



CONSOLE CONNECTOR KIT 1174

INSTALLATION INSTRUCTIONS

FOR USE WITH: All Leslie 11-pin Tone Cabinets (up to four channels)

Any one, two, three, or four channel organs

INTRODUCTION

This kit contains a console connector assembly, console cable, and control center along with appropriate mounting hardware. When properly installed to the organ and connected to the Leslie speaker, it provides switching for Leslie Fast, Slow, or Off rotor speeds, switching for Leslie tone cabinet Power ON/OFF, switching between Leslie tone cabinet and self-contained organ speakers, or in Mix position allows both sound sources to be heard. This Leslie/Organ/Mix switch supercedes any "Echo Only" and "Main & Echo" tabs on organs containing these tabs. It also provides mixing a third channel such as Reverb or Pedal into the Stationary (Main) channel of a dual channel Leslie, or into the Rotary channel of a single channel Leslie.

KIT CONTENT

Console Connector Assembly	009-057678	Hardware Package	089-057686
Console Cable Assembly	011-057692	Installation Instructions	047-057676
Control Center Assembly	008-057672		

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 person authorized by the dealer or factory to perform such work.

INSTALLATION

CAUTION: DISCONNECT ORGAN POWER BEFORE PROCEEDING.

CONTROL CENTER MOUNTING

1. Select a location under the keyboard shelf where the control is to be mounted, either left or right, as the organist prefers. Keep in mind that the cable from the control must pass into the interior of the organ. The mounting bracket may be reversed, if desired, by removing the four corner screws, turning it around, and re-fastening it to the plastic case with the four corner screws. This enables the control to be mounted to the front key strip if the keyboard shelf is metal, or the keyboard shelf if it is made of wood. See Figure 1 and Figure 2.
2. Select a hole to pass the control cable into the interior of the organ. If none is available, use a hole saw to make a 1" diameter hole or cut a notch in the rear of the organ shelf. Dress the control cable neatly under the keyboard shelf and secure it with the cable clamps provided.

CAUTION

SEE SAFETY NOTICE ON
INSIDE COVER SHEET

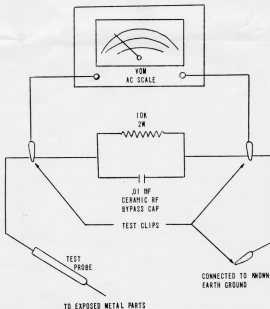
047-057676

SAFETY NOTICE

Great care has been taken in the design and manufacture of this product to assure that no shock hazard exists on any exposed metal parts. Internal service operations can expose the technician to hazardous line voltages and accidentally cause these voltages to appear on exposed metal parts during repair or reassembly of product components. To prevent this, work on these products should only be performed by those who are thoroughly familiar with the precautions necessary when working on this type of equipment.

To protect the user, it is required that all enclosure parts and safety interlocks be restored to their original condition and the following tests be performed before returning the product to the owner after any service operation.

Plug the AC line cord directly into a line voltage AC receptacle (do not use an isolation transformer for this test) and turn the product on. Connect the network (as shown below) in series with all exposed metal parts and a known earth ground such as a water pipe or conduit. Use an AC VOM of 5,000 ohms per volt or higher sensitivity to measure the voltage drop across the network. Move the network connection to each exposed metal part (metal chassis, screw heads, knobs and control shafts, escutcheon, etc.) and measure the voltage drop across the network. Reverse the line plug and repeat the measurements. Any reading of 4 volts RMS or more is excessive and indicates a potential shock hazard which must be corrected before returning the product to the user.



CONSOLE CONNECTOR MOUNTING

Mount the console connector chassis inside the organ within reach of the organ amplifier and speaker wiring using #8 x 1/2" sheet metal screws provided. Install the console cable and control center cable plugs to the appropriate sockets on the console connector printed wiring board.

