

CONSOLE CONNECTOR KIT 7930 INSTALLATION INSTRUCTIONS

FOR USE WITH: Lowrey Organ Models SCT/Contempo 80, TGS series

LESLIE Speaker Model Combinations, 540/720 (recommended), 540/705 (optional)

INTRODUCTION

This kit contains a console connector, control center, Y-adapter, and cable (with appropriate hardware) which, when properly installed in the organ and connected to the LESLIE speakers, provides both interfacing and controls for the LESLIE speakers and selected organ components.

The organs for which this kit is intended have four channels, and thus require two LESLIE speakers for complete output and channel augmentation. With the equipment provided in the kit each channel is routed for proper processing and output by appropriate loudspeakers in one of the LESLIE speakers. Model 540 handles two channels, and the companion LESLIE speaker handles two channels.

The control center, which mounts on the organ console where it can conveniently be operated by the player, includes an organ/mix/echo switch, on/off button, and fast/off/slow switch. The operation of the individual controls is discussed in a later section of these instructions.

KIT CONTENT

Console Connector Assembly	139065	Switch Assembly,	
Cable Assembly,		ECHO/TREMOLO, black	137342
11-conductor, 30-foot	137357	Hardware Package	139070
Y-adapter	137469	Oiler	053025

CAUTION: Due to the presence of electrical potential and the danger of moving mechanical parts, installation procedures or adjustments requiring work inside the LESLIE speaker cabinet or the organ console should be performed only by a service man authorized by the dealer or factory to perform such work.

INSTALLATION

CAUTION: DISCONNECT ORGAN POWER BEFORE PROCEEDING:

CONTROL CENTER MOUNTING (figure 1)

1. Select a location under the keybed where the control is to be mounted (left or right). If a tape cassette is installed, or will be installed, the control must be mounted left. The recommended position is at the extreme left. (On some models the leftward positioning is limited by the downward curved portion of the frame.) This is to give maximum space for knee movement when the pedals are being used. Indicate the control location on the under side of the keybed.
2. Cut out the paper template (figure 1) provided in this instruction sheet.

3. Measure the width of the key strip at the place chosen for control mounting. Fold the template along the line corresponding to this width. If the keybed is flat (no separate key strip) do not fold the template at all.
4. Lay the template in position behind the key strip, with the narrow portion toward the front of the organ, and use a sharp instrument or pencil to scribe the location of the four mounting screws.* If there is no key strip, position the template so that the narrow edge is flush with the front of the keybed. Start the holes for the screws. Do not attach the control at this time.

NOTE: To retain maximum screw-holding power, merely break the surface of the wood.

5. Remove the back panel from the organ.
6. To introduce the cable from the control center into the organ interior choose one of the methods described in the following steps.

Method A

7. Remove the two screws that hold the left keyblock in position and lift the keyblock up at the front edge. (It can be raised about one inch.) Support the keyblock in the raised position.
8. Drill a one-inch hole in the keybed between the keyblock supports.
9. Pass the plug of the control center cable through the hole. From the back, reach into the interior of the organ near the side, grasp the plug, and pull it to the back of the organ.
10. Route the cable to the part of the organ indicated in figure 2 for the console connector mounting location.
11. Go to step 12.

*At the locations indicated "PRICK HERE". In this installation the locations marked for leveling screws are not used.

Method B

7. From the under side of the keybed remove three screws, as follows: one each at the extreme left and right immediately adjacent to the legs, and one from the center at the forward edge.
8. At each side of the component-mounting panel which occupies the entire upper back area remove the screw and the round, spool-like wooden support or dowel.

