
4. Troubleshooting

4-1 Troubleshooting

4-1-1 First Checklist for Troubleshooting

1. Power LED: Check that the LED works when the power cord is connected to a 90-264 wall outlet.
2. LED Indicators: See table 4-1-2 Basic Troubleshooting: LED Diagnosis on the Front Panel.
3. In case of a power failure or abnormal screen, check the following items.
 - ① Check that the power cord is correctly connected to a 90-264 wall outlet.
 - ② Check that the Master Switch has been pressed.
 - ③ Check that the transmitter is turned on.
 - ④ Check that transmitter device selection is set to TV.
 - ⑤ Check that the signal cable is properly connected.
 - ⑥ Check that channel setting has been set.

4-1-2 Checkpoints by Error Mode

1. Troubleshooting Summary

Problem	Solution
The power does not turn on.	Check if the power cord is properly connected.
Air broadcasting does not work.	Check if the antenna is properly installed.
Cable broadcasting does not work.	Subscribe to a local cable broadcasting firm and get support.
Satellite broadcasting does not work	Install a satellite antenna (Parabola) and connect it to the TV.

2. Menu & Remote Control

Problem	Solution
The remote control does not work.	<ul style="list-style-type: none"> ■ Press the Select Device button to select the TV or external device. ■ Replace the battery of the remote control with a new one. ■ Insert the battery making sure the polarity (+,-) is correct. ■ Check if the angle or the distance is sufficient, or if there is any interference between the product and the remote control. ■ Make sure the user has pressed the correct button. ■ To avoid direct sunlight to the receiving panel of the TV, remove any indoor lighting or change the location of the TV. ■ Check if the power switch at the back left of the TV is turned on..
Cannot change the channel with the remote control.	<ul style="list-style-type: none"> ■ Press the Select Device button to select the TV. ■ Change the channel using the remote control of the cable or satellite receiver.
Cannot select an A/V channel.	Press the source button and check if the AV item is grayed out. When the AV item is grayed out, you cannot select an A/V channel. Check if the connector is properly connected.
Cannot select a menu.	Check if the menu is grayed out. If a menu is grayed out, it cannot be selected.

3. Screen

Problem	Solution
The screen is black and there is no sound.	<ul style="list-style-type: none"> ■ Check if the power cord is properly connected. ■ Turn on the power. ■ Select an AV channel that corresponds to the external device.
Only the screen is blank/it is dark or too bright.	Adjust the screen brightness.
The screen is blue/the external channel is not displayed.	<ul style="list-style-type: none"> ■ Check if the connector is properly installed. ■ Select an AV channel that corresponds to the external device.
The screen overlaps (double/triple).	<ul style="list-style-type: none"> ■ Check if the antenna is properly installed. ■ Adjust the position, angle or direction of the antenna.
The screen is snowy or unclear. The picture quality gets worse when it is windy	<ul style="list-style-type: none"> ■ Check if the antenna has been bent or moved by the wind. ■ Check the antenna for its lifetime. (Normally 3 - 5 years, 1-2 years near the coast)
Dotted or semi-dotted lines are displayed on the screen.	Install the antenna as far away from the road as possible.
The screen is black and white.	<ul style="list-style-type: none"> ■ Adjust the color density. ■ Check if the connector is properly installed.
The colors of the screen are odd/strange.	Adjust the color tones.
Unusual lines appear on the screen.	Keep the antenna away from the power cord or connectors if possible.
Unusual lines appear on the screen when watching or recording to video.	Keep the video player as far away from the TV as possible.

4. Sound

Problem	Solution
There is no sound.	<ul style="list-style-type: none"> ■ Increase the volume. ■ Press the Mute button.
The sound is very low.	<ul style="list-style-type: none"> ■ Increase the volume. ■ Set the auto volume control to ON.
There is a lot of noise.	Keep the antenna away from the power cord or connectors if possible.
The selected language does not appear.	Press the Multiplex button to select the TV.

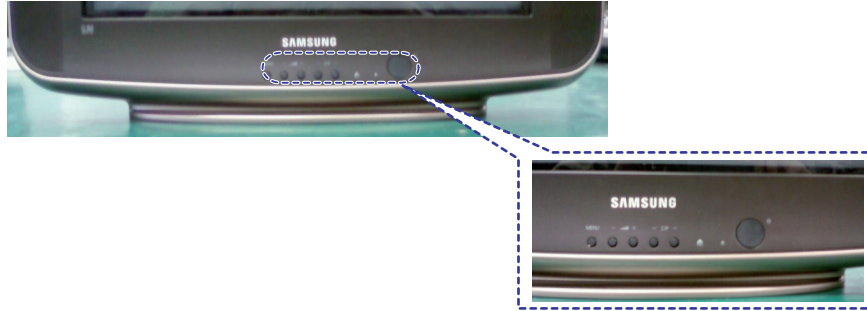
5. Channel

Problem	Solution
There are no channels available.	<ul style="list-style-type: none"> ■ Check if the antenna is properly installed. ■ Press the Auto Channel button to store channels. ■ Contact your local broadcasting service station.
Some channels are not available.	<ul style="list-style-type: none"> ■ Adjust the position, angle or direction of the antenna. ■ Activate the Reception Sensitivity Boost feature. ■ Contact your local broadcasting service station. ■ Use the number keys to select a specific channel and press Store/Clear to memorize it.
Only the UHF (14-69) channels are not available.	Check if the antenna is able to receive UHF signals.

6. Others

Problem	Solution
The TV makes a noise as if something is dropping inside.	This noise may occur when the plastic material inside the TV expands or contracts according to the seasonal temperature or humidity. This is like the noise from a furniture/cabinet/sink unit, and there is no need for concern.

7. Basic Troubleshooting: Diagnosis of LED on the Front Panel



- :Light is On
- ◐:Light is Blinking
- :Light is Off

Power	Description
○	This happens when the TV have turned on or the power cord is disconnected.
●	This happens when the power cord is connected.
○→◐→●	The LED blinks, while the unit is starting up or the unit is turning off.

