
			< CONNECTOR >	
CN6000		1-695-915-11	TAB (CONTACT)	
CN6001		1-794-032-21	PIN, CONNECTOR (PC BOARD) 11P	
CN6002		1-794-519-21	PIN, CONNECTOR (PC BOARD) 14P	
CN6003	⚠	*1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P	
CN6005		1-573-290-21	PIN, CONNECTOR (1.5MM) (SMD)	4P
CN6101		*1-816-974-51	PLUG, CONNECTOR 3P	
			< DIODE >	
D6000		8-719-510-53	DIODE D4SB60L	
D6001		8-719-082-03	DIODE MM3Z15VT1	
D6002		8-719-081-97	DIODE MMDL914T1	
D6003		8-719-082-03	DIODE MM3Z15VT1	
D6004		8-719-082-03	DIODE MM3Z15VT1	
D6005		8-719-979-64	DIODE UF4005PKG23	
D6006		8-719-082-03	DIODE MM3Z15VT1	
D6007		8-719-082-03	DIODE MM3Z15VT1	
D6015		8-719-083-66	DIODE UDZSTE-1718B	
D6016		6-500-501-01	DIODE D10SC6M-4022	
D6019		6-500-501-01	DIODE D10SC6M-4022	
D6020		8-719-082-75	DIODE FCH08A10	
D6021		6-500-253-01	DIODE RB053L-30TE25	
D6022		6-500-253-01	DIODE RB053L-30TE25	
D6023		8-719-082-75	DIODE FCH08A10	
D6100		8-719-083-60	DIODE UDZSTE-174.7B	
D6101		8-719-081-97	DIODE MMDL914T1	
D6102		6-500-567-31	DIODE 10ERB20-TB3	
D6103		8-719-948-45	DIODE ERA22-08	
D6104		8-719-080-75	DIODE M1FL20U-4063	
			< FUSE >	
F6000	⚠	1-576-232-12	FUSE 5A 250V	
FH6000	⚠	1-533-725-11	FUSE HOLDER	
			< IC >	
IC6000		6-705-768-01	IC MCZ3001UB	
IC6001		8-759-586-17	IC TL1431CZ-AP	
IC6100		6-600-279-01	IC STR-A6169	
IC6101		8-759-586-17	IC TL1431CZ-AP	
			< COIL >	
L6000	⚠	1-456-678-11	LINE FILTER COIL	
L6008	⚠	1-456-389-11	INDUCTOR 20MH	
L6009	⚠	1-456-389-11	INDUCTOR 20MH	
L6010		1-406-971-21	INDUCTOR 10UH	
L6011		1-406-971-21	INDUCTOR 10UH	
L6100		1-412-537-31	INDUCTOR 100UH	

Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part numbers specified in the parts list.

G2 **H1**

REF.NO.		PART.NO	DESCRIPTION			REMARK
			< PHOTOCOUPLER >			
PH6000		6-600-187-01	PHOTO COUPLER	PC123Y22JOOF		
PH6001		6-600-187-01	PHOTO COUPLER	PC123Y22JOOF		
PH6100		6-600-187-01	PHOTO COUPLER	PC123Y22JOOF		
			< PROTECTOR MODULE >			
PS6001	⚠	1-533-596-21	IC LINK	4A	90V	
PS6002	⚠	1-533-596-21	IC LINK	4A	90V	
PS6003	⚠	1-533-595-31	IC LINK	3.15A	90V	
			< TRANSISTOR >			
Q6000		8-729-010-29	TRANSISTOR MSD601-RST1			
Q6001		8-729-010-05	TRANSISTOR MSB709-RT1			
Q6002		8-729-010-29	TRANSISTOR MSD601-RST1			
Q6003		6-550-526-01	TRANSISTOR 2SK2842-LB180			
Q6004		6-550-526-01	TRANSISTOR 2SK2842-LB180			
Q6005		8-729-010-29	TRANSISTOR MSD601-RST1			
Q6009		8-729-010-25	TRANSISTOR MSD601-RT1			
Q6010		8-729-010-05	TRANSISTOR MSB709-RT1			
			< RESISTOR >			
R6003	⚠	1-219-759-11	METAL	1M	5%	1/2W
R6004		1-216-837-11	METAL CHIP	22K	5%	1/10W
R6005		1-216-833-11	METAL CHIP	10K	5%	1/10W
R6006	⚠	1-202-933-61	FUSIBLE	0.1	10%	1/2W
R6007		1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R6009		1-218-823-11	METAL CHIP	100	0.5%	1/10W
R6011		1-218-875-11	METAL CHIP	15K	0.5%	1/10W
R6012		1-208-847-11	METAL CHIP	510K	0.5%	1/10W
R6013		1-208-847-11	METAL CHIP	510K	0.5%	1/10W
R6014		1-208-847-11	METAL CHIP	510K	0.5%	1/10W
R6015		1-208-847-11	METAL CHIP	510K	0.5%	1/10W
R6017		1-216-845-11	METAL CHIP	100K	5%	1/10W
R6018		1-216-833-11	METAL CHIP	10K	5%	1/10W
R6019		1-216-833-11	METAL CHIP	10K	5%	1/10W
R6020		1-216-837-11	METAL CHIP	22K	5%	1/10W
R6021		1-218-823-11	METAL CHIP	100	0.5%	1/10W
R6022		1-216-837-11	METAL CHIP	22K	5%	1/10W
R6023		1-249-393-11	CARBON	10	5%	1/4W
R6024		1-249-393-11	CARBON	10	5%	1/4W
R6025		1-216-833-11	METAL CHIP	10K	5%	1/10W
R6026		1-216-833-11	METAL CHIP	10K	5%	1/10W
R6027		1-216-821-11	METAL CHIP	1K	5%	1/10W
R6028		1-216-864-11	SHORT CHIP	0		
R6029		1-216-817-11	METAL CHIP	470	5%	1/10W
R6030		1-245-315-71	METAL OXIDE	0.1	5%	2W
R6031		1-216-864-11	SHORT CHIP	0		
R6032		1-216-837-11	METAL CHIP	22K	5%	1/10W
R6033		1-216-837-11	METAL CHIP	22K	5%	1/10W
R6034		1-216-833-11	METAL CHIP	10K	5%	1/10W
R6035		1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R6037		1-216-821-11	METAL CHIP	1K	5%	1/10W
R6038		1-216-821-11	METAL CHIP	1K	5%	1/10W
R6039		1-216-864-11	SHORT CHIP	0		
R6040		1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R6041		1-216-864-11	SHORT CHIP	0		
R6042		1-218-866-11	METAL CHIP	6.2K	0.5%	1/10W
R6043		1-218-848-11	METAL CHIP	1.1K	0.5%	1/10W
R6044		1-216-821-11	METAL CHIP	1K	5%	1/10W
R6046		1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R6055		1-245-494-21	METAL	2.2M	2%	1/4W
R6056		1-245-494-21	METAL	2.2M	2%	1/4W
R6057		1-216-833-11	METAL CHIP	10K	5%	1/10W
R6058		1-245-315-71	METAL OXIDE	0.1	5%	2W
R6062		1-216-864-11	SHORT CHIP	0		
R6100		1-249-389-11	CARBON	4.7	5%	1/4W
R6101		1-216-353-00	METAL OXIDE	2.2	5%	1W
R6105		1-216-864-11	SHORT CHIP	0		
R6106		1-249-393-11	CARBON	10	5%	1/4W
R6107		1-243-725-71	METAL OXIDE	100K	5%	1W
R6108		1-216-864-11	SHORT CHIP	0		
R6109		1-216-817-11	METAL CHIP	470	5%	1/10W
R6110		1-216-821-11	METAL CHIP	1K	5%	1/10W
R6111		1-216-864-11	SHORT CHIP	0		
R6112		1-216-839-11	METAL CHIP	33K	5%	1/10W
R6113		1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R6114		1-218-871-11	METAL CHIP	10K	0.5%	1/10W
			< TRANSFORMER >			
T6001	⚠	1-443-384-11	CONVERTER TRANSFORMER (PIT)			
T6002	⚠	1-443-564-11	POWER ISOLATION TRANSFORMER (PIT)			
T6100	⚠	1-443-312-11	TRANSFORMER, CONVERTER (SBT)			
			< VARISTOR >			
VR6000	⚠	1-804-995-11	VARISTOR			

