

#### Brief Installation Procedure:

1. Check the Parts
2. assembly each channel in brief and make sure the assembly is correct.
3. assembly the chassis in brief, and make sure no small parts missed.
4. fixed the Power rectifier board, bridge and the transformer on the chassis, don't tight up the transformer yet
5. connect the power to test power regulator+ transformer and the bridge in order to make sure connect correctly. (if you have oscillator, you can connect and see is it clean or not)
6. connect the power to the amplifier board to see is the power supply is correct or not.
7. re connect the power to tune the middle voltage(0V) , adjust the bias
8. after tune the middle voltage and the bias, solder the stuff up, fix the amplifier board on the heatsink,
9. tighen up the screws and if you have oscillator, test with frequency generator)
10. connect the cables.

## Installation

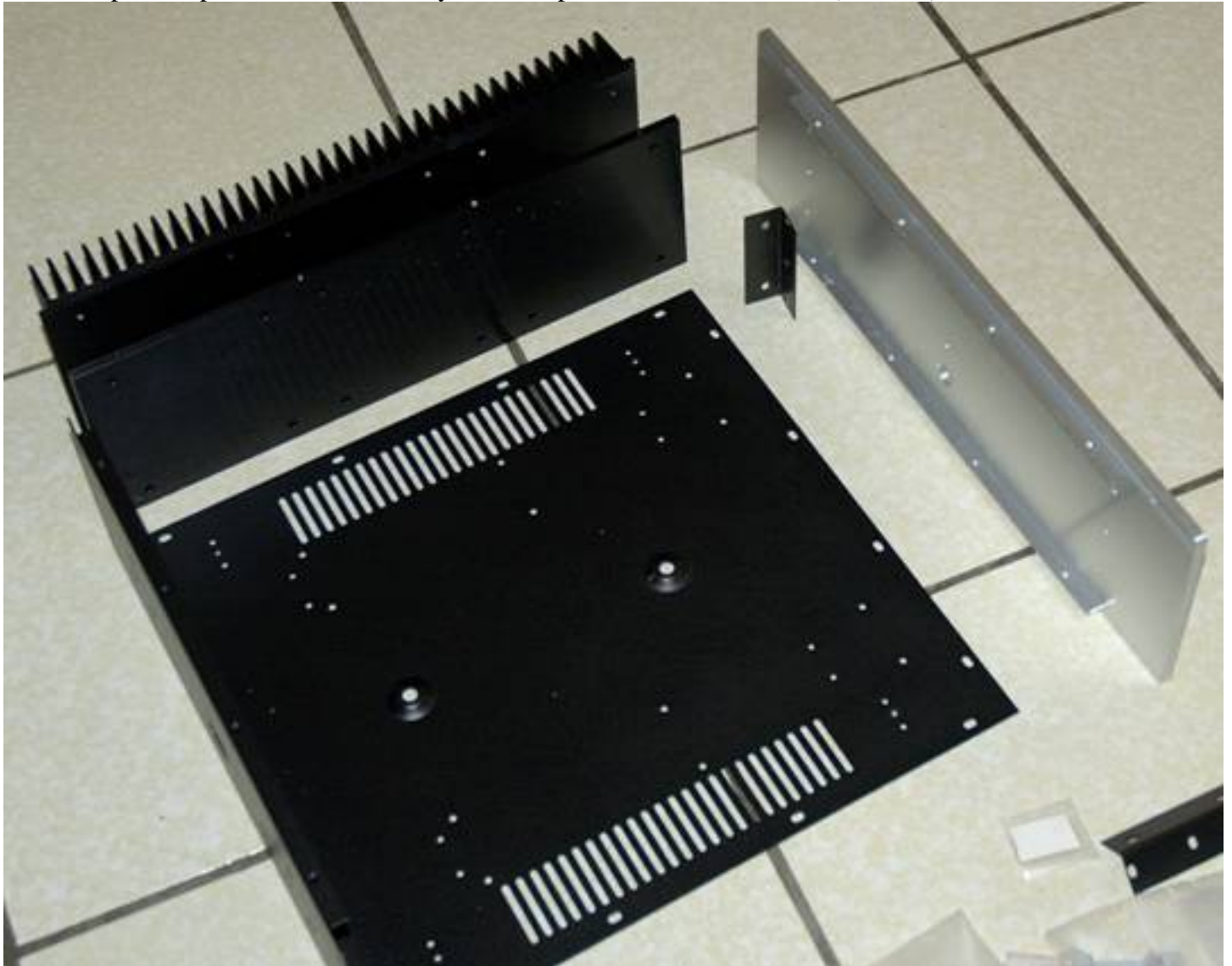
The Heatsink on each side is actually 3 smaller heatsink connect together, and use 1 large long aluminum board as the base board to connect the amplifier PCB with the heatsink. All the holes are predrilled for the PCB and heatsink.



