

## Quick Reference Guide to Technics RS-1506:

Page:

- 2       Technics Line Amplifier modification
- 3       pics
- 4       Headphone modification
- 5       Location of the boards
- 6       Adjustment pots

**THIS QRG IS A WORK IN PROGRESS AND NOT FINISHED !!!!**



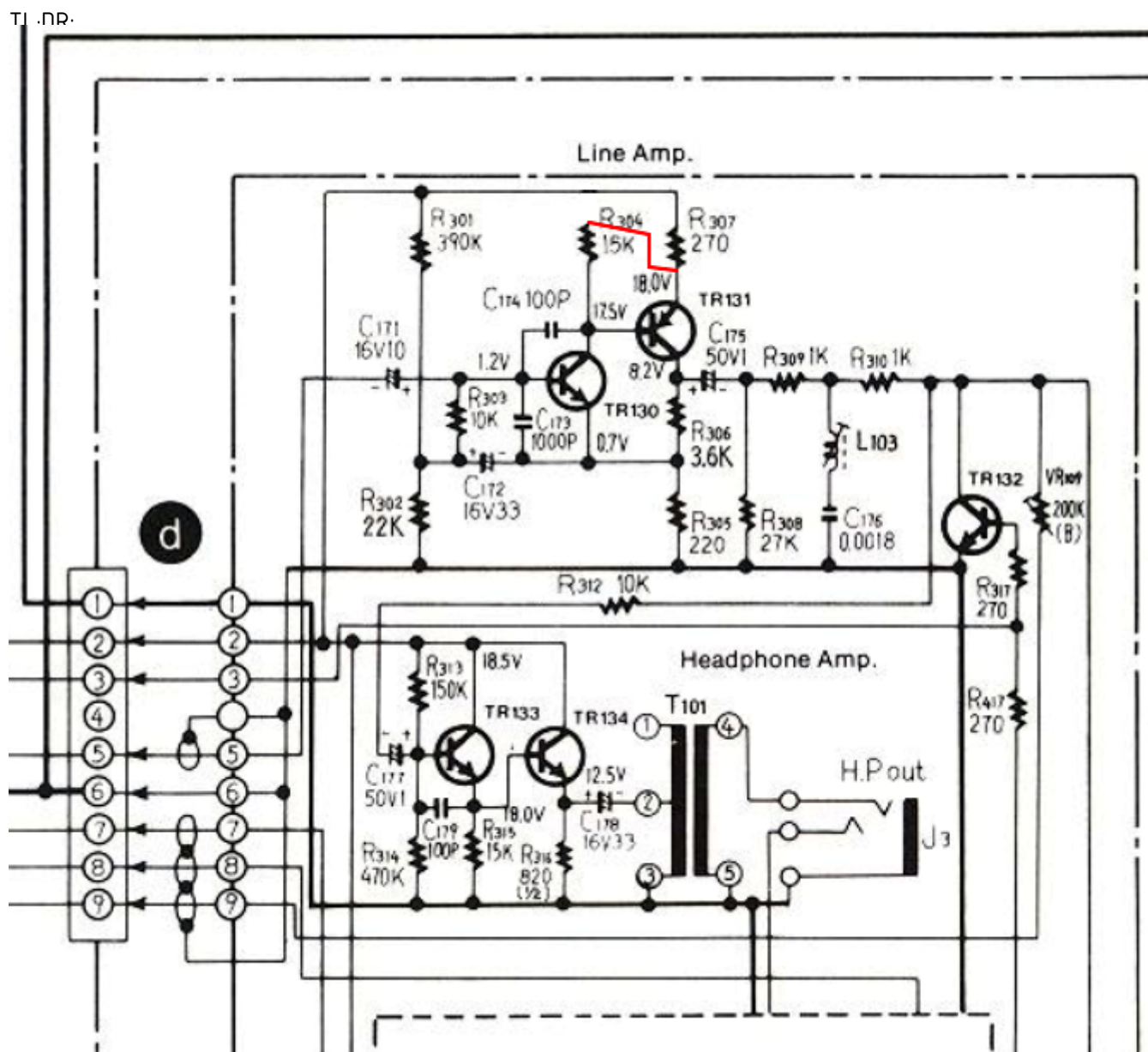
## Technics Line Amplifier modification:

In the RS-15XX series of R2R decks, as well as in the RS-9900 and the RS-M95 cassette decks (and possibly in some other equipment) from Technics the line amplification stage is built around a simple n-p-n/p-n-p 2 transistors stage. In its original form this line stage is the main source of distortion in the signal electronics of these decks. A very simple modification, applicable to all aforementioned units, improves the linearity of that stage, reducing both harmonic and intermodulation distortion by over 30dB (!). The sound quality as a result is also much improved. This modification doesn't need any components, only a bit of soldering. The load resistor of the n-p-n transistor (usually 15kOhm in these circuits) needs to be connected not between the base of the p-n-p transistor and positive supply rail, but between the base and the emitter of that transistor. That is all, no other changes required.

Below the mod is shown in red.

R304 is modified to connect to TR131. And R404 op TR231 for right channel.

<http://www.ant-audio.co.uk/index.php?cat=post&qry=Modifications>







### Technics RS-1500 Headphone Amplifier Modification

The headphones amp lacks any power, and in the calibration setting of the output controls, it distorts with LOW IMPEDANCE headphones. The Mod for it is described below:

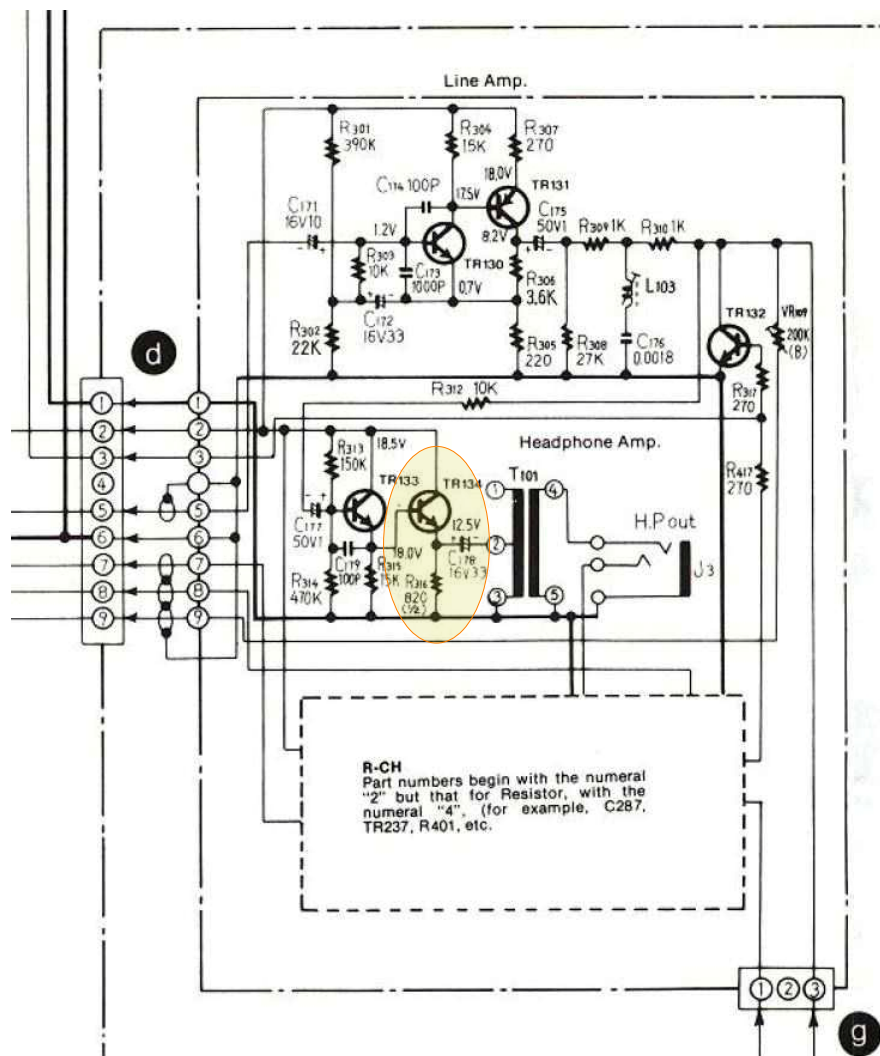
*Replace the output transistors with a 2SC3708T and those output resistors of the emitter follower (820 Ohms) with 390 Ohms / 2 Watt resistors. Now, it will play 6dB louder without distortion, or, said differently: the headroom has been raised by 6dB. Gain stays the same!*