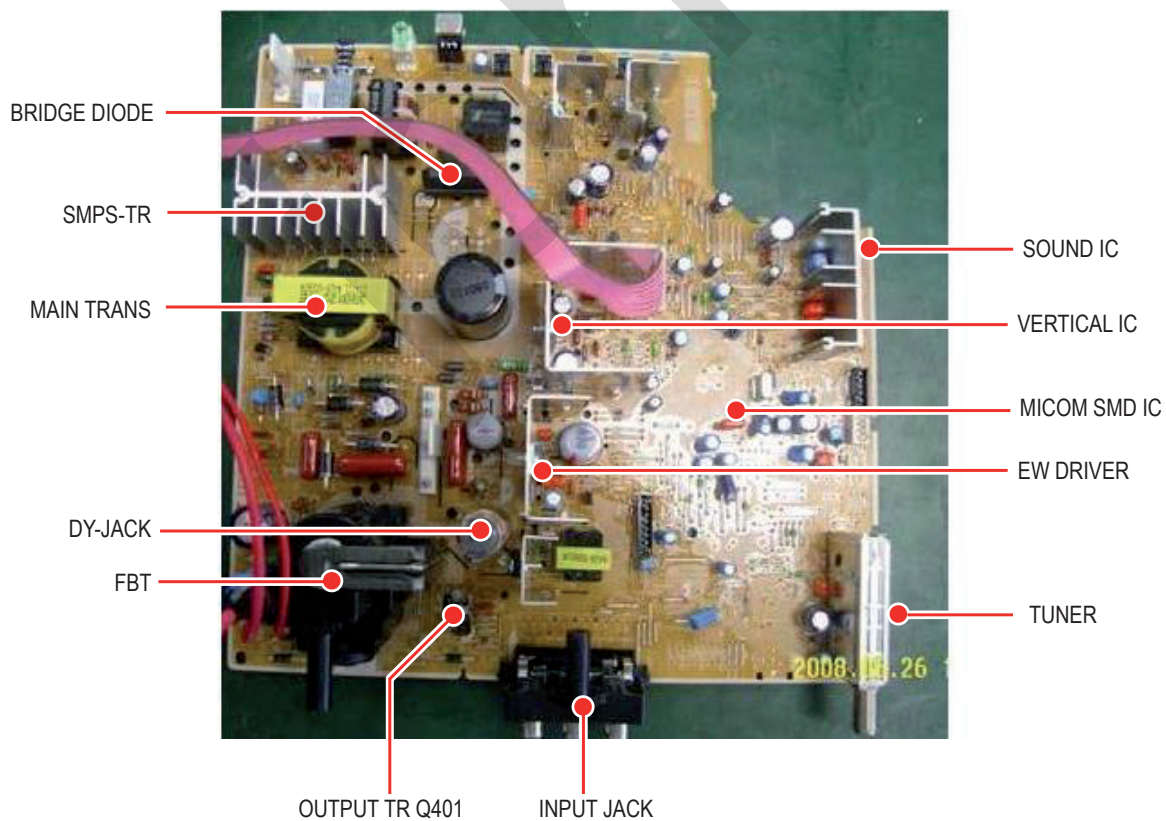
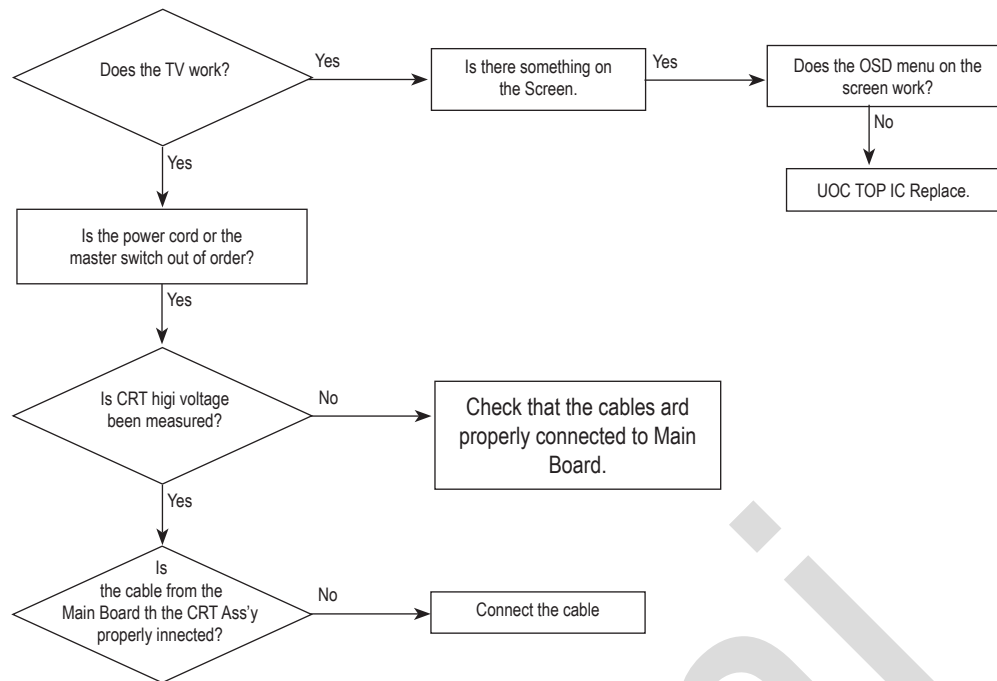
8. Troubleshooting by the Checksum

- Diagnosis of trouble by the checksum is neither reliable nor convenient.
You can only use the checksum of the current direct-view TV to determine whether the software is corrupted or not.
The Checksum value is determined according to the version of the software loaded on the set.
Therefore, you can determine whether the software has been properly downloaded, if you know the correct checksum for that version of the software.