9. Pull the entire key and tab section back until it is behind the front (grille cloth-covered) partition.
10. Pass the cable from the control center over the partition and route it through the interior to the part of the organ indicated in figure 2 for the console connector mounting location.
11. Lifting up slightly, return the key and tab section to its normal position.
12. Place one or both of the adhesive cork pieces on the upper part of the control mounting bracket, centered in the area between the mounting screw holes. (Use both, one on top of the other, if there seems to be a noticeable gap between the control center mounting bracket and the bottom of the keybed when the control center is held in position.)
13. Hold the control center in position and fasten the mounting screws into the keybed in the locations previously marked.
14. Replace all the screws that were removed during the preceding steps, but do not replace the organ back.

CONSOLE CONNECTOR MOUNTING (organ back panel already removed) (See figure 2.)

SCT/Contempo 80

1. Connect the plug from the control center to the 12-contact socket on the top of the console connector.
2. Mount the console connector upside down, on the lower side of the shelf at the extreme left (viewing from the back of the organ). Use a screw at each end to hold it in place. The side with the white, 9-contact socket should be toward you.
3. Continue with the instructions given under the heading Making the Connections.

TGS Series

1. Looking into the back of the organ, locate the reverb spring, which is on the speaker compartment cover at the left; the spring is covered with black plastic material.
2. Remove two cable clamps to free the wires which are attached to the shelf, at the left of the reverb spring.
3. Place the console connector on the shelf, where the wires were detached. The relay should be uppermost and the white, 9-conductor socket on the lower side. Move the console connector upward until it is approximately 3/8-inch from the screw indicated on the drawing. (The console connector must be properly positioned so that there will be enough room for the plugs when the organ back is replaced.) Fasten the console connector in place with a screw through each flange.

MAKING THE CONNECTIONS

1. Locate the organ amplifier/power supply on the floor of the organ, at the left.
2. If the plug from the organ tape cassette is attached to the white AMP socket on the amplifier/power supply, disconnect it; attach this plug to the white AMP socket on the side of the console connector (nearest you).
3. Attach the plug from the console connector to the AMP socket (9-contact) provided on the organ amplifier/power supply for the cassette.
4. Attach the plug from the control center (previously installed) to the socket on the top of the console connector.
5. Connect the 11-conductor cable (which comes in the kit) to the remaining socket on the console connector. Attach the Y-adapter to the other end of the cable.
6. Connect the short leg of the Y-adapter to the basic cabinet (model 720 or 705) and the longer leg to the model 540 cabinet.
7. Re-install the back panel of the organ. Be careful that no wires are pinched. If necessary, cut a small triangular piece from the lower left corner of the panel, to permit the 11-conductor cable to pass through. Installation is now complete.