WIRING

CAUTION: When selecting a place to attach the Black wire to ground in the following wiring instructions, make certain the point selected is a true ground, traceable back to the amplifier, not just a pseudo ground or common tie point for several speakers such as used in some crossover installations.

- A. For single channel organs with "G-G" terminals - not self-contained:
1. Remove the wires from the "G-G" terminals. Connect one of them to the Green wire from the console cable and connect the other one to the Violet wire from the console cable using the wire nuts provided.
 2. Connect the Brown wire from the console cable to one of the vacated "G" terminals and the Orange wire from the console cable to the other vacated "G" terminal.
 3. Connect the Black wire from the console cable to the ground terminal. Do not remove existing ground wire.
 4. Disconnect (by clipping or unsoldering) all 5 jumpers, plus the large 8K resistor, on the printed circuit board.
 5. Tape up or clip the remaining console cable wires, as they are not used.
- B. For single channel organs with self-contained amplifiers and speakers:
1. Cut the signal wire between the organ amplifier (after the phone jack if one is used) and the speaker (or crossover if one is used).
 2. Connect one of the Red wires from the console cable to the wire coming from the organ amplifier (after phone jack) using a wire nut provided.
 3. Connect the Blue wire from the console cable to the wire going to the speaker (or crossover if one is used) using a wire nut provided.
 4. Connect the Black wire from the console cable to the amplifier, crossover, or speaker ground. Do not remove existing ground wire.
 5. Disconnect (by clipping or unsoldering) wire jumpers #1, #2, & #5, plus the large 8K resistor, on the printed circuit board.
 6. Tape up or clip the remaining console cable wires, as they are not used.
- C. For Dual channel organs consisting of a Main channel and a Reverb channel with self-contained amplifiers and speakers:
1. Cut the signal wire between the organ Main amplifier (after the phone jack if one is used) and the Main speaker (or crossover if one is used).

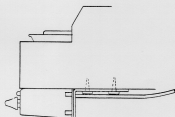
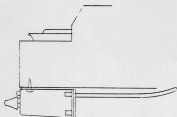


Figure 1

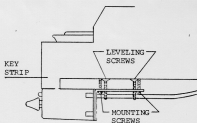
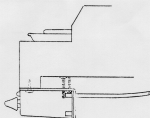


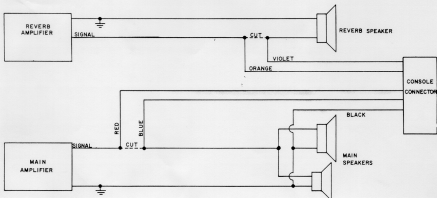
Figure 2

Four sets of mounting screws of different lengths to accomodate different key strip heights are included in the hardware package.

2. Connect one of the Red wires from the console cable to the wire coming from the organ Main amplifier (after phone jack) using a wire nut provided.
 3. Connect the Blue wire from the console cable to the wire going to the Main speaker (or crossover if one is used) using a wire nut provided.
 4. Connect the Black wire from the console cable to the amplifier, crossover, or speaker ground. Do not remove existing ground wire.
 5. Remove the existing wire going to the Reverb amplifier Input and tape up. Connect the other Red wire from the console cable to the Input to the Reverb amplifier.
 6. Cut the signal wire between the organ Reverb amplifier (after the phone jack if one is used and after the Reverb control) and the Reverb speaker (or crossover if one is used).
 NOTE: Most organs will have the Reverb control in the ground side of the Reverb amplifier output. If so, reverse the two speaker leads at the amplifier.
 (The symptom will be no reverb in Leslie position.)
 7. Connect the Orange wire from the console cable to the wire coming from the Reverb amplifier using a wire nut provided.
 8. Connect the Violet wire from the console cable to the wire going to the Reverb speaker using a wire nut provided.
 9. Disconnect (by clipping or unsoldering) wire jumpers #1, #2, & #5 on the printed circuit board.
 10. Tape up or clip the remaining console cable wires, as they are not used.
- D. For Dual channel organs consisting of a Main channel and a separate Flute/Tibia channel with self-contained amplifiers and speakers:
1. Cut the signal wire between the organ Main amplifier (after the phone jack if one is used) and the Main speaker (or crossover if one is used).
 2. Connect one of the Red wires from the console cable to the wire coming from the organ Main amplifier (after phone jack) using a wire nut provided.
 3. Connect the Blue wire from the console cable to the wire going to the Main speaker (or crossover if one is used) using a wire nut provided.
 4. Connect the Black wire from the console cable to the amplifier, crossover, or speaker ground. Do not remove existing ground wire.
 5. Cut the signal wire between the organ Flute/Tibia amplifier (after the phone jack if one is used) and the Flute/Tibia speaker (or crossover if one is used).
 6. Connect the Brown wire from the console cable to the wire coming from the organ Flute/Tibia amplifier (after phone jack) using a wire nut provided.