You can check the checksum according in the following order.
Factory Mode → Checksum → Enter → Output Checksum (e.g. 0xab2b)

- Checksum Examples
T-SIXNSAM -1000.0 Checksum = XXXX

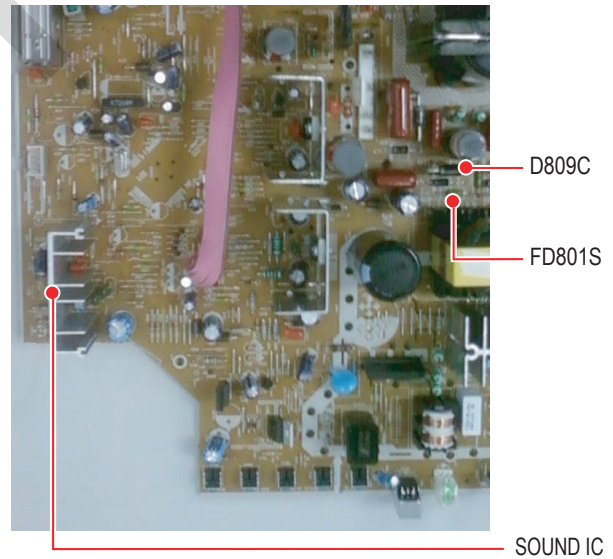
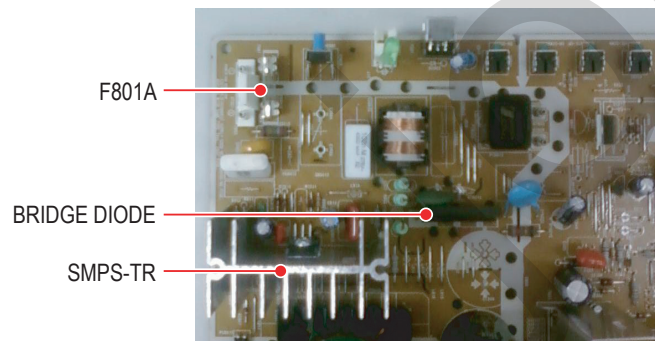
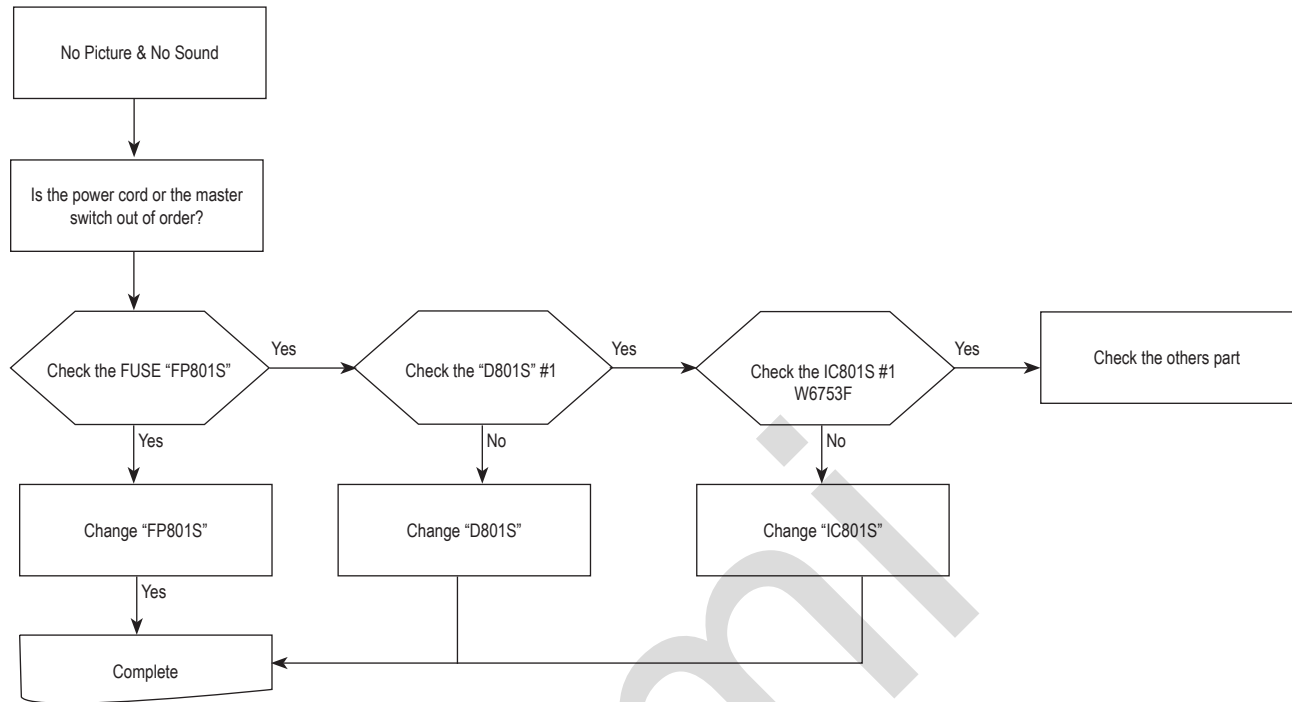
9. Flow Chart for Malfunction



4-1-3 Troubleshooting Procedures by ASS'Y

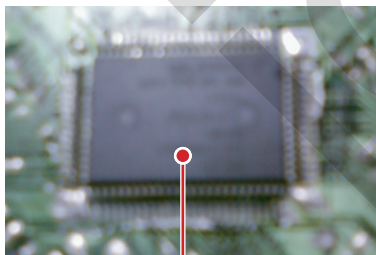
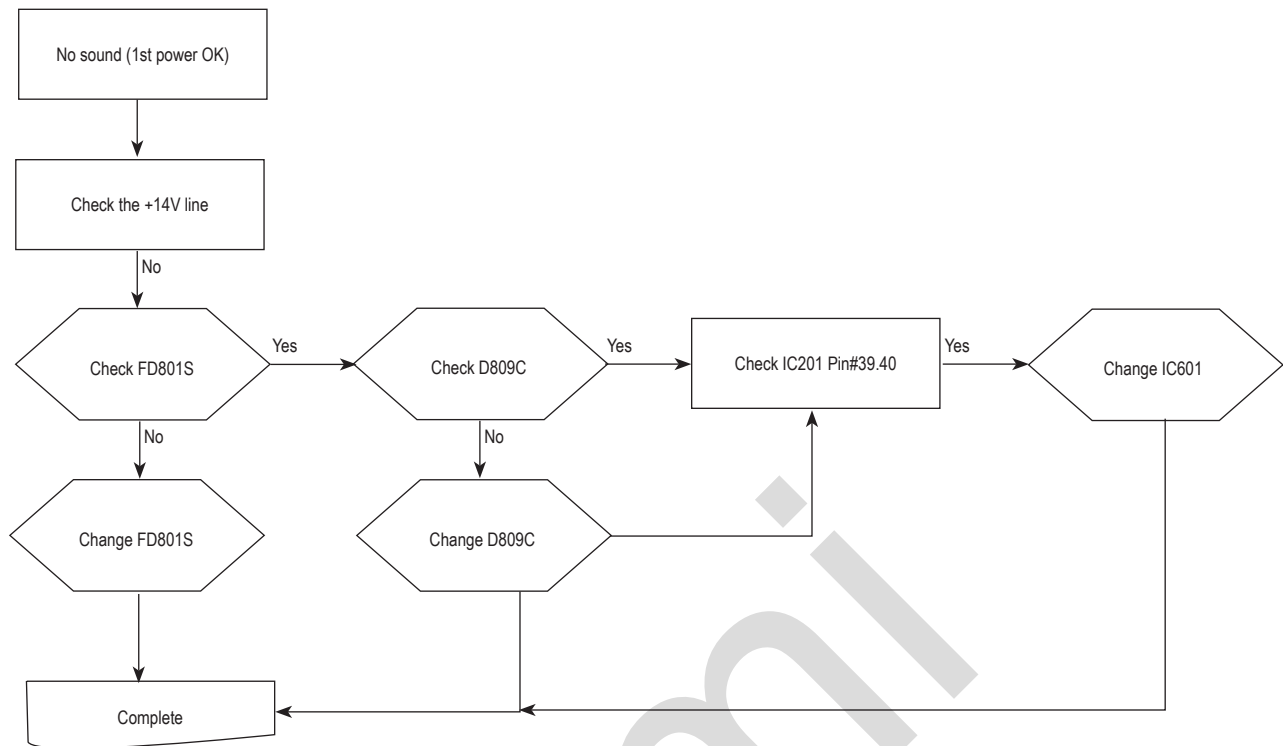
1 NO Power

- Power part of the Main Board Check.

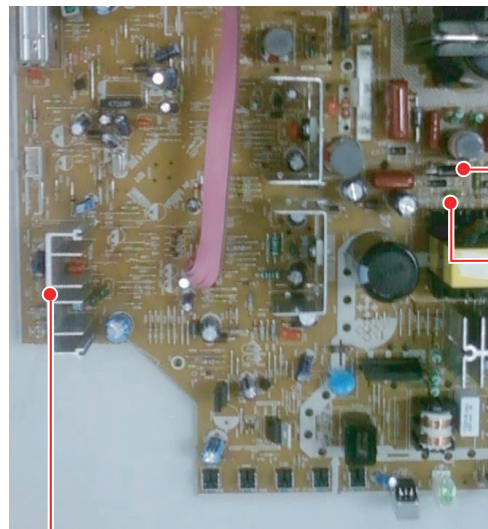


2. No Sound

- when the power is normal



MICOM SMD IC



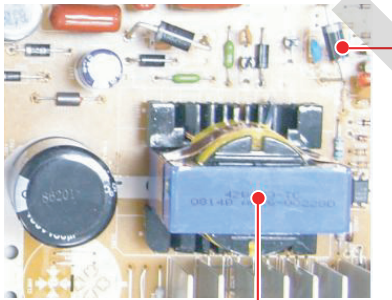
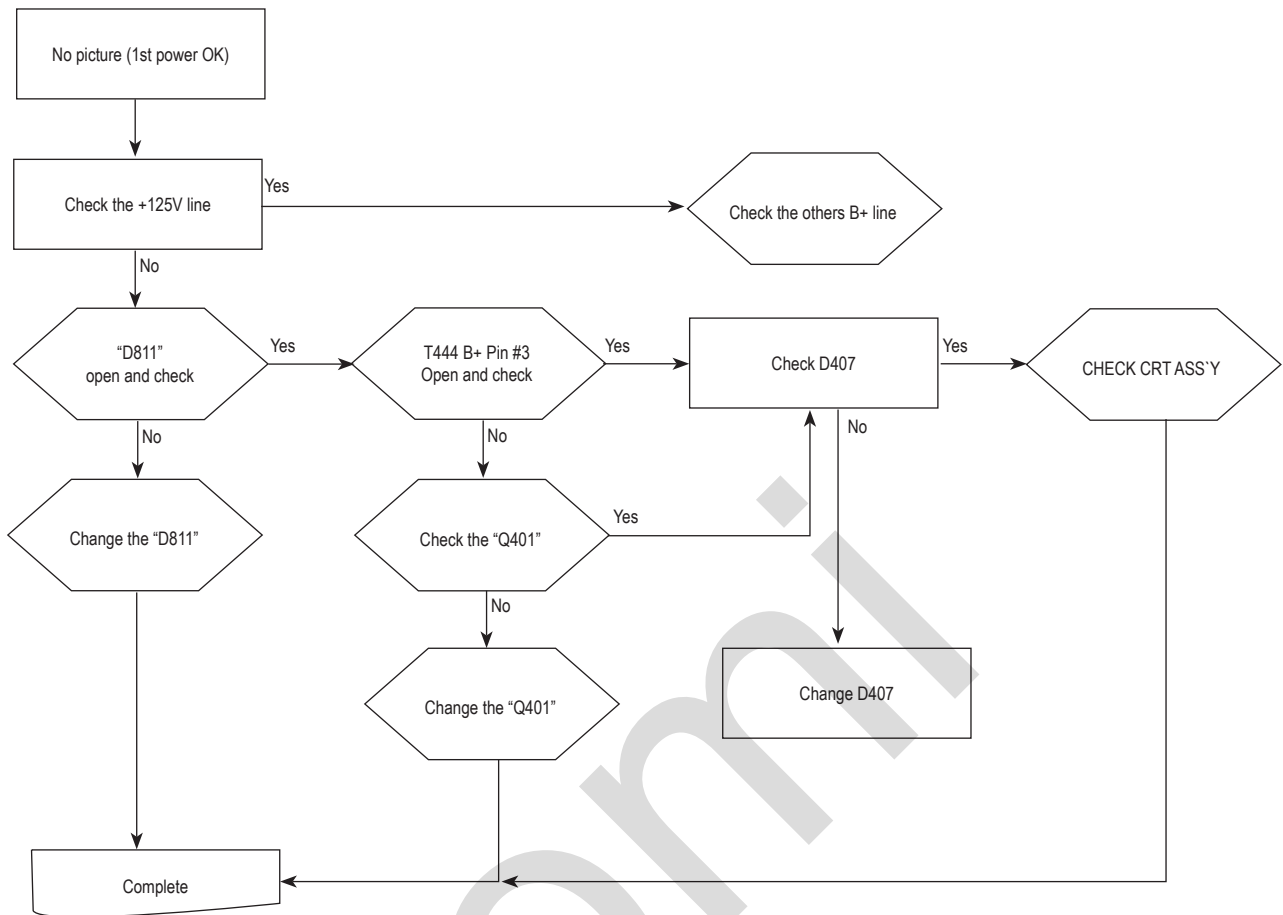
D809C

