

## **DSE 2760 AMPLIFIER**

### **MODIFICATIONS TO POWER AMPLIFIER SECTION**

- Remove C213 and C238 (33pF ceramic capacitors)
- Replace R239/R287 (1.8k resistors) with 10k/0.6W metalfilm resistors
- Relocate R238 connection from base of V218 to junction of C212/R239
- Connect 39k/0.6W metalfilm resistor in parallel with R238
- Relocate R286 connection from base of V239 to junction of C240/R287
- Connect 39k/0.6W metalfilm resistor in parallel with R286
- Replace C212/C240 (4.7uF electrolytic capacitors) with 2.2uF/50v MKP capacitors
- Replace C208/C234 (100uF electrolytic capacitors) with 100uF/50v non-polarised electrolytic capacitors
- Remove 100nF polyester capacitors in shunt with C208/C234
- Replace R230/R253 (1k resistors) with  $3k \parallel 2$  resistors (=1.5k)
- Connect 100pF/100v NPO ceramic capacitor in series with 220pF/100v NPO ceramic capacitor from base of V215 to collector of V214, and connect 2.2k resistor from junction of capacitors to -ve supply rail of R232; connect 100pF/100v NPO ceramic capacitor in series with 220pF/100v NPO ceramic capacitor from base of V235 to collector of V232, and connect 2.2k resistor from junction of capacitors to -ve supply rail of R278 (= 2 pole lag compensation)
- Remove R231/R281 (62k resistors) and replace with 1W metalfilm  $120k \parallel 4$  resistors (=30k) - do not add lead compensation capacitors

- Disconnect R224/R225 and R270/272 (220R resistors) from R231/R281, leaving R224 connected to R225 and R270 connected to R272
- Remove L201 and replace with 2 x 0R22 (5W) wirewound resistors in series (=0R44 ohms total) and connect (120k||4) resistors which have been substituted for R231 to PCB tracks on input side of 0R22 (5W) resistor pair [ensuring that each connection to the PCB is made on a portion of the track which carries the combined current of the output transistor pair]; Remove L202 and replace with 2 x 0R22 (5W) wirewound resistors in series (=0R44 ohms total) and connect (120k||4) resistors which have been substituted for R281 to PCB tracks on input side of 0R22 (5W) resistor pair [ensuring that each connection to the PCB is made on a portion of the track which carries the combined current of the output transistor pair]
- Remove C204/C228 (100uF electrolytic capacitors)
- Shunt R209 and R257 with 1k multiturn trimpots  
**NB : Ensure trimpots are at maximum resistance setting when installed!**
- Adjust RP201/RP202 to trim DC offset for each channel of amplifier
- Adjust 1k trimpots so that quiescent voltage across R212/262 is 34mV (Iq~155mA including current flowing in R212/R262)
- Readjust RP201/RP202 to trim DC offset for each channel of amplifier after quiescent current has been set with 1k trimpots
- Unplug cables from input switch to preamplifier and plug directly into power amplifier input sockets