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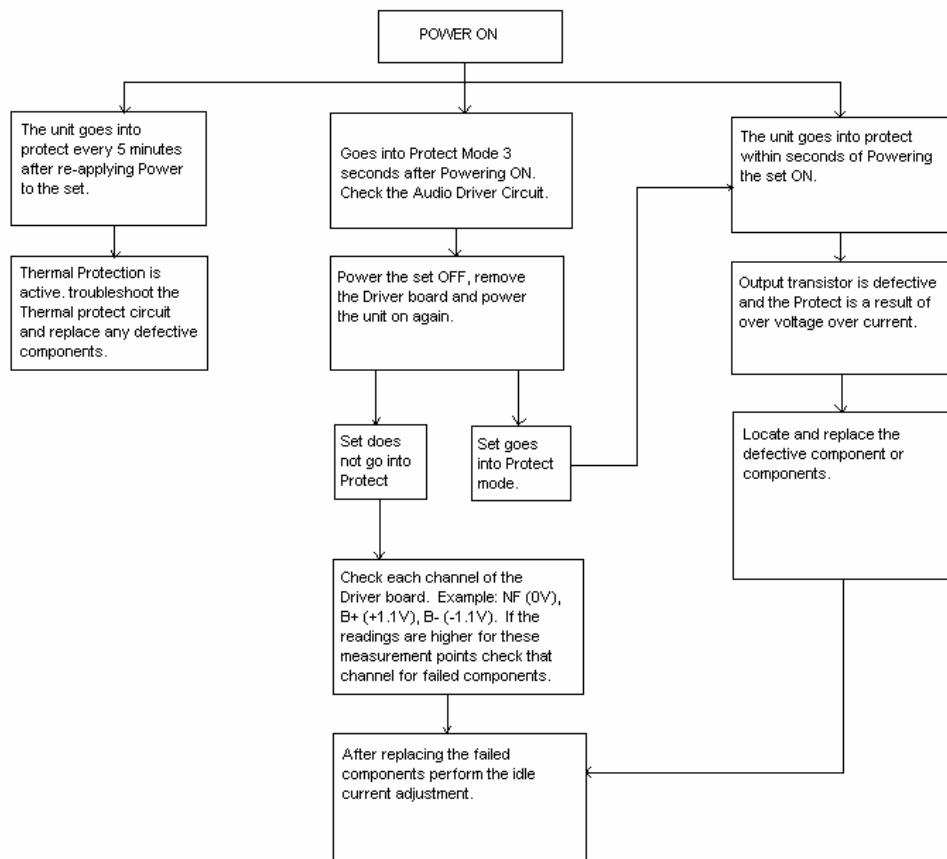
18 Park Way, Upper Saddle River, NJ 07458

## Technical Tip

Date: May 25, 2006

**Model:** HTR-330/530, TX-SR303/SR503

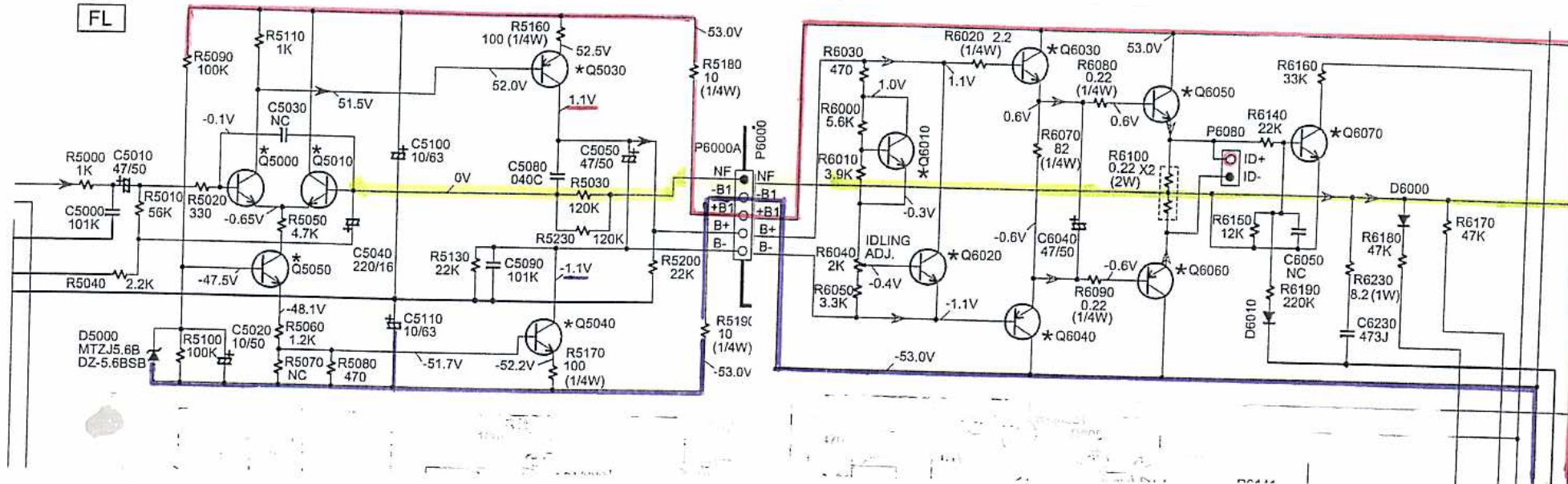
**Subject:** General troubleshooting for Protect problem.



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- 1 . Normal audio using analog inputs. Do you have all Dolby surround sound ?
- 2 . All DSP voltages are normal ? Did all supply voltage go to all ICs ? +5vDSP, 2.5V, +3.3V... +7v, -7V..
- 3 . Input sel IC. Use CD analog input audio signal (ADRT+, ADRT- and ADLT+, ADLT-) out to DAC IC ?  
Surround analog signal out (DAC L, DAC R, DAC C, DAC SW, DAC LS, DAC RS, DAC SB\* back to Input sel. IC.  
Pin 1 to pin8 out to p5504. ( Same as pre out) check Mutting transistors Q5600 to Q5617 .
- 4 . When use digital input signal did digital light up on display ?  
If missing 3.3v, 2.5v 5vdsp (on Reg IC Q5640) to DSP ICs will disable DSP function. (U05 Amplifer PC board)

Please use TX-SR502 as sample Technical Tip Troubleshooting.

When you need Tech help Please use Tech Email and give us Voltage and signal info. What voltage on DSP ICs and where you lost audio signal ? What you have on input IC Data line  
Check with TX-SR502 Troubleshooting tips for the Microprocessor and Audio Select IC

Pop noise in speakers Check next page info you have DC in audio line at any channel .

**Date:** 04/13/03

**Ref #:** TXDS575MUTE

**Title:** TX-DS575

**Classification:** Service Tip

**Symptom:** Receiver shuts down when source, Speakers are selected or volume is set to MIN. position.

**Solution:** Defective components

Referring to Page 41 and 42 of service manual find all location of muting transistors used. Anyone of the following transistors at location Q3383, 3483, 3186, 3187, 3188, 3684, 3683, 3583, 3283, 3183 may be leaky. In the exception of Q3187 and Q3188, the emitter voltage of the above-described components should not exhibit any DC volt presence in excess of 12mv to max 20mv while operating.

Mute duration is governed by C3194. Muting control DC volt (+2.6) passes through Q3185. The base of all muting transistors is -12vdc when unit is operating normal. When in mute mode, muting transistors base voltage goes to approximate +2.6vdc.

Q3184 pins 1,2,3,4,8,9,10,11 are expected to be DC free. If Any DC is noticed, Q3184 may be defective.

#### Troubleshooting Steps and Procedure:

Since the unit is likely to shut down if any one of the function switches or volume controls reach MIN, do the followings to keep the unit ON.

- 1) On the power amplifier PCB locate P601A. Then Short all the connector pins together.
- 2) Locate Front amplifier input connector P520A. Short all the connector pins together EXCEPT FIRST PIN, which is 24vdc carrier. This condition will allow the unit to stay ON allowing troubleshooting without unit shutting down.

**\*\* Do not forget to remove or clean short when service is complete.**

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18 Park Way, Upper Saddle River, NJ 07458

## Service Bulletin

**No. 004**

**Date:** August 24, 2005

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**Model:** TX-SR602/702/DTR-4.5/5.5/6.5

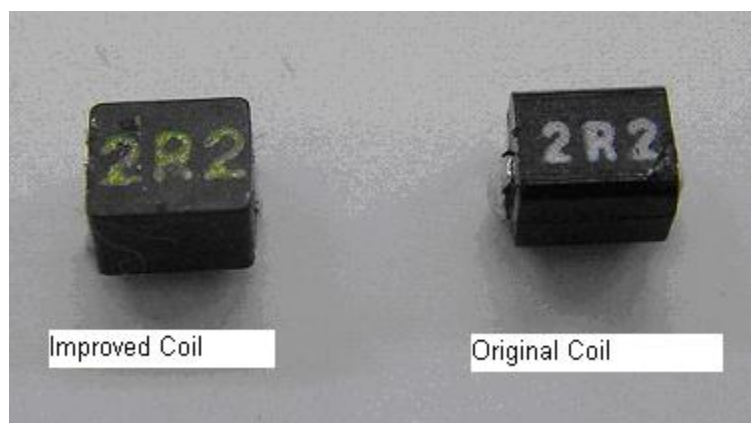
**Subject:** No sound in Surround mode

**Symptom:** No sound in Surround mode. Coil L921 which is located on the DSP board may have opened due to in rush current.

**Solution:** Check coil L921, if open, replace L921 with the improved part (green print).

### Parts:

Ref #	FORMER		NEW	
	Description	Part Number	Description	Part Number
L921	NCH-1587-022	233533K022R2	NCH-1471	231237M022R2



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18 Park Way, Upper Saddle River, NJ 07458

## Technical Tip

**Date:** January 3, 2006

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**Model:** TX-SR602/SR702      can      be      use      other      Receive

**Subject:** Unit Displays “Auto Speaker Setup” and locks up.

**Symptom:** The unit displays “Auto Speaker Setup and locks up. There is no sound and you cannot exit the Menu Screen.

**Solution:** No +7V to Front panel, +7 volt regulator Q303 found to be overheating and +7V on pin 19 of the Selector IC Q302 was shorted. Replaced regulator IC Q303 and Selector IC Q302 and normal operation was restored. Tip submitted by R. Jackson of Goodman TV, Addison, TX.

[Check all voltage on Amp. power board and DSP board. Repair low voltage you fix the problem.](#)

### Parts:

Ref#	Description	Part Number
Q302	NJW1157B	22242193R3
Q303	78L07	222780073R2

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**ONKYO : TXSR602 \*** - Serial Numbers within range (Last 7 digits) ???0020001 thru ???0029999 with Q701 IC description being M30627FHPGP  
Serial Numbers within range (Last 7 digits) ???1020001 thru ???1029999 with Q701 IC description being M30627FHPGP

**ONKYO : TXSR702 \*** - Serial Numbers within range (Last 7 digits) ???0020000 thru ???0028751 with Q701 IC description being M30627FHPGP  
**\* NOTE : Units with Q701 description of M30627MHP are not upgradeable and the IC needs to be replaced.**

**Symptom & Relative model:**

1) Any CD/HDCD hybrids which are played into these models digitally,  
no audio is output.

**Solution:**

Perform firmware up-grade procedure below with the latest version posted under "Upgrade" section  
on service web site.