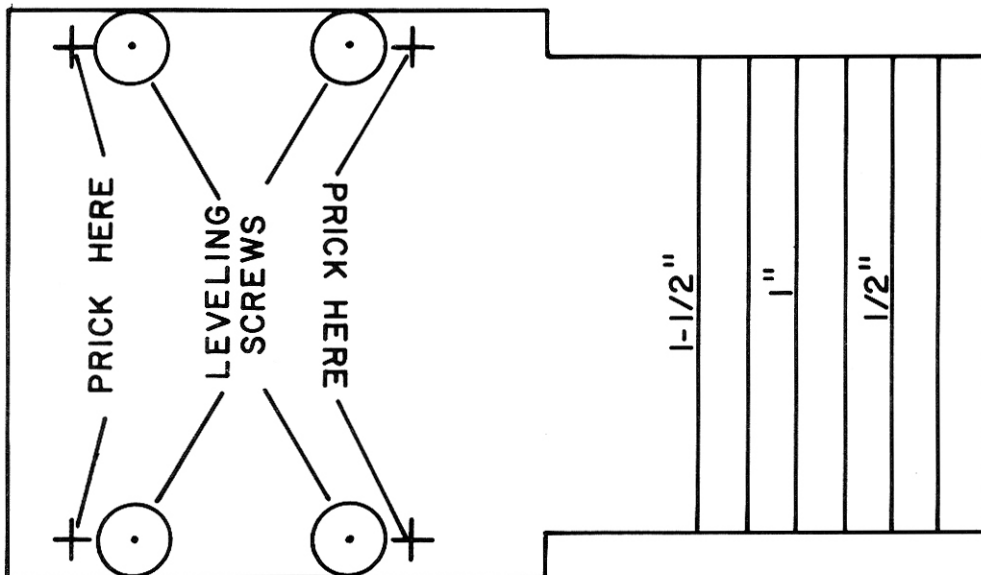


Figure 1. Control Location and Mounting Template

Ordering Parts

Standard hardware, connectors, and electronic components should be purchased locally. Non-standard items may be obtained through a LESLIE speaker dealer. Orders should include part numbers as listed.

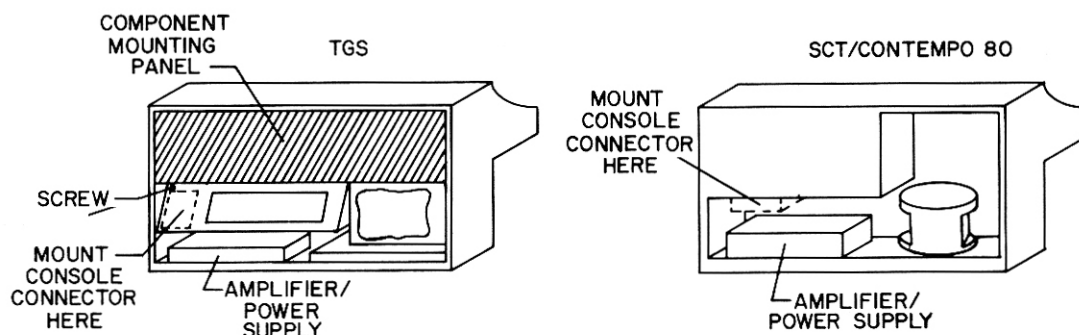


Figure 2. Console Connector Installation Locations

PARTS LIST: 139065 CONSOLE CONNECTOR ASSEMBLY

Circuit Board Assembly	139064
Relay, 4-pole double-throw, 12VDC	049551
Cable and Housing Assembly, plug (P7,S6)	139060
Cable and Housing Assembly, socket (S2,S3)	139062

PARTS LIST: 137342 SWITCH ASSEMBLY

Switch and Cable Assembly	137340
Circuit Board Assembly	137339
Case	137282
Clamp, cable	137365
Knob, switch, white	137291
Nut, knurled	137864
Cork, adhesive	137419

PARTS LIST: 137357 CABLE ASSEMBLY

Plug Assembly, 11-pin (with screw) (P2)	137299
Plug, 11-pin, modified	137296
Package, plug cap and screws (order for repair use) (contains plug body sections, screws, and tubing)	137457
Socket, 11-contact (S1)	137297

PARTS LIST: 137340 SWITCH AND CABLE ASSEMBLY

Circuit Board Assembly	137339
Switch, lever, 3-position (FAST) (SW2)	137304
Switch, lever, 3-position (ECHO) (SW1)	137305
Housing, plug, miniature Molex , 12-circuit, natural (white) (P3)	101310
Contact, insert, miniature Molex, male	065599

CONTROLS

The control unit, mounted just below the organ keyboard, groups all the controls in one convenient location.

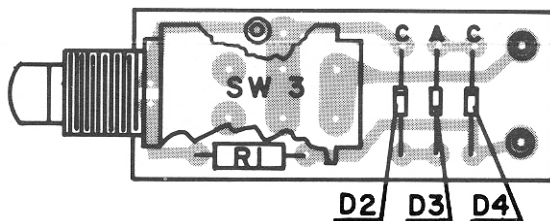
The center **BUTTON**, a push-on, push-off control, is used to actuate the **LESLIE** speaker system. With the button set to off, only the organ speakers operate. With the button set to on (red light glowing) the speakers in the **LESLIE** speaker cabinets are ready to respond.

