# **LK1 Gain Modification Procedure**

Important – Anti-static precautions must be taken when carrying out the following upgrade – the LK1 circuitry contains many static sensitive devices, which are easily damaged by tiny static discharges from your body (that you will not be aware of). Use an anti-static earthing mat and wrist strap when working on an LK1 with its sleeve removed or when handling any of the circuit boards or spare parts.

Estimated time for completion of this task: 1 hour

### **Symptoms**

When the LK1 is set to its lowest volume setting, the music is too loud for the customer. Please note – this modification reduces the overall gain of the LK1 by 8dB. This means that the entire volume range, from the lowest to the highest will be reduced

# Units affected

Can potentially affect all units built after 1986 (roughly). This is a very subjective issue – one customer may consider the lowest volume to be ridiculously quiet, whereas another customer may consider it too loud for his particular circumstances.

### Equipment Required

No1 Posidrive (Supadrive) Screwdriver Soldering Iron, temperature controlled 25 watt with fine tip Fine solder Fine Pliers & snips Soft cloth

# Parts Required (if fault is confirmed)

2 small pieces of fine gauge tinned copper wire, each about 4cm long

#### Procedure

#### Take anti-static precautions!

- 1. Disconnect LK1 from everything and especially the mains
- 2. Remove sleeve
- 3. Locate U8 on the main board it is a fairly large IC near the right hand side of the board, towards the rear of the unit.
- 4. Locate the cluster of modification components at the right hand side of U8 as shown below



5. Short circuit the resistors indicated by soldering a wire link across them as shown. Ensure that your soldering is good – that the solder joints are solid and that there are no dry joints or solder splashes. Trim off any excess wire with snips (ensure the cuttings do not fall into the circuitry).



- 6. Check your work and the area around the mod to ensure you have not damaged any components or other part of the circuit board check for stray bits of solder & wire etc.
- 7. Replace sleeve & check fully ensure that the gain of both channels is now at a lower level, both channels have equal gain and the LK1 is working correctly.