#### Parts needed:

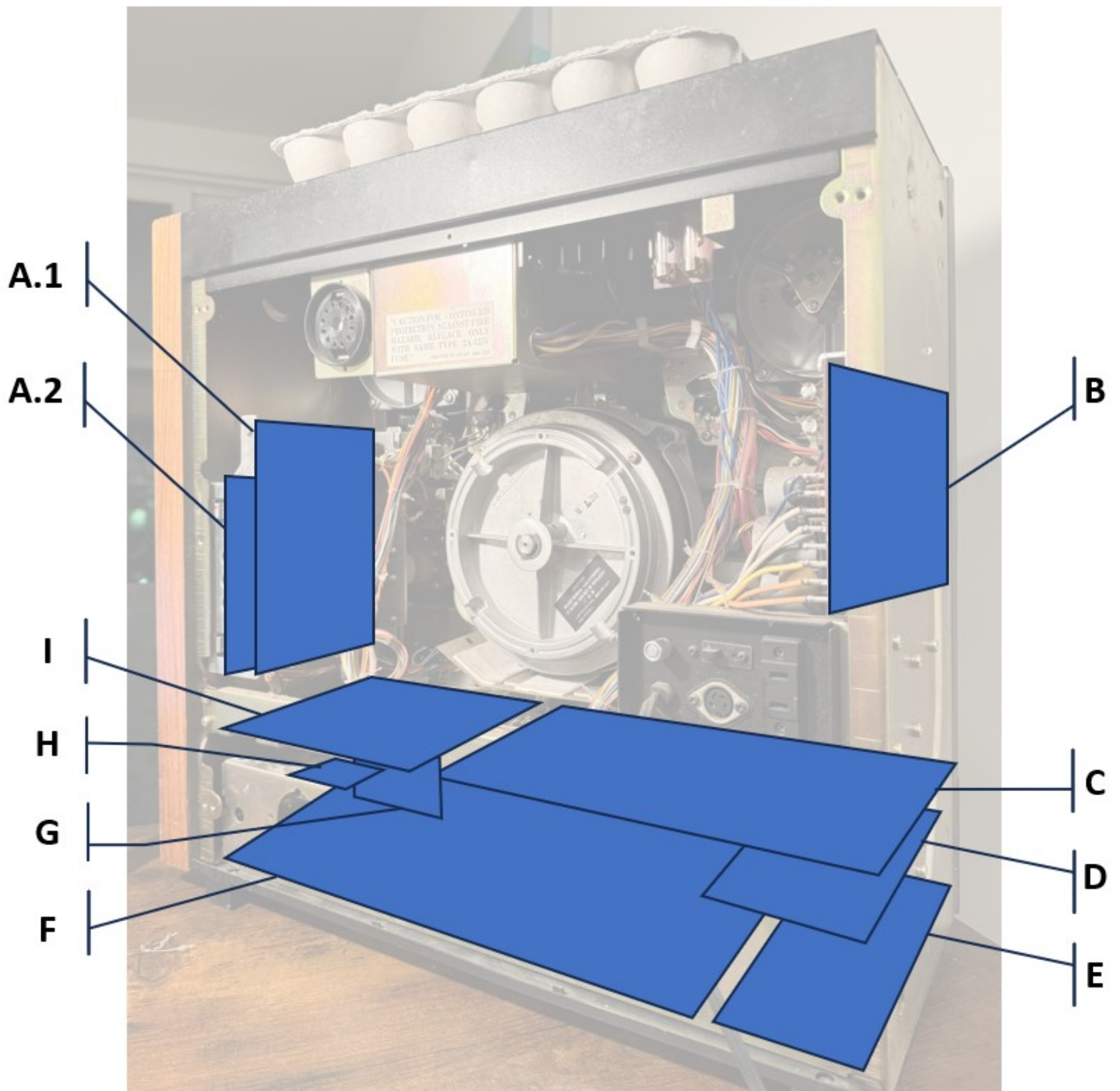
2X transistor 2SC3708T (Sanyo)  
2X resistor 390 Ohms / 2W