FD801S

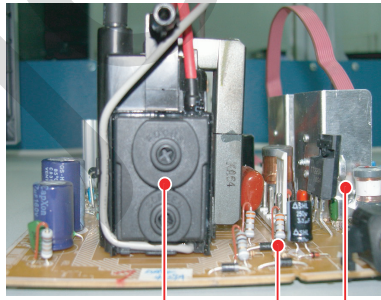
SOUND IC

3. No Picture

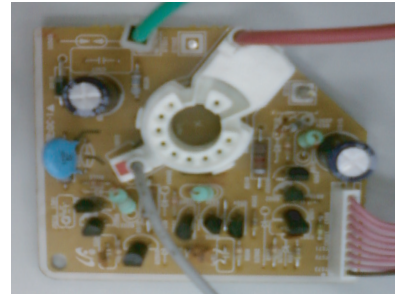
- when the power is normal



MAIN TRANS D811



FBT D407 OUTPUT TR Q401

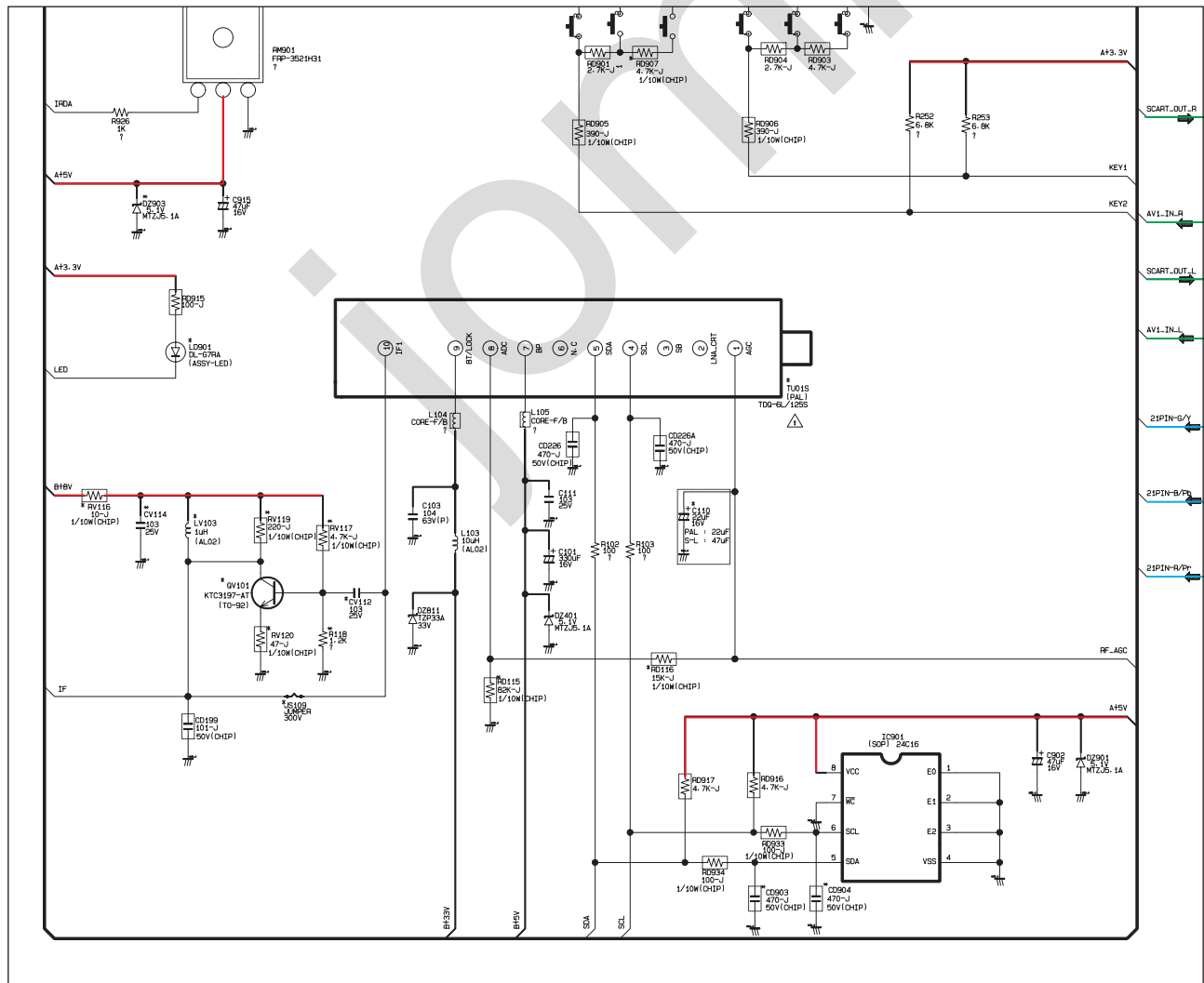
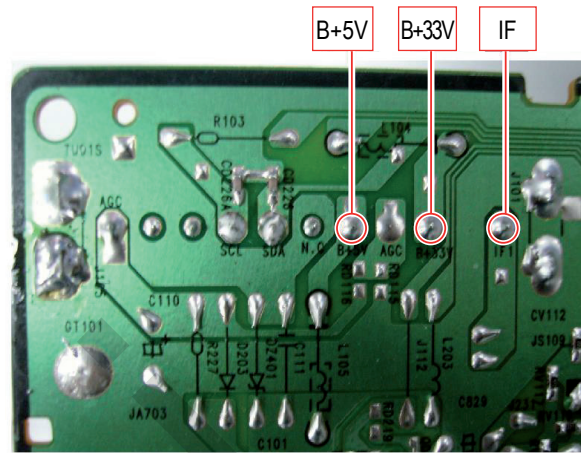
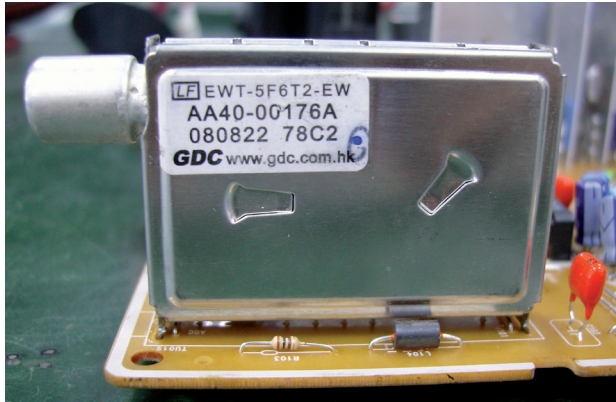


