



INSTALLATION INSTRUCTIONS  
for  
9- AND 11-PIN ADAPTER ASSEMBLY 138658  
(117V)

GENERAL DESCRIPTION

This adapter assembly permits the addition of a "new series" 11-conductor type LESLIE speaker to an existing system which consists of a 9-conductor LESLIE speaker and an organ with 9-conductor outplugging, 9-conductor console connector kit, or appropriate combo pre-amp.

NOTE

The adapter is not intended for connecting a 9-conductor cabinet to an 11-conductor system.

The adapter is used with one 9-conductor cable assembly (021600) and one 11-conductor cable assembly (137357).

When a kit is installed in the organ, or outplugging is provided, the adapter connects directly to the console connector or outplug facility. If a combo pre-amp is used the adapter connects to the 9-conductor output socket of the pre-amp.

The installation illustrations show clearly how the parts of the music system are interconnected. Make all connections as shown. No operational procedures are required.

CIRCUIT DESCRIPTION

When the AC circuit is energized by turning on the ON/OFF switch in the control unit or combo pre-amp, relay REL 1 in the adapter actuates, completing the control circuit of the 11-conductor LESLIE speaker, through diodes D4, D5, and D6. Organ speaker signals for channels 1 and 2 (intercepted by the console connector or routed through the combo pre-amp) pass directly to each LESLIE speaker.

While the fast motor circuit is not energized Q1 is biased off by the negative potential at pin 6 of the input plug. Actuating the control to turn on the fast (tremolo) motor causes pin 6 to be grounded, making the base of Q1 approximately 0.6 volts negative while the emitter is held at approximately 1.8 volts negative by the action of diodes D4, D5, and D6. Transistor Q1 thus conducts, actuating the fast motors in the 11-conductor LESLIE speaker.

Simultaneously, the fast motors in the 9-conductor LESLIE speaker are operated through the direct connection of pin 6, S3 to pin 6, P1.

When the slow motor circuit is energized the circuit involving Q2 operates in the same way as that for Q1. It may be noted that the two circuits do not operate at the same time.

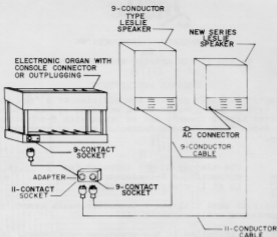


Figure 1. Installation, With Console Connector or Outplugging

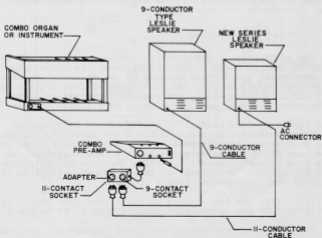


Figure 2. Installation, With Combo Pre-amp

# PARTS LIST: 138658 ADAPTER ASSEMBLY

Circuit Board Assembly	138840
Cable & Plug Assembly, 9-conductor (includes P1)	138847
Socket, Amphenol, 9-contact (S3)	061713
Socket, 11-contact (S2)	028852
Relay, SPDT, 115V 50/60 Hz	027649
Bushing, strain relief, 7W-2	011767
Bushing, .196 x .312 x .325	051060
Grommet, Neoprene, .312ID x .406	050211
Stand-off, 6-32 x 7/8	113770

## PARTS LIST: 138840 CIRCUIT BOARD ASSEMBLY

Transistor, 2N4425 (NPN) (Q1,Q2)	033563
Diode, silicon, 30PIV, 500mW (D1,D2,D3)	041616
Diode, silicon, 100PIV, 1 amp (D4,D5,D6)	021154
Resistor, 100K, 1/2W, 10% (R1,R2)	028498
Resistor, 470-ohm, 1/2W, 10% (R3,R4)	028068
Resistor, 10K, 1/2W, 10% (R5,R6)	028548
Etched Circuit Board	138692

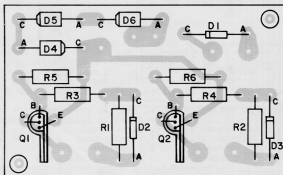


Figure 3. Circuit Board Assembly 138840

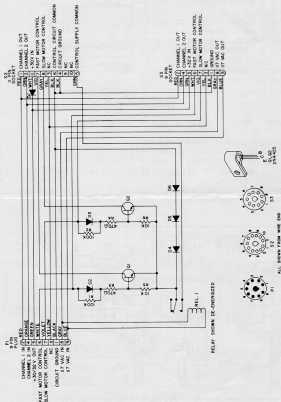


Figure 4. Schematic, Adapter 138658