*** A-1072-345-A H1 Board Complete**

			< CAPACITOR >			
C9000		1-164-156-11	CERAMIC CHIP 0.1UF			25V
C9001		1-164-156-11	CERAMIC CHIP 0.1UF			25V
			< CONNECTOR >			
CN9000		1-580-057-11	PIN, CONNECTOR (SMD) 4P			
			< DIODE >			
D9000		8-719-069-55	DIODE UDZSTE-175.6B			
D9001		8-719-069-55	DIODE UDZSTE-175.6B			

REF.NO.	PART.NO	DESCRIPTION	REMARK
		< RESISTOR >	
R9000	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R9001	1-216-833-11	METAL CHIP 10K 5%	1/10W
R9002	1-216-837-11	METAL CHIP 22K 5%	1/10W
R9004	1-216-864-11	SHORT CHIP 0	
R9005	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R9006	1-216-833-11	METAL CHIP 10K 5%	1/10W
R9007	1-216-864-11	SHORT CHIP 0	
R9008	1-216-864-11	SHORT CHIP 0	
		< SWITCH >	
S9000	1-786-420-11	TACTILE SWITCH	
S9001	1-786-420-11	TACTILE SWITCH	
S9002	1-786-420-11	TACTILE SWITCH	
S9003	1-786-420-11	TACTILE SWITCH	
S9004	1-786-420-11	TACTILE SWITCH	
S9005	1-786-420-11	TACTILE SWITCH	
S9006	1-786-420-11	TACTILE SWITCH	

*** A-1081-021-A A Board Complete**

	4-382-854-01	SCREW (M3X8), P, SW (+)	
		< CAPACITOR >	
C0001	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C0002	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C0003	1-126-394-11	ELECT CHIP 10UF	20.00% 16V
C0011	1-126-394-11	ELECT CHIP 10UF	20.00% 16V
C0030	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C0031	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C0032	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C1101	1-162-921-11	CERAMIC CHIP 33PF	5.00% 50V
C1104	1-162-925-11	CERAMIC CHIP 68PF	5.00% 50V
C1105	1-162-925-11	CERAMIC CHIP 68PF	5.00% 50V
C1106	1-126-964-11	ELECT 10UF	20.00% 50V
C1107	1-162-921-11	CERAMIC CHIP 33PF	5.00% 50V
C1108	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V
C1109	1-162-921-11	CERAMIC CHIP 33PF	5.00% 50V
C1110	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C1111	1-162-921-11	CERAMIC CHIP 33PF	5.00% 50V
C1200	1-127-573-11	CERAMIC CHIP 1UF	10% 16V
C1201	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V
C1202	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C1203	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V
C1204	1-127-573-11	CERAMIC CHIP 1UF	10% 16V
C1205	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V
C1207	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C1300	1-126-394-11	ELECT CHIP 10UF	20.00% 16V
C1301	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C1302	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C2000	1-125-889-91	CERAMIC CHIP 2.2UF	10% 10V
C2001	1-125-889-91	CERAMIC CHIP 2.2UF	10% 10V
C2002	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2003	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C2005	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V
C2006	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C2007	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C2009	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V
C2010	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V
C2011	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C2012	1-115-416-11	CERAMIC CHIP 0.001UF	5.00% 25V
C2013	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V
C2014	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V
C2015	1-162-906-11	CERAMIC CHIP 1.5PF	0.25PF 50V
C2016	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V
C2017	1-162-906-11	CERAMIC CHIP 1.5PF	0.25PF 50V
C2018	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V
C2019	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V
C2020	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V
C2021	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V
C2023	1-126-394-11	ELECT CHIP 10UF	20.00% 16V
C2024	1-126-394-11	ELECT CHIP 10UF	20.00% 16V
C2025	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2026	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C2027	1-126-394-11	ELECT CHIP 10UF	20.00% 16V
C2028	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2029	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C2030	1-126-394-11	ELECT CHIP 10UF	20.00% 16V
C2032	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C2033	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C2036	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V
C2037	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V
C2100	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V
C2102	1-216-864-11	SHORT CHIP 0	
C2103	1-162-928-11	CERAMIC CHIP 120PF	5.00% 50V
C2105	1-125-891-11	CERAMIC CHIP 0.47UF	10.00% 10V
C2200	1-104-665-11	ELECT 100UF	20.00% 25V
C2201	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C2202	1-125-889-91	CERAMIC CHIP 2.2UF	10% 10V
C2203	1-127-760-11	CERAMIC CHIP 4.7UF	10.00% 6.3V
C2250	1-127-861-11	CERAMIC CHIP 2.2UF	10% 16V
C2300	1-126-935-11	ELECT 470UF	20.00% 16V
C2301	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2304	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2309	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2310	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2311	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C2312	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C2313	1-127-573-11	CERAMIC CHIP 1UF	10% 16V