The **LEFT-HAND TOGGLE SWITCH** may be set for the fast or slow effect from the **LESLIE** speaker rotor. Up is fast; down is slow; center is off.

The **RIGHT-HAND TOGGLE SWITCH** controls which of the speakers will be heard. Setting the switch to **ORGAN** cuts off the sound from the **LESLIE** speakers, so that only those speakers in the organ itself play. At **ECHO** only the **LESLIE** speakers play; the organ speakers are silent. **MIX** permits all of the speakers, in both the **LESLIE** speaker cabinets and in the organ, to play together, mixing their outputs for full, rich sound from three sources.

The red light will help to remind you to turn the control off when you are through playing your organ.

PARTS LIST: CIRCUIT BOARD ASSEMBLY 137339



Switch, push/push (SW3)	137303
Diode, silicon, 1-amp, 100 PIV (D2, D3, D4)	021154
Diode, light-emitting (D1)	137315
Resistor, 47-ohm, 1/2W, 10% (R1)	016311
Etched Circuit Board	137281

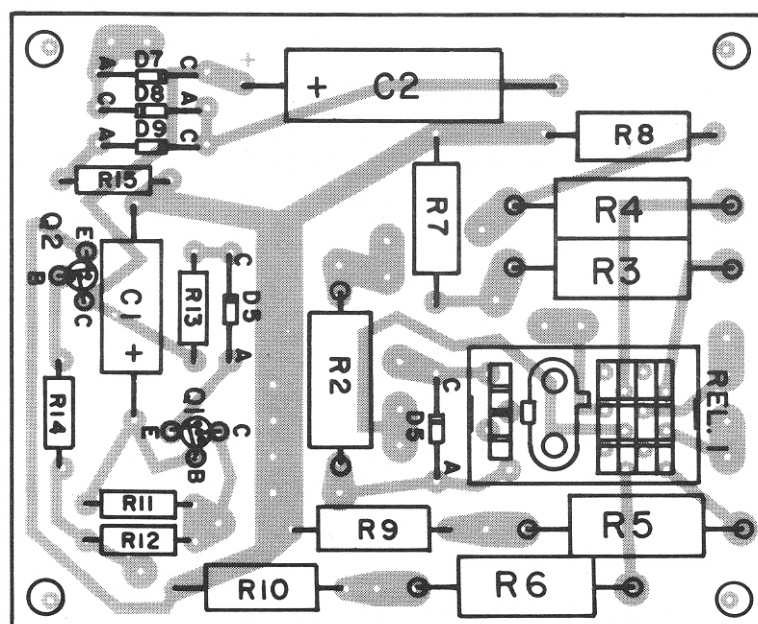


Figure 3. Circuit Board Assembly 139064

PARTS LIST: CIRCUIT BOARD ASSEMBLY 139064

C1	Capacitor, electrolytic, 5mfd, 50V	028589
C2	Capacitor, electrolytic, 50mfd, 50V	025262
D5,D6,D8,D9	Diode, silicon, 30 PIV, 500mw	041616
Q1,Q2	Transistor, 2N3859A (NPN)	061366
R2	Resistor, wire-wound, 430-ohm, 5W, 5%	023648
R3,R4,R5,R6	Resistor, wire-wound, 100-ohm, 3W, 10%	021675
R7,R8,R9,R10	Resistor, 33-ohm, 1W, 10%	028332
R11	Resistor, 56K, 1/2W, 10%	024133
R12	Resistor, 10K, 1/2W, 10%	028548
R13	Resistor, 3.3K, 1/2W, 10%	024141
R14	Resistor, 1K, 1/2W, 10%	023713
R15	Resistor, 100-ohm, 1/2W, 10%	028399