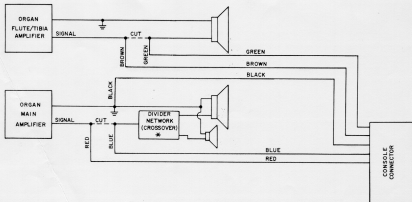
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2 CHANNEL ORGANS

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* NOT ALL ORGANS HAVE
DIVIDER NETWORKS

7. Connect the Green wire from the console cable to the wire going to the Flute/Tibia speaker (or crossover if one is used) using a wire nut provided.

8. If a single channel Leslie tone cabinet is being used, disconnect (by clipping or unsoldering) wire jumpers #1, #2, & #5, plus the large 8Ω resistor, on the printed circuit board.

If a dual channel Leslie tone cabinet is being used, disconnect (by clipping or unsoldering) wire jumpers #2, #3, & #5, plus the large 8Ω resistor, on the printed circuit board.

9. Tape up or clip the remaining console cable wires, as they are not used.

E. For three channel organs consisting of a Main channel, a separate Flute/Tibia channel, and a separate third channel such as Pedal, Reverb, or String Ensemble.

1. Cut the signal wire between the organ Main Amplifier (after the phone jack if one is used) and the Main speaker (or crossover if one is used).

2. Connect one of the Red wires from the console cable to the wire coming from the organ Main amplifier (after phone jack) using a wire nut provided.

3. Connect the Blue wire from the console cable to the wire going to the Main speaker (or crossover if one is used) using a wire nut provided.

4. Connect the Black wire from the console cable to the amplifier, crossover, or speaker ground. Do not remove existing ground wire.

5. Cut the signal wire between the organ Flute/Tibia amplifier (after the phone jack if one is used) and the Flute/Tibia speaker (or crossover if one is used).

6. Connect the Brown wire from the console cable to the wire coming from the organ Flute/Tibia amplifier (after phone jack) using a wire nut provided.

7. Connect the Green wire from the console cable to the wire going to the Flute/Tibia speaker (or crossover if one is used) using a wire nut provided.

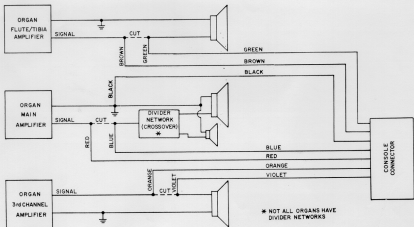
8. If the third channel consists of a Reverb channel deriving its signal from the Main channel speaker, remove the existing wire going to the Reverb amplifier Input and tape up. Connect the other Red wire from the console cable to the Input to the Reverb amplifier. Otherwise, disregard this step.

9. Cut the signal wire between the organ Third channel amplifier (after the phone jack if one is used and after the Reverb control if applicable) and the Third channel speaker (or crossover if one is used).