REF.NO.	PART.NO	DESCRIPTION	REMARK
C2400	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C2401	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C2404	1-126-401-21	ELECT CHIP 1UF	20.00% 50V
C2405	1-126-401-21	ELECT CHIP 1UF	20.00% 50V
C2406	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2407	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C2410	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C2411	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C2413	1-127-573-11	CERAMIC CHIP 1UF	10% 16V
C2414	1-127-573-11	CERAMIC CHIP 1UF	10% 16V
C2500	1-127-573-11	CERAMIC CHIP 1UF	10% 16V
C2501	1-127-573-11	CERAMIC CHIP 1UF	10% 16V
C2502	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2507	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2508	1-128-526-11	ELECT 100UF	20.00% 25V
C2510	1-165-629-91	CERAMIC CHIP 1UF	10% 50V
C2511	1-135-374-11	ELECT 1000UF	20% 35V
C2512	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C2513	1-135-374-11	ELECT 1000UF	20% 35V
C2514	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C2515	1-126-971-11	ELECT 470UF	20.00% 50V
C2516	1-126-971-11	ELECT 470UF	20.00% 50V
C2600	1-127-573-11	CERAMIC CHIP 1UF	10% 16V
C2601	1-127-573-11	CERAMIC CHIP 1UF	10% 16V
C2602	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2603	1-164-156-11	CERAMIC CHIP 0.1UF	25V
C2608	1-165-908-11	CERAMIC CHIP 1UF	10% 10V
C2609	1-165-908-11	CERAMIC CHIP 1UF	10% 10V
C2620	1-164-227-11	CERAMIC CHIP 0.022UF	10.00% 25V
C2621	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C2622	1-164-227-11	CERAMIC CHIP 0.022UF	10.00% 25V
C2623	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C2624	1-165-908-11	CERAMIC CHIP 1UF	10% 10V
C2625	1-165-908-11	CERAMIC CHIP 1UF	10% 10V
C2626	1-126-947-11	ELECT 47UF	20.00% 35V
C2627	1-126-947-11	ELECT 47UF	20.00% 35V
C3603	1-126-947-11	ELECT 47UF	20.00% 35V
C3608	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C3801	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C3802	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C3803	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C3804	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C3806	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C3807	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C3808	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C3809	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C3810	1-125-889-91	CERAMIC CHIP 2.2UF	10% 10V
C3811	1-164-227-11	CERAMIC CHIP 0.022UF	10.00% 25V
C3812	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C3814	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C3816	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V
C3820	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C3821	1-162-914-11	CERAMIC CHIP 9PF	0.50PF 50V
C3822	1-126-394-11	ELECT CHIP 10UF	20.00% 16V
C3823	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C3824	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C3825	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C3826	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C3827	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C3828	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C3829	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C3830	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C3831	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C3832	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C3833	1-127-760-11	CERAMIC CHIP 4.7UF	10% 6.3V
C3835	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C3836	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C3837	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C3838	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C3841	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V
C6200	1-162-974-11	CERAMIC CHIP 0.01UF	50V
C6201	1-162-974-11	CERAMIC CHIP 0.01UF	50V
C6204	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C6205	1-162-974-11	CERAMIC CHIP 0.01UF	50V
C6207	1-162-974-11	CERAMIC CHIP 0.01UF	50V
C6209	1-162-974-11	CERAMIC CHIP 0.01UF	50V
C6210	1-162-974-11	CERAMIC CHIP 0.01UF	50V
C6211	1-162-974-11	CERAMIC CHIP 0.01UF	50V
C6216	1-162-974-11	CERAMIC CHIP 0.01UF	50V
C6218	1-162-974-11	CERAMIC CHIP 0.01UF	50V
C6226	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C6227	1-104-665-11	ELECT 100UF	20.00% 25V
C6228	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C6230	1-128-527-11	ELECT 330UF	20.00% 25V
C6237	1-100-566-91	CERAMIC CHIP 0.1UF	10.00% 25V
C6238	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C6239	1-104-665-11	ELECT 100UF	20.00% 25V
C6242	1-128-528-11	ELECT 470UF	20.00% 25V
C6246	1-100-566-91	CERAMIC CHIP 0.1UF	10.00% 25V
C6267	1-126-947-11	ELECT 47UF	20.00% 35V
C6269	1-100-566-91	CERAMIC CHIP 0.1UF	10.00% 25V
C6270	1-162-995-11	CERAMIC CHIP 0.022UF	50V
C6271	1-126-963-11	ELECT 4.7UF	20.00% 50V
C6272	1-126-967-11	ELECT 47UF	20.00% 50V

