

## HARDWARE ASSEMBLY

The front panel should now be fitted to the main chassis making sure that the pot wires coming from the front panel have a stress free path where they pass between the front panel and front panel metal screen.

These wires should be looped through the plastic wire clips which are stuck to the inside of the amp side panel then routed below the input transformer assembly.

Fix the front panel to the main frame with 2 M3.5x8 C/S screws in the middle of the front panel then use M4x8 C/S screws in the four corners. 3 M2.5x6 C/S are then fitted through the underside of the front panel into the main PCB.

Fit perspex covers.

## THERMAL CYCLE

The thermal cycle is important to ensure that all the device thermal paths are intact and that 1 device is not getting significantly hotter than another.

To aid this process the metal tabs of the devices should be painted with thermochromic paint so that the temperature can be mapped.

Switch to bridge mode and plug amp load (8 ohms) into the + terminals.

This test is best done with the amplifier on its side to be able to view both sides of the heatsinks.

Bring signal level up to the -3dB led on the level meter, observe devices as they warm up, make sure that no devices are getting hotter than the others, if 1 does then power down and solve this immediately.

Problems of this nature are caused by:

Dirt under the device, an incorrectly placed spring, the device has been soldered down in such a way that it is left lying at an angle or it has not been selected properly and is using more bias than it should.

Please observe static control during this next process.

To achieve the best solution it is best to remove the device, clean of any heatsink compound from both device and heatsink, make sure there are no manufacturing defects ie bumps on the heatsink or on the device then apply new heatsink compound and refit the device.

When refitting the device, solder only the middle leg first, then place the spring so that it is dead centre of the device tab, solder other 2 legs, then apply pressure to the middle of the device with a screwdriver or something similar and while pressing down resolder all 3 legs. This will ensure the device stays flat against the heatsink.

Resume thermal test as before and continue to monitor the thermal progress of all the devices. The temperature will progress through a color spectrum: