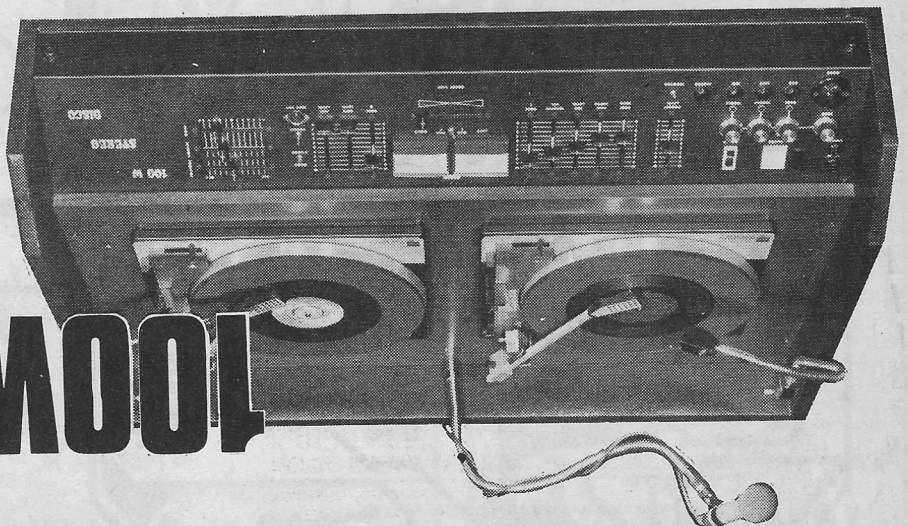


100W DISCO

PART THREE

ed project 458



CONSTRUCTION

Fit the components to the circuit board as shown. The wiring of the components on the front panel associated with this board is shown. Connect the OV from the p.c.b. to the earth link between the two main power supply capacitors C1, C2. Run a wire from the O/P of FSI on each 100W Amp Board to pin LM1 and pin LM2 for the other channel. The transformer should be bolted to the p.c.b. using 4BA x 1/4 in. bolts and nuts. Twist together the pair of wires to each L.E.D., and insulate the leads of the L.E.D.'s.

DECKS MOTOR SWITCHING BOARD

Fit the diodes, relays and wiring pins to the board as shown. Fix the p.c.b. to the underside of the motor board between the two decks making quite certain that the circuit board does not foul the top of the transformer or any other component which is mounted on the baseboard. This is most important since the chassis of the relay will be live when in use. Drill two 1/4 in. holes in the front pane such that one hole is 1/4 in. from one end of the cross-fade control slot (and in line with it) and the other hole is 3/4 in. from the other end of that slot, and fit SW21 and SW22.

On both decks, before fixing the platter on the BDS80 turntable, remove the two screws securing the paxolin cover on the motor switch which is next to the motor (taking care that you don't lose the nylon nut which holds one of the screws tight, and is on the other side of the chassis) and connect wires to the tags inside the switch as shown. This will enable the deck

console that the individual sensitivity controls are at their most favourable settings. The circuit is arranged such that if a bulb goes open circuit the L.E.D. associated with that channel lights continuously, providing immediate indication of the failure.

SETTING-UP

Turn VR2, 3 and 4 fully clockwise (minimum resistance). If the lights do not flash disconnect the mains and reverse the connections to the primary of T4. Reconnect the mains and turn VR5 anti-clockwise until one or more of the lamps ceases to flash altogether. Now turn VR5 clockwise again very slowly until all the lamps operate. All the thyristors should now be firing at the correct point. To obtain the most pleasing effect the channel controls VR2, 3 and 4 can be adjusted.

THIS LIGHT MODULATOR is a high quality unit having three output channels, each capable of driving loads in excess of 1kW, 750W with spoilamps, or 100W when fitted within the console. The unit includes an automatic gain control so that continual readjustment of the sensitivity controls is not necessary and after initial adjustment will operate correctly with inputs from 100mW-100W! However, manual control is provided, and may be selected if desired. Individual sensitivity controls are provided so that trigger levels may be set individually for each channel. The crossover frequencies for the channels are at approximately 550Hz and 3kHz, and the filters have a very sharp roll-off outside the pass band. The triggering is designed to occur just after the instantaneous a.c. mains voltage crosses the OV point so that radio frequency interference is virtually eliminated. L.E.D.'s are provided which light in unison with the lamps, and thus it is possible to check from the