< CONNECTOR >

CN0041	1-573-806-21	PIN, CONNECTOR (1.5MM) (SMD)6P
CN0042	*1-564-508-11	PLUG, CONNECTOR 5P
CN0043	1-793-358-21	PIN (PWB) (30P), CONNECTOR
CN2211	*1-766-376-11	PIN, CONNECTOR (1.5MM)(SMD) 9P

REF.NO.	PART.NO	DESCRIPTION	REMARK
CN2500	*1-564-507-11	PLUG, CONNECTOR 4P	
CN3602	*1-770-130-11	CONNECTOR (SQUARE TYPE) 21P	
CN3621	1-774-769-11	CONNECTOR, FFC/FPC 25P	
CN6201	1-573-290-21	PIN, CONNECTOR (1.5MM) (SMD)4P	
CN6202	1-573-806-21	PIN, CONNECTOR (1.5MM) (SMD)6P	
CN6204	1-794-032-21	PIN, CONNECTOR (PC BOARD) 11P	
		< DIODE >	
D1200	8-719-081-97	DIODE MMDL914T1	
D2001	8-719-069-60	DIODE UDZSTE-179.1B	
D2200	8-719-081-97	DIODE MMDL914T1	
D2201	8-719-081-97	DIODE MMDL914T1	
D2202	8-719-081-97	DIODE MMDL914T1	
D2203	8-719-081-97	DIODE MMDL914T1	
D2204	8-719-081-97	DIODE MMDL914T1	
D2205	8-719-081-97	DIODE MMDL914T1	
D2400	8-719-069-60	DIODE UDZSTE-179.1B	
D2401	8-719-069-60	DIODE UDZSTE-179.1B	
D2402	8-719-081-97	DIODE MMDL914T1	
D2500	6-500-253-01	DIODE RB053L-30TE25	
D2600	8-719-069-60	DIODE UDZSTE-179.1B	
D2604	8-719-069-60	DIODE UDZSTE-179.1B	
D2605	8-719-069-60	DIODE UDZSTE-179.1B	
D2606	8-719-069-60	DIODE UDZSTE-179.1B	
D2607	8-719-069-60	DIODE UDZSTE-179.1B	
D3601	8-719-069-55	DIODE UDZSTE-175.6B	
D3626	8-719-069-60	DIODE UDZSTE-179.1B	
D3627	8-719-083-63	DIODE UDZSTE-1713B	
D3628	8-719-069-55	DIODE UDZSTE-175.6B	
D3629	8-719-069-55	DIODE UDZSTE-175.6B	
D3630	8-719-069-60	DIODE UDZSTE-179.1B	
D3631	8-719-069-55	DIODE UDZSTE-175.6B	
D3634	8-719-069-60	DIODE UDZSTE-179.1B	
D6202	8-719-081-97	DIODE MMDL914T1	
D6204	8-719-081-97	DIODE MMDL914T1	
D6205	8-719-081-34	DIODE RB160M-30TR	
D6209	6-500-295-01	DIODE PTZ-TE25-5.6B	
D6217	8-719-081-97	DIODE MMDL914T1	
		< FERRITE BEAD >	
FB1101	1-216-864-11	SHORT CHIP 0	
FB2200	1-469-324-21	FERRITE 0UH	
FB2500	1-469-324-21	FERRITE 0UH	
FB2501	1-469-324-21	FERRITE 0UH	
FB3609	1-216-864-11	SHORT CHIP 0	
FB3610	1-216-864-11	SHORT CHIP 0	
FB6200	1-216-295-91	SHORT CHIP 0	
FB6203	1-216-295-91	SHORT CHIP 0	
FB6204	1-216-295-91	SHORT CHIP 0	
FB6208	1-414-864-11	FERRITE 0UH	

REF.NO.	PART.NO	DESCRIPTION	REMARK
		< FILTER >	
FL3800	1-233-765-21	FILTER	
		< IC >	
IC0001	8-759-561-69	IC PCF8574TS-T	
IC0002	8-759-701-01	IC NJM2904M	
IC0030	8-759-561-69	IC PCF8574TS-T	
IC1200	8-759-514-57	IC BA7046F	
IC2000	6-706-636-01	IC MSP3410G-QA-C12-0001	
IC2300	8-759-576-76	IC TDA2822D013TR	
IC2400	8-759-278-58	IC NJM4558V-TE2	
IC2500	8-759-246-70	IC TA8216H	
IC3801	8-753-212-10	IC CXA2163AQ-T6	
IC3811	8-759-481-08	IC TC7SET02FU(TE85R)	
IC6202	6-705-025-01	IC PQ20WZ1UJ00H	
IC6205	6-704-407-01	IC PQ1CZ41H2ZPH	
IC6208	8-749-925-00	IC TK11819MTL	
		< SOCKET >	
J2400	1-794-623-21	JACK, PIN 2P	
		< COIL >	
L1100	1-414-580-21	INDUCTOR 100NH	
L1101	1-414-760-21	FERRITE 0UH	
L1102	1-414-580-21	INDUCTOR 100NH	
L1103	1-414-760-21	FERRITE 0UH	
L1104	1-414-580-21	INDUCTOR 100NH	
L1105	1-412-029-11	INDUCTOR 10UH	
L1106	1-412-979-21	INDUCTOR 1UH	
L1107	1-412-029-11	INDUCTOR 10UH	
L1200	1-412-029-11	INDUCTOR 10UH	
L1300	1-412-029-11	INDUCTOR 10UH	
L2000	1-412-029-11	INDUCTOR 10UH	
L2001	1-412-029-11	INDUCTOR 10UH	
L2002	1-412-029-11	INDUCTOR 10UH	
L2100	1-216-864-11	SHORT CHIP 0	
L2101	1-412-990-41	INDUCTOR 8.2UH	
L2300	1-412-029-11	INDUCTOR 10UH	
L2400	1-412-029-11	INDUCTOR 10UH	
L2500	1-406-661-21	INDUCTOR 22UH	
L2600	1-412-029-11	INDUCTOR 10UH	
L3600	1-412-029-11	INDUCTOR 10UH	
L3801	1-412-029-11	INDUCTOR 10UH	
L3802	1-216-864-11	SHORT CHIP 0	
L3803	1-216-864-11	SHORT CHIP 0	
L3804	1-216-864-11	SHORT CHIP 0	
L3805	1-412-029-11	INDUCTOR 10UH	
L3806	1-412-029-11	INDUCTOR 10UH	

Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part numbers specified in the parts list.