Afterward, we need to assemble the chassis, factory does not provide the installation manual, it is definitely a little bit hard for beginner. OK, let play with that Lego.

Bottom and the rear board is the same board and bended into L-shape already. Front panel is using exclude techniques and brush afterward.

2 x L-Shape steel plate, used to assembly the front panel with the side board(heatsink).



I believe every guy can't wait to start assembly the stuff, I have used some cooling oil between heatsink and the base board. Need to screw not too powerful as the heatsink is pre drilled and then do the anodizing electrolyte.





As PCB is already semi-finish, there is not much to do . just do the quality assurance once more. I have disconnect the 10K5 resistor in order to adjust the 0 voltage.



In order to maximize the connect surface between the capacitor and the copper, I flip the pcb for soldering. And I also connect WIMA 0.1uf in parallel. (In the photos is the RIFA cap, it is sold out at the moment.)

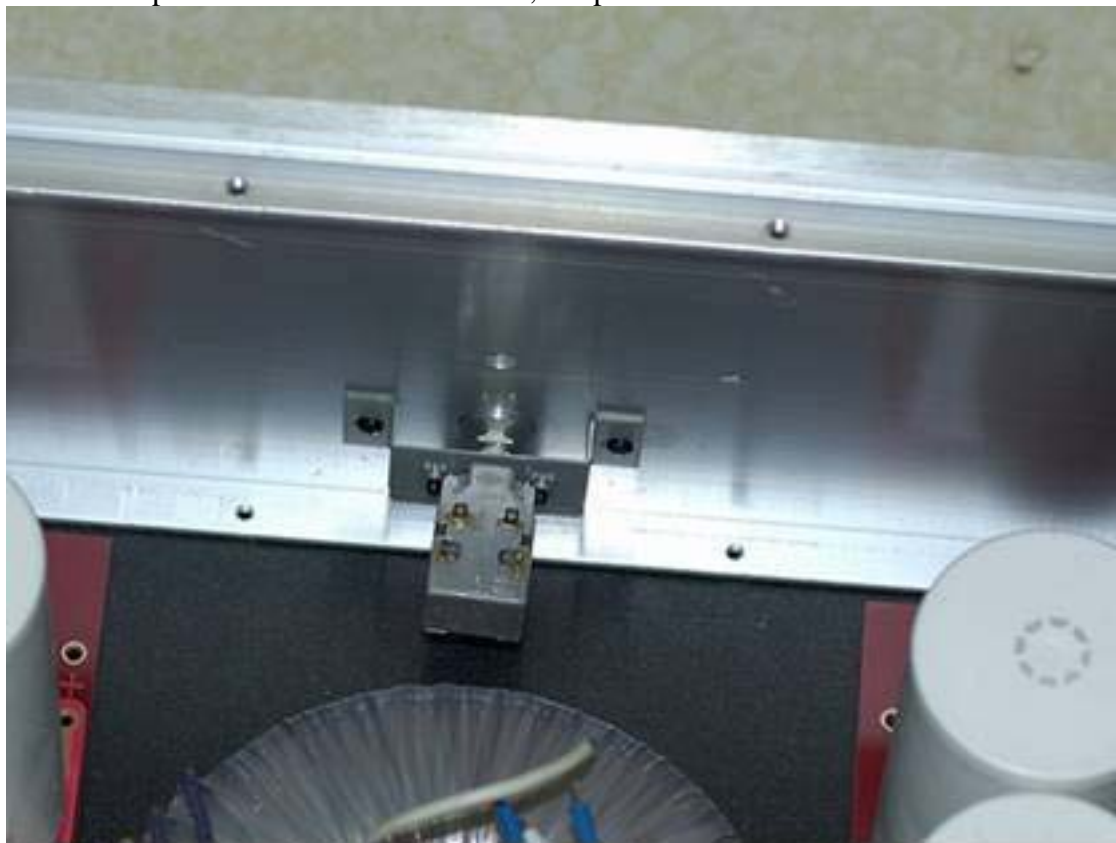


And then place the stereo amp board, rectifier board ,bridge and the transformer inside the chassis in order to see anything missed. The bridge and the rectifier holes are not predrilled! It need to drilled manually!





And then I placed most of the small item,like power on off button.





Now , I placed the amplifier board to the heat sink, there are many holes, I use the 4 holes at 4 corners of PCB to find out any holes fit. Luckily it is still easy to find, after that I placed the silicon sticker between the transistor and the heatsink. Don't screw too tight, the transistor may be enlarge a bit when it get hot.





After that, I fixed the RCA connector and the IEC Socket, the IEC socket is you see in the photo is something I bought a few years ago , not included in the kit.



Pictures of the transformer , it looks nice.





I have used 2 resistors in series to the amplifier board for testing, both of them are 5W1R, at first I set the bias current as 0.45A, and then I adj the bias current to 10hm, voltage drop almost 0.55V then,

Please make sure when you test 2 channel using the same resistors then 2 channel's board bias will almost the same. For my experience, the adjustment is a trial and error process. You cannot get it done 1 first round, you need to test in when it is cool, after that you may warm it up with music with dynamic range for 15 minutes and test it one more time.

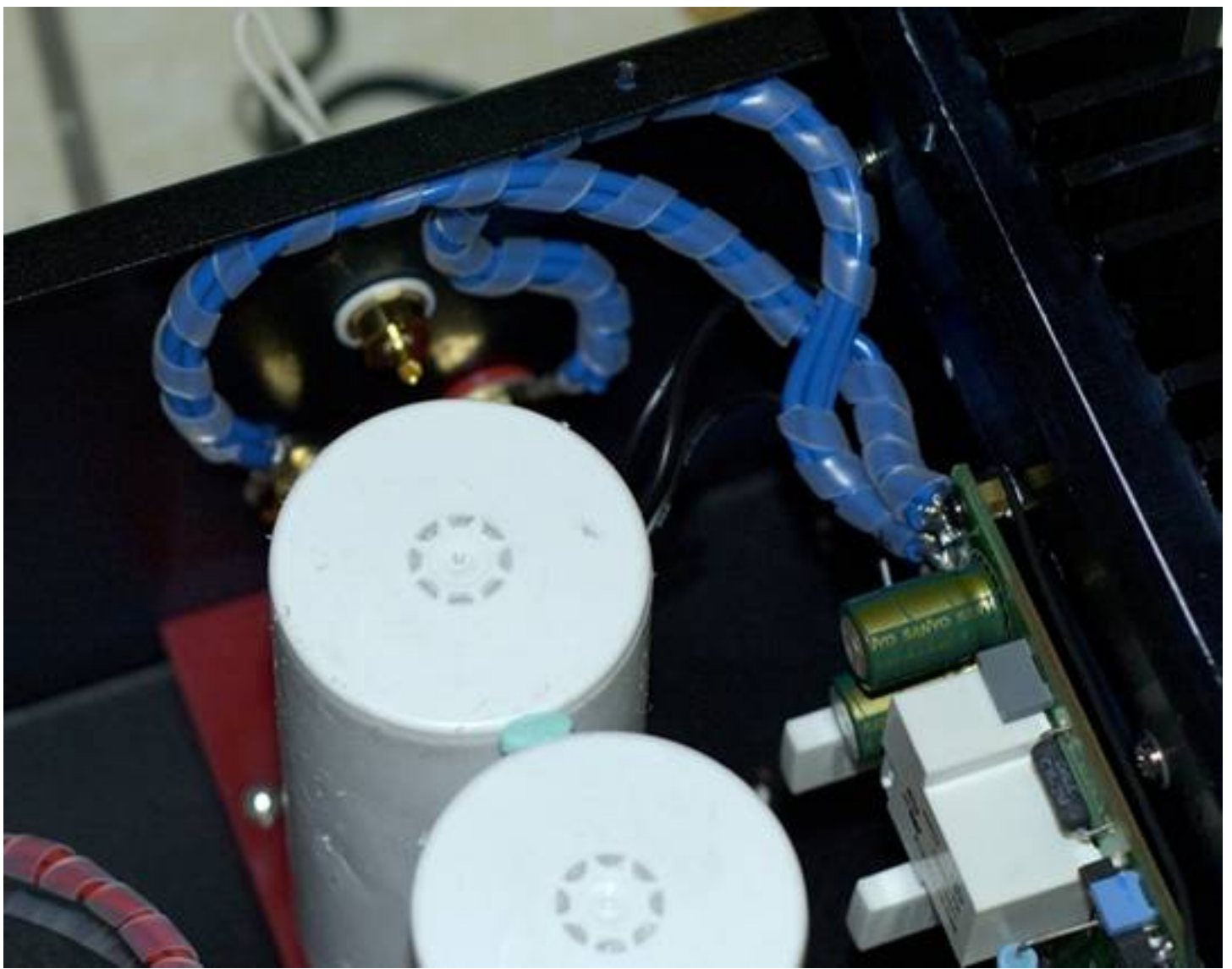
Middle voltage also need to tune, because the middle voltage will also change based on temperature, therefore, will I start the amp, I adj in brief, every times I adj the bias, and test the middle voltage also. Every time I tune, I tune into 1/3 to 1/2 and let it float slowing,

Actually, if you do not know how to adj the bias and the middle voltage, you may not fine tune in this details. The factory pre-tuned the amp board before they sell it. My friend's M-9 also did not tune anything and run perfectly. After I tune the bias and the middle voltage, reconnect the DC Servo resistor.



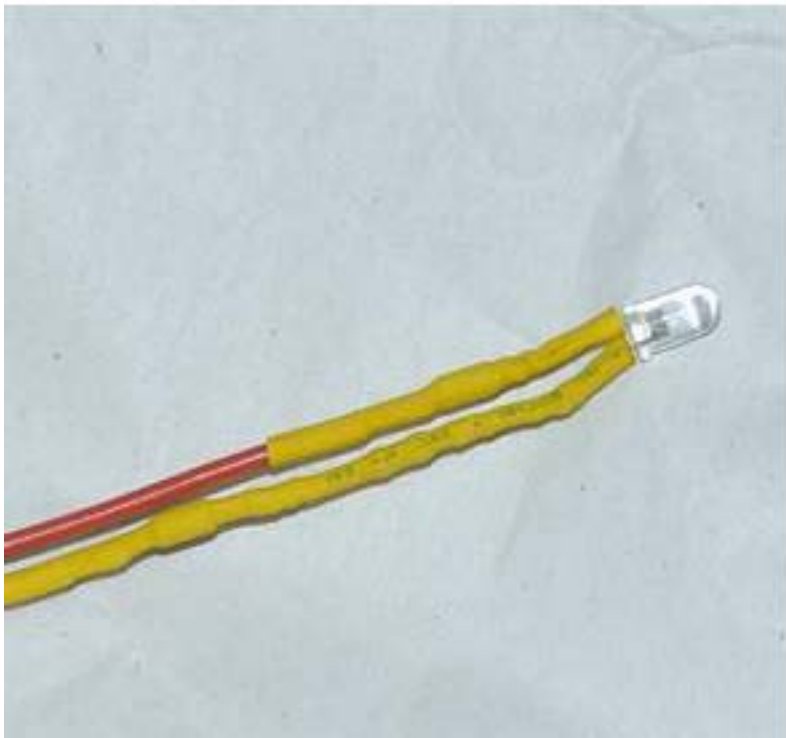
For the wiring cables, main power supply use 2mm OCC single core, speaker output use OCC multi core cables in parallel. But the single core is hard, I bend it with extreme careful. And also You may stick a Blue Tack between the rectifier capacitor with the board to fix it more firmly.