4-1-4 Troubleshooting by Blocks

1. Tuner Diagnosis

If there is no signal measured even though the RF signal received by the external antenna is input to the Main Board Tuner.

- Supplied Power: 5V, 8V, 33V
- RF Trouble Check: Check CVBS output
- AUDIO Trouble Check: Check SiF signal output



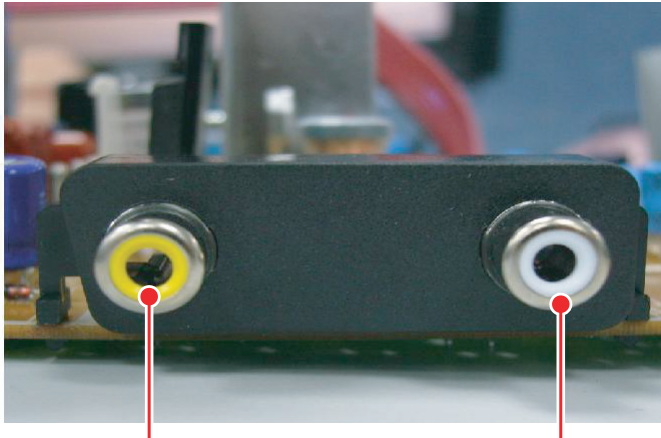
2. External Input Diagnosis

Component inputs and one monitor output (Video, Audio) are supported.

The signal is input to UOC TOP IC through the ports.

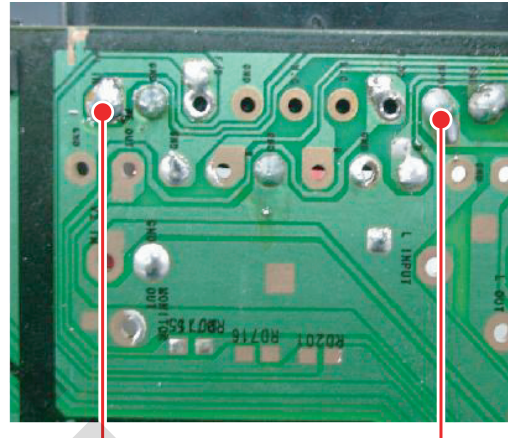
If the signal input change “and output are” to “is” not detected, check the following.

- Supplied Power: UOC TOP IC(5V, 3.3V, 8V)
- Input Problem Check: Check the connecting jacks.