A

REF.NO.	PART.NO	DESCRIPTION	REMARK
L3807	1-412-029-11	INDUCTOR 10UH	
L3808	1-412-029-11	INDUCTOR 10UH	
L3809	1-412-029-11	INDUCTOR 10UH	
L3810	1-412-029-11	INDUCTOR 10UH	
L3811	1-412-029-11	INDUCTOR 10UH	
L6202	1-424-918-21	INDUCTOR 10UH	
L6205	1-456-504-21	INDUCTOR 100UH	
L6215	1-410-120-11	INDUCTOR 1.2MH	
		< PROTECTOR MODULE >	
PS2500 ⚠	1-576-390-91	IC LINK 2.5A 50V	
		< TRANSISTOR >	
Q0001	8-729-010-29	TRANSISTOR MSD601-RST1	
Q0002	8-729-028-28	TRANSISTOR 2SK2036(TE85L)	
Q0046	8-729-010-29	TRANSISTOR MSD601-RST1	
Q0047	8-729-010-29	TRANSISTOR MSD601-RST1	
Q1100	8-729-010-29	TRANSISTOR MSD601-RST1	
Q1200	8-729-010-29	TRANSISTOR MSD601-RST1	
Q1201	8-729-010-05	TRANSISTOR MSB709-RT1	
Q1300	8-729-010-29	TRANSISTOR MSD601-RST1	
Q1301	8-729-010-05	TRANSISTOR MSB709-RT1	
Q2000	8-729-010-29	TRANSISTOR MSD601-RST1	
Q2001	8-729-010-29	TRANSISTOR MSD601-RST1	
Q2002	8-729-010-29	TRANSISTOR MSD601-RST1	
Q2100	8-729-010-29	TRANSISTOR MSD601-RST1	
Q2101	8-729-010-05	TRANSISTOR MSB709-RT1	
Q2200	1-801-806-11	TRANSISTOR DTC144EKA	
Q2201	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q2202	8-729-010-29	TRANSISTOR MSD601-RST1	
Q2203	1-801-806-11	TRANSISTOR DTC144EKA	
Q2204	8-729-010-29	TRANSISTOR MSD601-RST1	
Q2205	8-729-010-29	TRANSISTOR MSD601-RST1	
Q2206	8-729-010-29	TRANSISTOR MSD601-RST1	
Q2207	8-729-010-29	TRANSISTOR MSD601-RST1	
Q2300	8-729-010-29	TRANSISTOR MSD601-RST1	
Q2301	8-729-010-29	TRANSISTOR MSD601-RST1	
Q2400	8-729-015-39	TRANSISTOR DTC323TK	
Q2401	8-729-015-39	TRANSISTOR DTC323TK	
Q2404	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q2405	8-729-015-39	TRANSISTOR DTC323TK	
Q2406	8-729-015-39	TRANSISTOR DTC323TK	
Q2600	8-729-010-29	TRANSISTOR MSD601-RST1	
Q2601	8-729-010-29	TRANSISTOR MSD601-RST1	
Q3600	8-729-010-29	TRANSISTOR MSD601-RST1	
Q3801	8-729-010-05	TRANSISTOR MSB709-RT1	
Q3802	8-729-010-05	TRANSISTOR MSB709-RT1	
Q3806	8-729-010-05	TRANSISTOR MSB709-RT1	
Q3807	8-729-010-05	TRANSISTOR MSB709-RT1	
Q3808	8-729-010-29	TRANSISTOR MSD601-RST1	
Q3809	8-729-010-05	TRANSISTOR MSB709-RT1	
Q6200	8-729-045-62	TRANSISTOR 2SK2158-T2B	
Q6203	8-729-010-29	TRANSISTOR MSD601-RST1	
		< RESISTOR >	
JR2200	1-216-864-11	SHORT CHIP 0	
JR2300	1-216-864-11	SHORT CHIP 0	
JR3905	1-216-864-11	SHORT CHIP 0	
JR3906	1-216-864-11	SHORT CHIP 0	
JR3907	1-216-864-11	SHORT CHIP 0	
JR3908	1-216-864-11	SHORT CHIP 0	
JR6201	1-216-295-91	SHORT CHIP 0	
JR6211	1-216-295-91	SHORT CHIP 0	
JR6212	1-216-295-91	SHORT CHIP 0	
JR6213	1-216-295-91	SHORT CHIP 0	
JR6214	1-216-295-91	SHORT CHIP 0	
JR6215	1-216-295-91	SHORT CHIP 0	
JR6216	1-216-295-91	SHORT CHIP 0	
JR6217	1-216-295-91	SHORT CHIP 0	
JR6218	1-216-295-91	SHORT CHIP 0	
R0001	1-216-864-11	SHORT CHIP 0	
R0002	1-216-809-11	METAL CHIP 100 5% 1/10W	
R0003	1-216-809-11	METAL CHIP 100 5% 1/10W	
R0004	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R0005	1-216-809-11	METAL CHIP 100 5% 1/10W	
R0006	1-216-864-11	SHORT CHIP 0	
R0007	1-216-864-11	SHORT CHIP 0	
R0008	1-216-809-11	METAL CHIP 100 5% 1/10W	
R0009	1-216-809-11	METAL CHIP 100 5% 1/10W	
R0010	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R0011	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R0012	1-216-809-11	METAL CHIP 100 5% 1/10W	
R0013	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R0014	1-216-864-11	SHORT CHIP 0	
R0015	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R0017	1-216-828-11	METAL CHIP 3.9K 5% 1/10W	
R0024	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R0025	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R0026	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R0027	1-216-809-11	METAL CHIP 100 5% 1/10W	
R0028	1-216-864-11	SHORT CHIP 0	
R0030	1-216-864-11	SHORT CHIP 0	
R0031	1-216-809-11	METAL CHIP 100 5% 1/10W	
R0032	1-216-809-11	METAL CHIP 100 5% 1/10W	
R0033	1-216-809-11	METAL CHIP 100 5% 1/10W	
R0034	1-216-864-11	SHORT CHIP 0	
R0035	1-216-864-11	SHORT CHIP 0	
R0036	1-216-864-11	SHORT CHIP 0	
R0037	1-216-809-11	METAL CHIP 100 5% 1/10W	