10. Connect the Orange wire from the console cable to the wire coming from the organ Third channel amplifier (after phone jack and Reverb control) using a wire nut provided. (See note under C Step 6 if the Third channel is Reverb.)

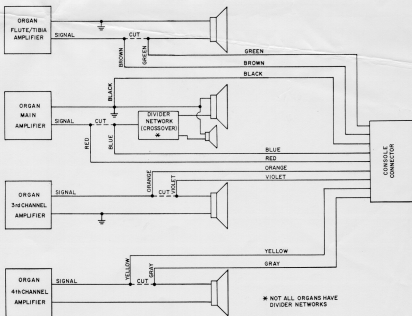
3 CHANNEL ORGANS

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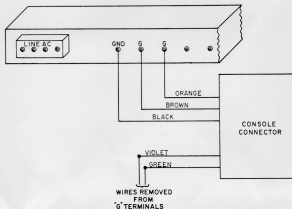
4 CHANNEL ORGANS

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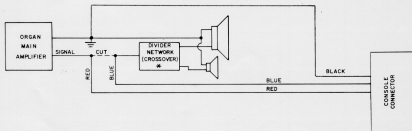
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HAMMOND ORGANS WITH "G" TERMINALS WITHOUT INTERNAL SPEAKERS



1174

1 CHANNEL ORGANS



* NOT ALL ORGANS HAVE
DIVIDER NETWORKS

11. Connect the Violet wire from the console cable to the wire going to the Third channel speaker (or crossover if one is used) using a wire nut provided.
12. If a single channel Leslie tone cabinet is being used, disconnect (by clipping or unsoldering) wire jumpers #1, #2, & #5, plus the large 8Ω resistor, on the printed circuit board. (The large 8Ω resistor is left in Only if the organ Third channel is Reverb with a Reverb control.)

If a dual channel Leslie tone cabinet is being used, disconnect (by clipping or unsoldering) wire jumpers #2, #3, & #5, plus the large 8Ω resistor, on the printed circuit board. (The large 8Ω resistor is left in Only if the organ Third channel is Reverb with a Reverb control.)

If a three channel or four channel Leslie tone cabinet is being used, disconnect (by clipping or unsoldering) wire jumpers #2, #3, & #4, plus the large 8Ω resistor, on the printed circuit board. (The large 8Ω resistor is left in Only if the organ Third channel is Reverb with a Reverb control.)

13. Tape up or clip the remaining console cable wires, as they are not used.
- F. For four channel organs consisting of a Main channel, a separate Flute/Tibia channel, a separate third channel such as Pedal, Reverb, or String Ensemble, and a separate fourth channel, usually String Ensemble.
1. Cut the signal wire between the organ Main amplifier (after the phone jack if one is used) and the Main speaker (or crossover if one is used).
 2. Connect one of the Red wires from the console cable to the wire coming from the organ Main amplifier (after phone jack) using a wire nut provided.
 3. Connect the Blue wire from the console cable to the wire going to the Main speaker (or crossover if one is used) using a wire nut provided.
 4. Connect the Black wire from the console cable to the amplifier, crossover, or speaker ground. Do not remove existing ground wire.
 5. Cut the signal wire between the organ Flute/Tibia amplifier (after the phone jack if one is used) and the Flute/Tibia speaker (or crossover if one is used).
 6. Connect the Brown wire from the console cable to the wire coming from the organ Flute/Tibia amplifier (after phone jack) using a wire nut provided.
 7. Connect the Green wire from the console cable to the wire going to the Flute/Tibia speaker (or crossover if one is used) using a wire nut provided.
 8. If the third channel consists of a Reverb channel deriving its signal from the Main channel speaker, remove the existing wire going to the Reverb amplifier input and tape up. Connect the other Red wire from the console cable to the Input to the Reverb amplifier. Otherwise, disregard this step.