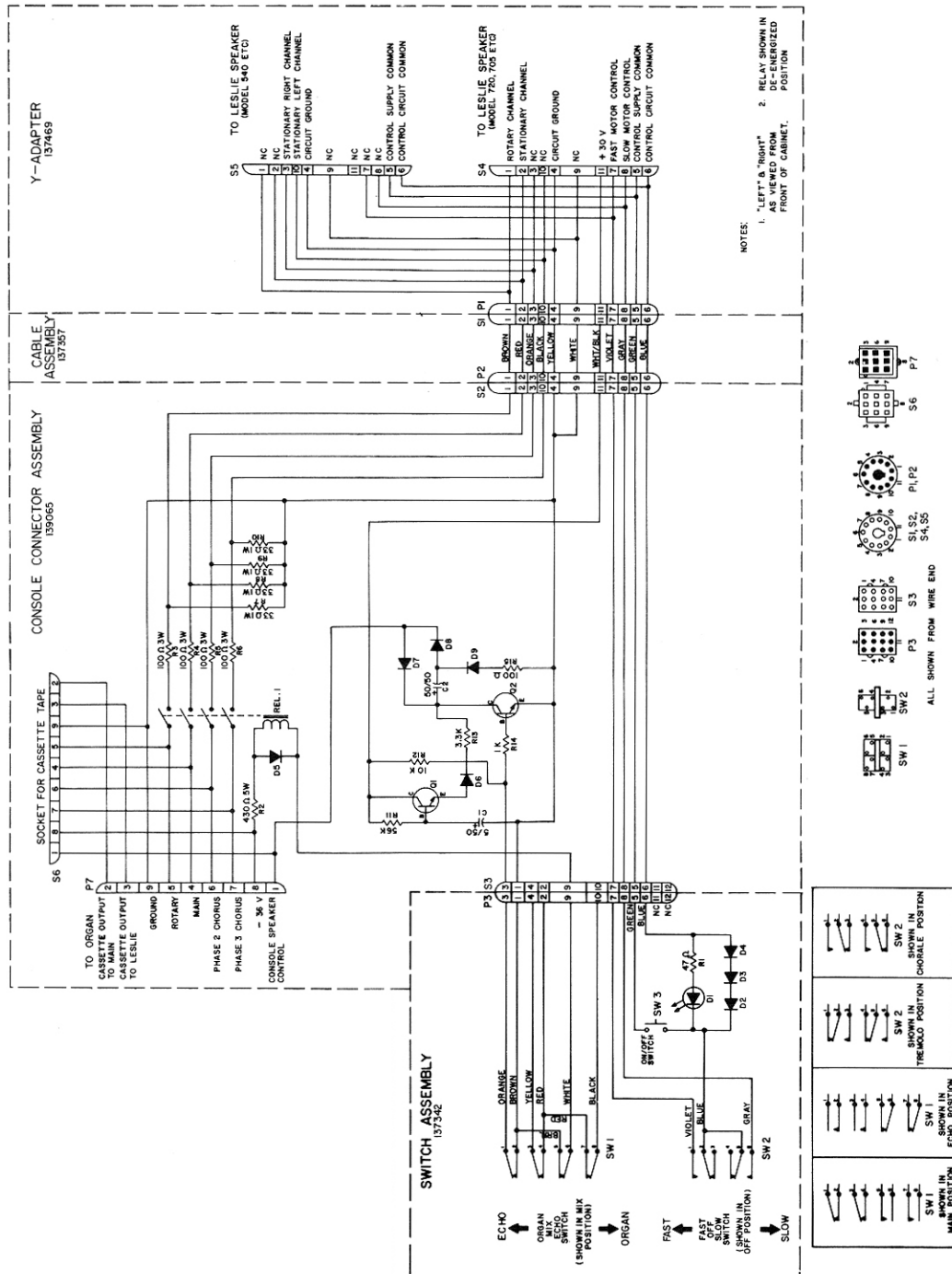


Figure 4. Schematic, Console Connector with Switch Assembly and Cable Assembly