REF.NO.	PART.NO	DESCRIPTION			REMARK
R0038	1-216-809-11	METAL CHIP	100	5%	1/10W
R0039	1-216-809-11	METAL CHIP	100	5%	1/10W
R0040	1-216-864-11	SHORT CHIP	0		
R0041	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0042	1-216-809-11	METAL CHIP	100	5%	1/10W
R0043	1-216-813-11	METAL CHIP	220	5%	1/10W
R0047	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R0048	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0049	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0050	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0051	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0052	1-216-809-11	METAL CHIP	100	5%	1/10W
R0053	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0054	1-216-811-11	METAL CHIP	150	5%	1/10W
R0055	1-216-864-11	SHORT CHIP	0		
R0056	1-216-809-11	METAL CHIP	100	5%	1/10W
R0057	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1100	1-216-836-11	METAL CHIP	18K	5%	1/10W
R1101	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1102	1-216-864-11	SHORT CHIP	0		
R1104	1-216-809-11	METAL CHIP	100	5%	1/10W
R1105	1-216-809-11	METAL CHIP	100	5%	1/10W
R1107	1-216-864-11	SHORT CHIP	0		
R1108	1-216-864-11	SHORT CHIP	0		
R1109	1-216-864-11	SHORT CHIP	0		
R1200	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1201	1-216-812-11	METAL CHIP	180	5%	1/10W
R1202	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1203	1-218-898-11	METAL CHIP	130K	0.5%	1/10W
R1204	1-216-853-11	METAL CHIP	470K	5%	1/10W
R1205	1-216-850-11	METAL CHIP	270K	5%	1/10W
R1206	1-216-853-11	METAL CHIP	470K	5%	1/10W
R1207	1-216-853-11	METAL CHIP	470K	5%	1/10W
R1208	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1209	1-216-864-11	SHORT CHIP	0		
R1301	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1302	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R1303	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1304	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1305	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R1306	1-216-797-11	METAL CHIP	10	5%	1/10W
R1307	1-216-864-11	SHORT CHIP	0		
R2000	1-414-760-21	FERRITE	0UH		
R2001	1-414-760-21	FERRITE	0UH		
R2003	1-216-839-11	METAL CHIP	33K	5%	1/10W
R2004	1-216-836-11	METAL CHIP	18K	5%	1/10W
R2005	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R2007	1-216-809-11	METAL CHIP	100	5%	1/10W
R2008	1-216-839-11	METAL CHIP	33K	5%	1/10W
R2009	1-216-836-11	METAL CHIP	18K	5%	1/10W
R2011	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R2012	1-216-845-11	METAL CHIP	100K	5%	1/10W
R2013	1-216-864-11	SHORT CHIP	0		
R2014	1-216-864-11	SHORT CHIP	0		
R2015	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2016	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2017	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2018	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2019	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2021	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2022	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2031	1-216-845-11	METAL CHIP	100K	5%	1/10W
R2102	1-216-805-11	METAL CHIP	47	5%	1/10W
R2103	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2106	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2159	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2200	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2201	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2202	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2204	1-216-818-11	METAL CHIP	560	5%	1/10W
R2205	1-216-864-11	SHORT CHIP	0		
R2206	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2208	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2209	1-216-809-11	METAL CHIP	100	5%	1/10W
R2210	1-216-809-11	METAL CHIP	100	5%	1/10W
R2211	1-216-847-11	METAL CHIP	150K	5%	1/10W
R2212	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R2213	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2214	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2215	1-218-325-11	RES-CHIP	120	5%	1/4W
R2216	1-218-325-11	RES-CHIP	120	5%	1/4W
R2217	1-218-818-11	RES-CHIP	220	5%	1/2W
R2219	1-216-864-11	SHORT CHIP	0		
R2255	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2256	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R2303	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2305	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2306	1-216-805-11	METAL CHIP	47	5%	1/10W
R2307	1-216-805-11	METAL CHIP	47	5%	1/10W
R2308	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2309	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2310	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2311	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2314	1-216-809-11	METAL CHIP	100	5%	1/10W
R2315	1-216-813-11	METAL CHIP	220	5%	1/10W
R2316	1-216-809-11	METAL CHIP	100	5%	1/10W
R2317	1-216-813-11	METAL CHIP	220	5%	1/10W
R2318	1-216-809-11	METAL CHIP	100	5%	1/10W
R2319	1-216-809-11	METAL CHIP	100	5%	1/10W
R2400	1-216-815-11	METAL CHIP	330	5%	1/10W