#### Part numbers on jack PCB (with headphones jack):

TR134  
TR234  
R316  
R416

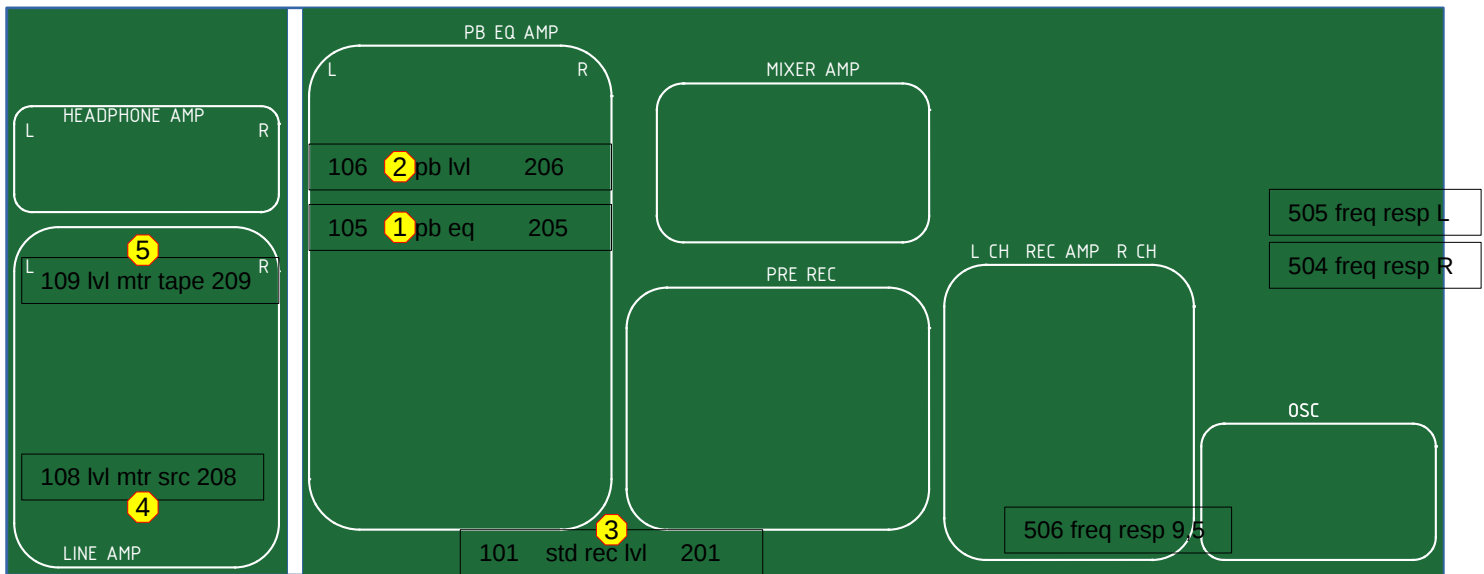






- A1 Reel Motor Drive
- A2 Reel Motor Tension
- B PSU
- C Capstan Motor Control
- D Mic and Meter Amp
- E Headphone and Line Amp
- F Main Amp
- G
- H
- I Main Control

## RS-1500 View from BOTTOM SIDE



HEADPHONE &  
LINE AMP PCB

MAIN AMP PCB

Behind LINE  
AMP PCB: ↑



MIC & METER  
AMP PCB