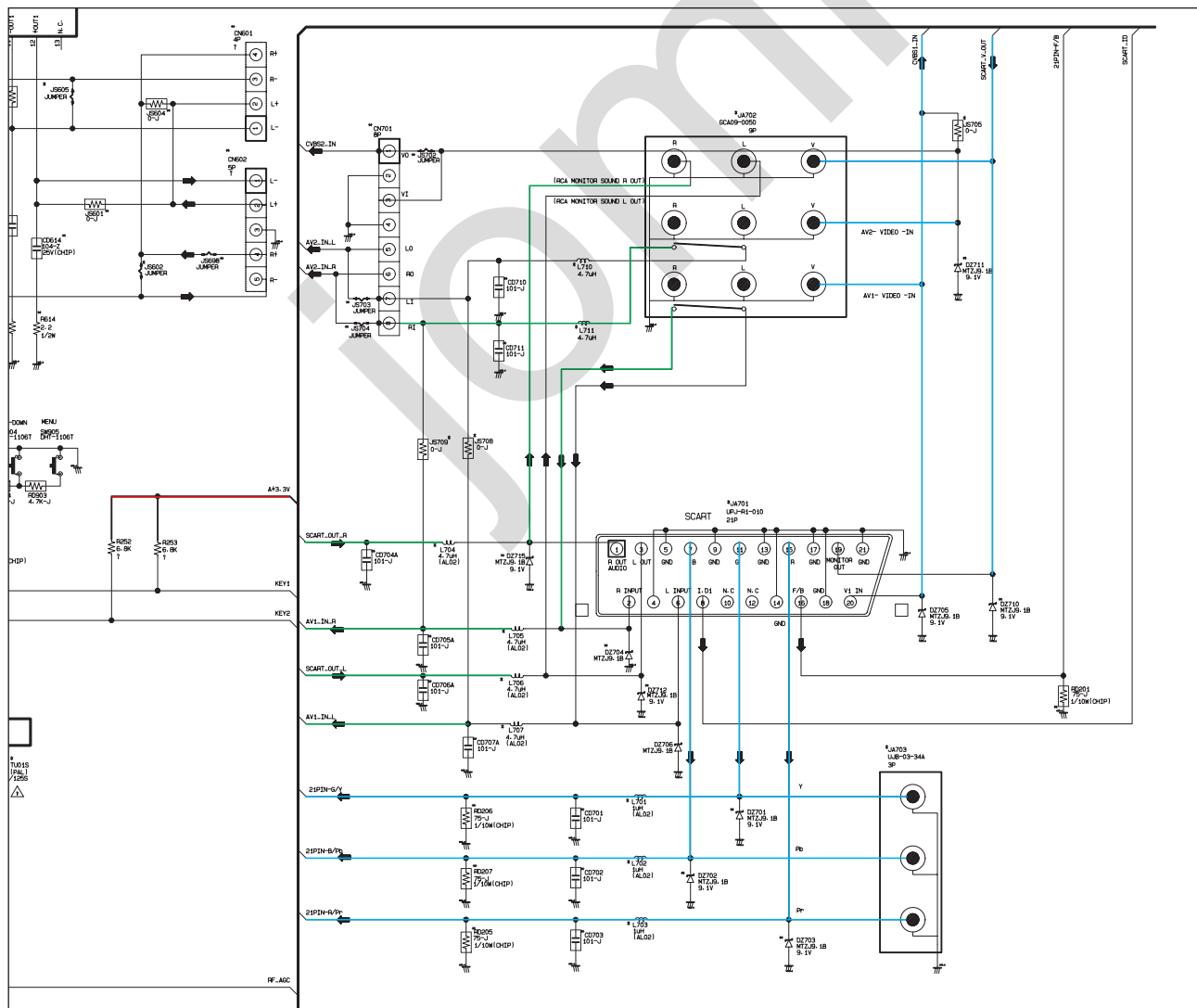
VIDEO IN

AUDIO IN

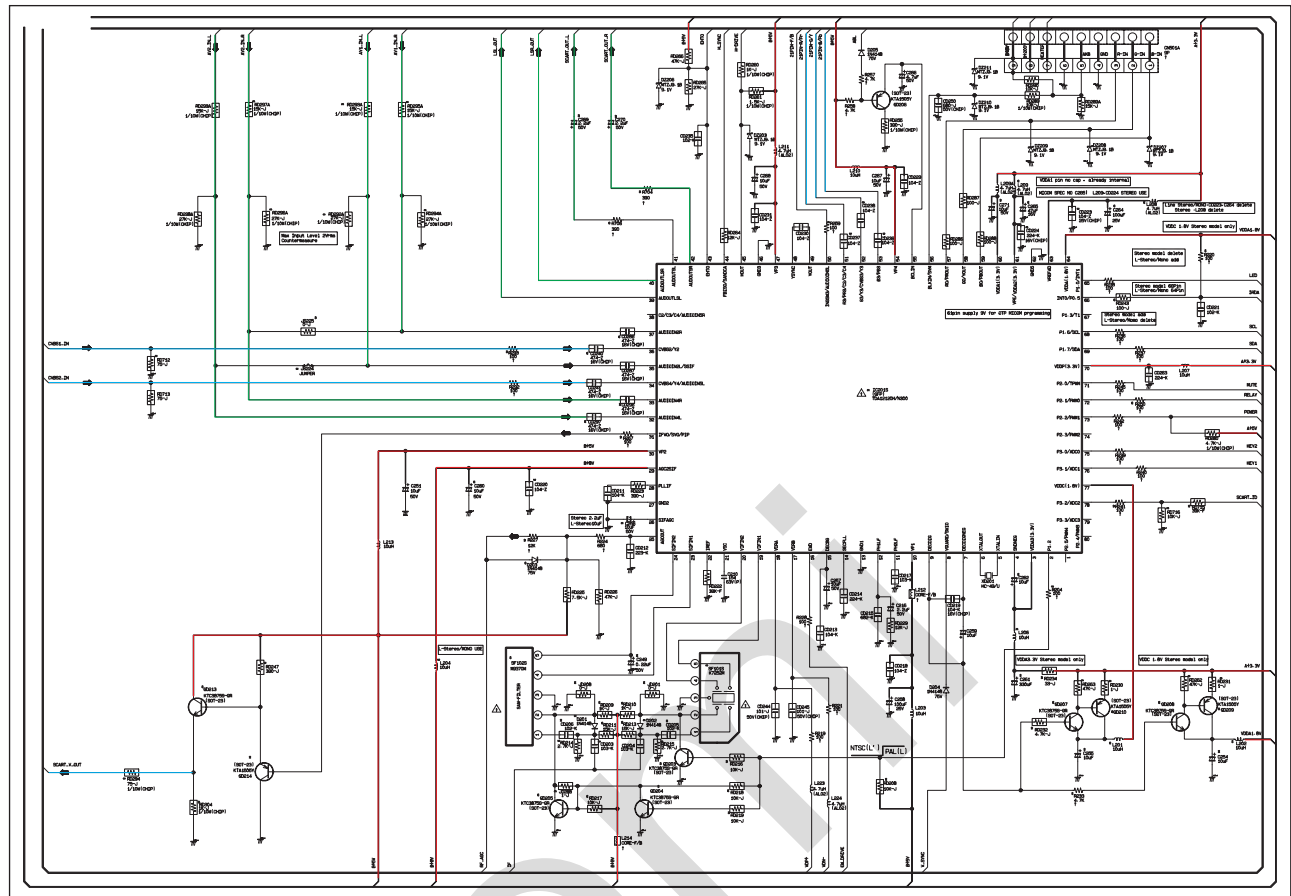


VIDEO IN

AUDIO IN

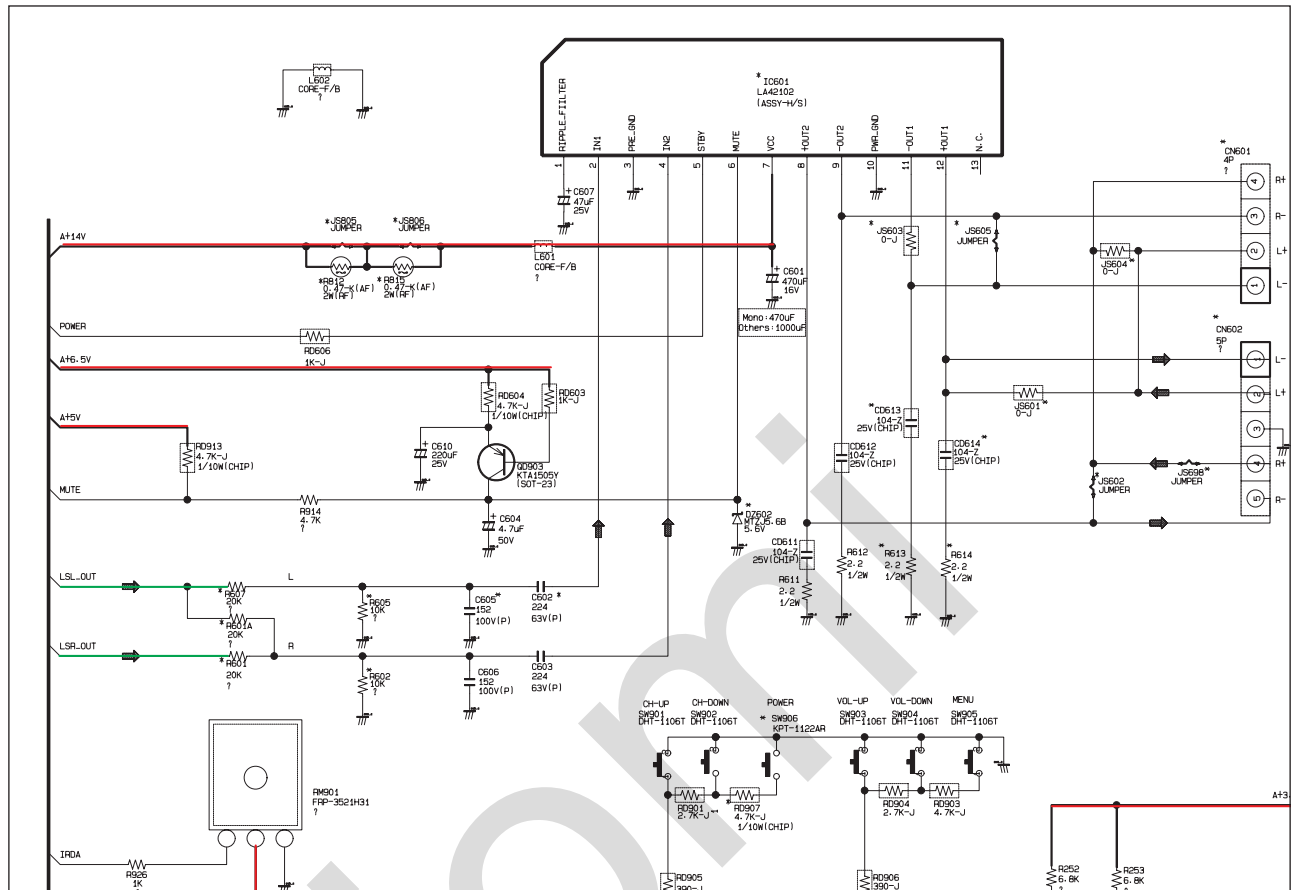


3. TDA11136H/N3 Diagnosis IF+MICOM+VIDEO



4. LA42032 Diagnosis

- Supplied Power: 11V
- Input Problem Check: L/R
- Output Problem Check: L+, L-, R+, R-



4-2 Adjustment

4-2-1 Service Instruction

1. General Adjustment :

In general, a color TV can provide ideal visual quality by adjusting the basic settings such as the vertical size, horizontal size, focus, etc.

Display a black and white picture on the screen to check if the picture is clearly displayed.

If there are some 'spotted' points on the screen when displaying a black and white picture, degauss the screen using the degauss coil. If the spotted points remain, re-adjust the purity and the convergence.

This completes the basic performance examination.

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4-2-2 How to Access Service Mode

1. To enter Service Mode, press the keys on the remote control according to the following sequence. (in Stand-by status)

To Enter: **Info** → **Menu** → **Mute** → **POWER ON**

2. The initial screen of Service Mode.

Option	XX XX XX XX XX
Hotel Option	
Deflection	
Video Adjust 1	
Video Adjust 2	
Video Adjust 3	
Video Adjust 4	
YC Delay	