REF.NO.	PART.NO	DESCRIPTION			REMARK
R2401	1-216-815-11	METAL CHIP	330	5%	1/10W
R2404	1-216-864-11	SHORT CHIP	0		
R2411	1-216-864-11	SHORT CHIP	0		
R2412	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2413	1-216-864-11	SHORT CHIP	0		
R2414	1-216-864-11	SHORT CHIP	0		
R2415	1-216-841-11	METAL CHIP	47K	5%	1/10W
R2416	1-216-841-11	METAL CHIP	47K	5%	1/10W
R2417	1-216-841-11	METAL CHIP	47K	5%	1/10W
R2420	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2421	1-216-841-11	METAL CHIP	47K	5%	1/10W
R2423	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2424	1-218-873-11	METAL CHIP	12K	0.5%	1/10W
R2425	1-218-873-11	METAL CHIP	12K	0.5%	1/10W
R2426	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2427	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2428	1-216-817-11	METAL CHIP	470	5%	1/10W
R2429	1-216-817-11	METAL CHIP	470	5%	1/10W
R2430	1-216-864-11	SHORT CHIP	0		
R2431	1-216-864-11	SHORT CHIP	0		
R2500	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2501	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2502	1-216-864-11	SHORT CHIP	0		
R2503	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R2505	1-216-864-11	SHORT CHIP	0		
R2506	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R2508	1-216-296-11	SHORT CHIP	0		
R2510	1-216-864-11	SHORT CHIP	0		
R2511	1-216-296-11	SHORT CHIP	0		
R2512	1-220-230-11	RES-CHIP	2.2	10%	1/4W
R2513	1-220-230-11	RES-CHIP	2.2	10%	1/4W
R2517	1-216-864-11	SHORT CHIP	0		
R2518	1-216-864-11	SHORT CHIP	0		
R2519	1-216-864-11	SHORT CHIP	0		
R2520	1-216-864-11	SHORT CHIP	0		
R2521	1-216-864-11	SHORT CHIP	0		
R2522	1-216-864-11	SHORT CHIP	0		
R2523	1-216-864-11	SHORT CHIP	0		
R2614	1-216-864-11	SHORT CHIP	0		
R2615	1-216-864-11	SHORT CHIP	0		
R2619	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R2620	1-216-836-11	METAL CHIP	18K	5%	1/10W
R2622	1-216-839-11	METAL CHIP	33K	5%	1/10W
R2623	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R2624	1-216-815-11	METAL CHIP	330	5%	1/10W
R2625	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2626	1-216-815-11	METAL CHIP	330	5%	1/10W
R2627	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2628	1-216-813-11	METAL CHIP	220	5%	1/10W
R2630	1-216-813-11	METAL CHIP	220	5%	1/10W
R2631	1-216-864-11	SHORT CHIP	0		
R2632	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2633	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2634	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2635	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2636	1-216-864-11	SHORT CHIP	0		
R2652	1-216-864-11	SHORT CHIP	0		
R2662	1-216-836-11	METAL CHIP	18K	5%	1/10W
R2663	1-216-839-11	METAL CHIP	33K	5%	1/10W
R3600	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3601	1-216-809-11	METAL CHIP	100	5%	1/10W
R3603	1-216-025-11	RES-CHIP	100	5%	1/10W
R3613	1-216-022-00	RES-CHIP	75	5%	1/10W
R3614	1-216-025-11	RES-CHIP	100	5%	1/10W
R3615	1-216-022-00	RES-CHIP	75	5%	1/10W
R3616	1-216-022-00	RES-CHIP	75	5%	1/10W
R3617	1-216-022-00	RES-CHIP	75	5%	1/10W
R3618	1-216-029-00	RES-CHIP	150	5%	1/10W
R3619	1-216-025-11	RES-CHIP	100	5%	1/10W
R3621	1-216-025-11	RES-CHIP	100	5%	1/10W
R3622	1-216-025-11	RES-CHIP	100	5%	1/10W
R3623	1-216-025-11	RES-CHIP	100	5%	1/10W
R3624	1-216-022-00	RES-CHIP	75	5%	1/10W
R3625	1-216-025-11	RES-CHIP	100	5%	1/10W
R3626	1-216-029-00	RES-CHIP	150	5%	1/10W
R3803	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R3804	1-216-818-11	METAL CHIP	560	5%	1/10W
R3805	1-216-817-11	METAL CHIP	470	5%	1/10W
R3811	1-216-809-11	METAL CHIP	100	5%	1/10W
R3812	1-216-809-11	METAL CHIP	100	5%	1/10W
R3813	1-216-864-11	SHORT CHIP	0		
R3814	1-216-820-11	METAL CHIP	820	5%	1/10W
R3818	1-216-864-11	SHORT CHIP	0		
R3822	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3833	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3835	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R3836	1-216-838-11	METAL CHIP	27K	5%	1/10W
R3841	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R3842	1-218-845-11	METAL CHIP	820	0.5%	1/10W
R3843	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R3844	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3845	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R3847	1-216-809-11	METAL CHIP	100	5%	1/10W
R3852	1-216-809-11	METAL CHIP	100	5%	1/10W
R3855	1-216-864-11	SHORT CHIP	0		
R3856	1-216-809-11	METAL CHIP	100	5%	1/10W
R3863	1-216-809-11	METAL CHIP	100	5%	1/10W
R3864	1-216-809-11	METAL CHIP	100	5%	1/10W
R3866	1-216-809-11	METAL CHIP	100	5%	1/10W
R3867	1-216-825-11	METAL CHIP	2.2K	5%	1/10W

Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part numbers specified in the parts list.