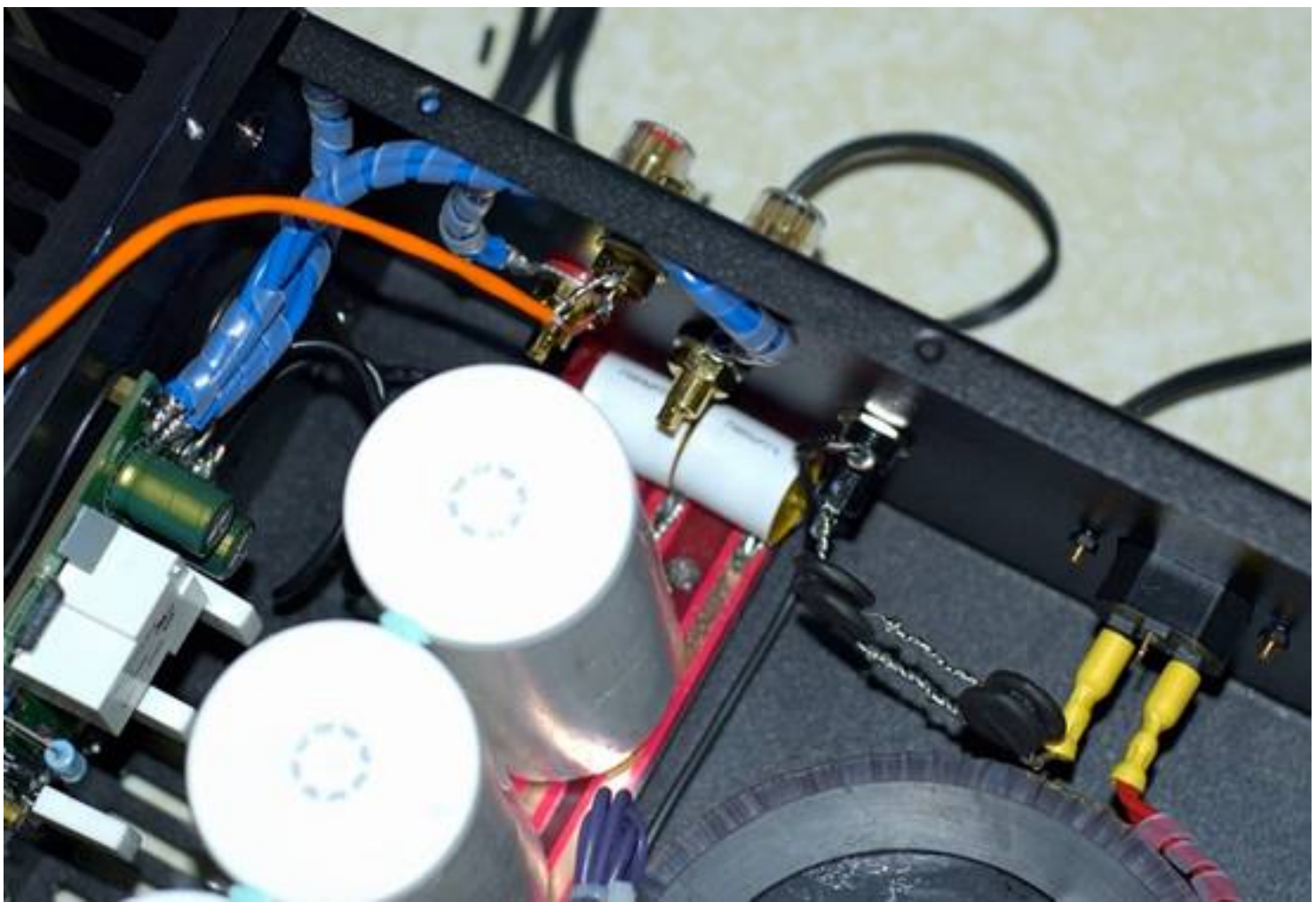




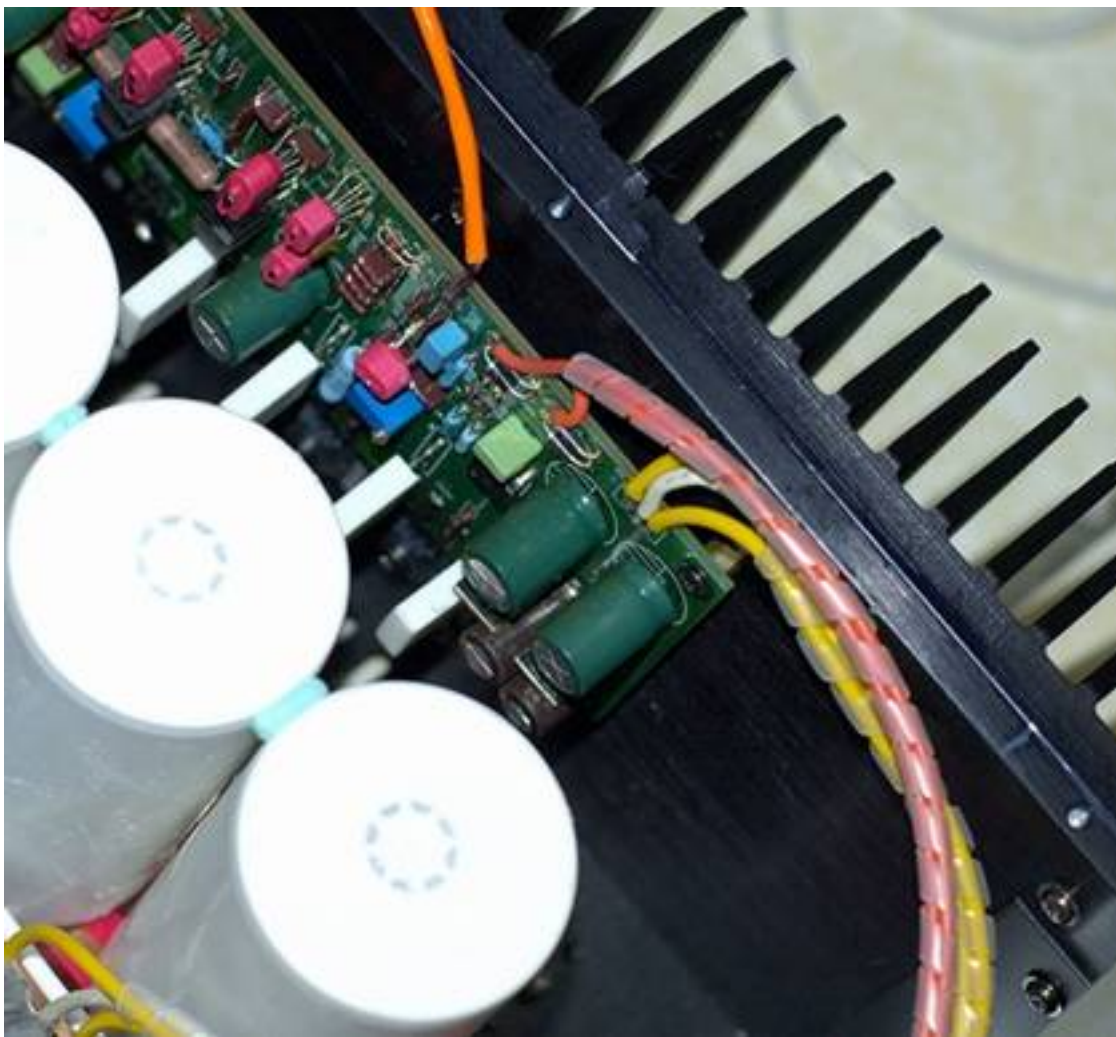
It is almost done, You may now connect the LED light , normally you need to connect a resistor with LED in series is enough. Because I am a little bit worry, therefore, I bought 2 more Diodes for safety.

It the AC Power supply, before the fuse, I add 1 more negative temperature sensitive resistor, CL60. the we power on the amp, it is for the current flooding protection purpose.





Now I wired the LED signal cable. Because I am lazy, I connect to some where nearer. Luckily I have play the amp for 3 months , and It got no problem.



Here are the finish photos, actually the wires are not many. Here are the cables you may need.

1. RCA input to amplifier board
2. AC IEC to fuse, fuse to transformer.
3. Beidge to Power rectifier board
4. Power rectifier board to main Amplifier board
5. Main amplifier board to speaker out
6. LED to power supply
7. 12-0-12 on the left hand side may not be long enough, you may I a very short wire to lengthen it.
- 8.





Photos from another viewpoint, signal cables are a little bit too long, after I cover it up, then they will stick to the top board, I won't see it.