9. Cut the signal wire between the organ Third channel amplifier (after the phone jack if one is used and after the Reverb control if applicable) and the Third channel speaker (or crossover if one is used).
10. Connect the Orange wire from the console cable to the wire coming from the organ Third channel amplifier (after phone jack and Reverb control) using a wire nut provided. (See note under C Step 6 if the Third channel is Reverb.)
11. Connect the Violet wire from the console cable to the wire going to the Third channel speaker (or crossover if one is used) using a wire nut provided.
12. Cut the signal wire between the organ Fourth channel amplifier (after the phone jack if one is used) and the Fourth channel speaker (or crossover if one is used).
13. Connect the Yellow wire from the console cable to the wire coming from the organ Fourth channel amplifier (after phone jack) using a wire nut provided.
14. Connect the Gray wire from the console cable to the wire going to the Fourth channel speaker (or crossover if one is used) using a wire nut provided.
15. If a single channel Leslie tone cabinet is being used, disconnect (by clipping or unsoldering) wire jumpers #1 & #2, plus the large Ⓜ resistor, on the printed circuit board. (The large Ⓜ resistor is left in Only if the organ Third channel is Reverb with a Reverb control.)

If a dual channel Leslie tone cabinet is being used, disconnect (by clipping or unsoldering) wire jumpers #2, #3, & #5, plus the large Ⓜ resistor, on the printed circuit board. (The large Ⓜ resistor is left in Only if the organ Third channel is Reverb with a Reverb control.)

If a three channel Leslie tone cabinet is being used, disconnect (by clipping or unsoldering) wire jumpers #2, #3, & #4, plus the large Ⓜ resistor, on the printed circuit board. (The large Ⓜ resistor is left in Only if the organ Third channel is Reverb with a Reverb control.)

If a four channel Leslie tone cabinet is being used, disconnect (by clipping or unsoldering) wire jumpers #3, #4, & #5, plus the large Ⓜ resistor, on the printed circuit board. (The large Ⓜ resistor is left in Only if the organ Third channel is Reverb with a Reverb control.)

16. Tape up or clip any remaining console cable wires, as they are not used.

FINAL CHECK

Check all connections for proper hookup. Dress wires neatly and secure with cable clamps and/or cable ties. Connect Leslie speaker cable to console connector socket and to tone cabinet. Turn on organ and tone cabinet power and adjust volume of tone cabinet to desired level according to instructions in tone cabinet owner's manual. Check that control center switches provide proper response in tone cabinet.

This completes the installation.

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 listed.

PARTS LIST

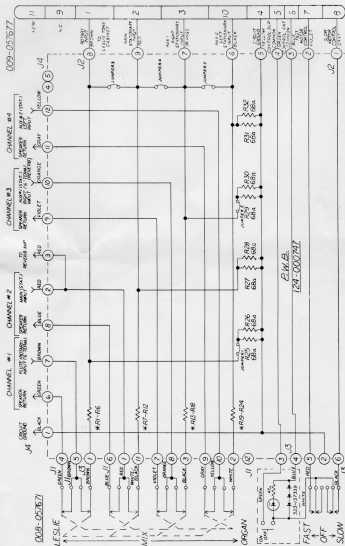
CONSOLE CABLE 011-057692

CONSOLE CONNECTOR ASSEMBLY 009-057678

Circuit Board Assembly	124-000747
Chassis	035-057325
Standoffs	044-050580
11-Pin Socket	504-028852

CONTROL CENTER ASSEMBLY 008-057672

Cable Mounting Plate	035-057338
Angle Bracket Mounting Plate	035-057324
Case - Silk Screened	541-141114-003
Knob - White	531-137291
Switch - Lever - 3 Position - 2 Pole	508-137304
Switch - Lever - 3 Position - 8 Pole	508-139035
Switch Assembly - ON/OFF	523-137339



NOTES

ALL RESISTORS 1/2 WATT ± 5% UNLESS

OTHERWISE NOTED.



FOR THE FIRST TIME