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REF.NO.	PART.NO	DESCRIPTION	REMARK
R3868	1-216-811-11	METAL CHIP 150 5% 1/10W	
R3869	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R3870	1-211-985-11	METAL CHIP 47 0.5% 1/10W	
R3872	1-216-864-11	SHORT CHIP 0	
R3873	1-216-864-11	SHORT CHIP 0	
R3874	1-216-864-11	SHORT CHIP 0	
R3875	1-216-864-11	SHORT CHIP 0	
R3876	1-216-864-11	SHORT CHIP 0	
R6202	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R6204	1-216-295-91	SHORT CHIP 0	
R6205	1-216-849-11	METAL CHIP 220K 5% 1/10W	
R6206	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R6210	1-216-827-11	METAL CHIP 3.3K 5% 1/10W	
R6211	1-218-867-11	METAL CHIP 6.8K 0.5% 1/10W	
R6224	1-218-850-11	METAL CHIP 1.3K 0.5% 1/10W	
R6225	1-218-861-11	METAL CHIP 3.9K 0.5% 1/10W	
R6257	1-216-808-11	METAL CHIP 82 5% 1/10W	
R6258	1-216-295-91	SHORT CHIP 0	
		< TUNER >	
TU1100	8-597-936-00	TUNER, FSS BTF-EF411Z	
		< VARISTOR >	
VD2500	1-801-925-21	VARISTOR, CHIP	(1608)
VD2501	1-801-925-21	VARISTOR, CHIP	(1608)
VD2502	1-216-864-11	SHORT CHIP 0	
		< CRYSTAL >	
X2000	1-795-612-11	VIBRATOR, CRYSTAL	
X3800	1-781-914-21	VIBRATOR, CRYSTAL	

REF.NO.	PART.NO	DESCRIPTION	REMARK
MISCELLANEOUS			
	1-826-042-11	LOUDSPEAKER (5X15CM)	
	1-805-758-11	DISPLAY MODULE, LIQUID CRYSTAL	
	8-597-936-00	TUNER, FSS BTF-EF411Z	
ACCESSORIES AND PACKAGING MATERIALS			
⚠	1-827-479-11	POWER SUPPLY CORD	
⚠	1-827-482-11	POWER SUPPLY CORD	
	4-099-720-02	HOOK	
	*2-148-373-02	BAG, PROTECTION	
	*2-348-297-01	INDIVIDUAL CARTON	
	*2-348-298-01	CUSHION UPPER (L)	
	*2-348-299-01	CUSHION UPPER (R)	
	*2-348-300-01	CUSHION LOWER CENTER	
	*2-338-301-01	BOX, ACCESSORY	
	*2-348-576-01	CUSHION LOWER	
	*2-349-939-01	LOWER CENTER CUSHION BOARD	
	*4-102-248-01	SHEET, PROTECTION CROSS	
	2-349-779-11	INSTRUCTION MANUAL(ENGLISH/RUSSIAN/POLISH/PORTUGUESE)	
	2-349-779-21	INSTRUCTION MANUAL(GERMAN/FRENCH/DUTCH/ITALIAN)	
	2-349-779-31	INSTRUCTION MANUAL(DANISH/FINNISH/SWEDISH SPANISH)	
	2-349-779-41	INSTRUCTION MANUAL(ENGLISH)	
REMOTE COMMANDER			
	1-478-815-12	REMOTE COMMANDER (RM-Y1108)	

TRACE

A new TV Repair Assistance Tool that combines ease of use and powerful PC software tools to allow you to save valuable time during many TV repairs.

The TRACE interface connects to the PC's serial port. It provides connection to the TV's I^2C bus and can be provided with an InfraRed transmitter (optional).

The interface is powered by a standard 9 V PP3 battery for portable use, and can also be powered by an external 9V/25mA DC power supply.

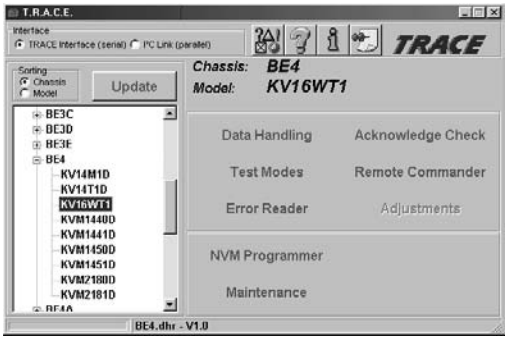
The TRACE software that is supplied with the interface allows you to:

- Read, restore and compare NVM contents via the I^2C bus
- Acknowledge check of all I^2C devices in the TV set
- Read Error Codes (emulation of the Error Reader tool)

With the optional IR Add-on kit, the following features can be added:

- Remote Commander emulation
- User programmable Functional Check through Infrared
- Fast and documented Test Mode setting of all Sony TV chassis

Additional features such as Adjustments and Troubleshooting are available in chassis-dependent software modules. Please contact your local Sony Service organisation for the latest information.



Note: For workshops already using the existing I^2C Link parallel port interface (9-948-320-30), this software can be used as well, replacing the TV Data Handling software (9-948-340-50), but Error Reader and IR functions can only be accessed with the TRACE interface.

Partnumbers:

TRACE Starter Kit (TRACE interface + software):	9-948-320-70
TRACE Software (for users of the I^2C Link interface):	9-948-340-80
TRACE IR Add-on (IR interface + Remote Commander software):	9-948-320-80

PC requirements: IBM-compatible PC with operating system Windows95, Windows98, or WindowsNT*.

* WindowsNT only supported with TRACE interface

9-927-500-01

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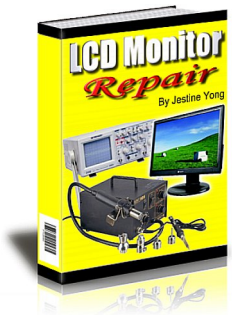
Happy Repairing!!

Highly Recommended Repair Ebook:



If you're a LCD Monitor repairer, then this is the best guide for you. Why? Because, the author revealed all his LCD Monitor Repairing secrets for you. I think, with just few Repair tips you learned from this guide you will get back your investment!
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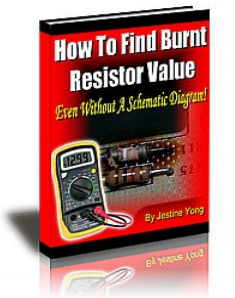

Are you tired of searching the service manuals to look for the value of a burnt resistor? If the answer is YES, then this eBook is a 'must have' guide for you. You can save a lot of time and be able to repair customer's Electronic equipment with burnt resistors in it.
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