Others	
Bus Stop	Off
CHECKSUM	0000
G2 Adjust	
RESET	
T-SIXPEANM-1000.0	2008/10/08

3. Functions of the Keys within Service Mode.

MENU	Show all menus
▲ / ▼	Move the cursor to select an item.
◀ / ▶	Adjust the selected configuration value

4. W/B Setting

No	Item	Data	Required Adjustment
1	White Balance	x: 275± 5 y: 27 5± 5 Y: 45± 3	White Balance (Standard Data)
		x: 265± 5 y: 265± 5 Y: 1.5± 0.3	
2	Screen Voltage	Toshiba Pattern	Same As KSCA Chassis
		G2 Adjust	

4-2-3 Factory Data ♦ The underlined are items applied during the service adjustment. None of the others should be adjusted.

1. Option

No	Item	Selection	Initial Data
1	Video mute	100msec~1000msec/Off	600msec
2	System	CL/CP/CT-N	CL
3	AV Jack	1RCA/2RCA/2RCA+DVD/1SCART	1RCA
4	Sound	Line Stereo / MONO	MONO
5	High Deviation	ON/Off	On
6	Volume Curve	Large/Small	Large
7	Initial Lang	English/Spain/Portugal/France	By Country
8	Lang Group	NTSC SA/Philippine	NTSC SA
9	Close Caption	ON/Off	On
10	Ext Band Pass	On/Off	Off
11	V-Guard	On/Off	On
12	AV OUT SEL	CVBS2/CVBS3	CVBS2
13	DNle Jr	On/Off	Off
14			

2. Hotel Option

No	Item	Selection	Initial Data
1	Hotel Mode	On/Off	Off
2	Power On Band	Air/STD	Air
3	Power On Channel	0~99	3
4	Power on volume	0~100	10
5	Max Volume	0~100	100
6	Pannel Button Lock	On/Off	Off
7	Power On Source	Off/TV/AV1/AV2/DVD	Off