



CONSOLE CONNECTOR KIT 7271

INSTALLATION INSTRUCTIONS

FOR USE WITH: HAMMOND Organ Models M1, M2, M3, L-100, M-100 Series
LESLIE Speaker Models 110, 145, 147, 147RV, 245, 247, 247RV

KIT CONTENT

Console Connector Assembly	012617	Echo Control		
Adapter Assembly	027011			
Cable Assembly, 6-conductor, 30-foot	017277		brown	029397
			ebony	029405
Hardware Package	034439		ivory	029413
Connector, tab, male (2)	029371			
Connector, tab, female (2)	029389	Tremolo Control		
Screw, wood, 6 x 1/2, Phillips head (4)	029124		brown	012625
Screw, sheet metal, 8 x 1/2, Phillips head (2)	029132		ebony	012633
			ivory	012641
Staple, insulated (5)	028464	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 person authorized by the dealer or factory to perform such work.

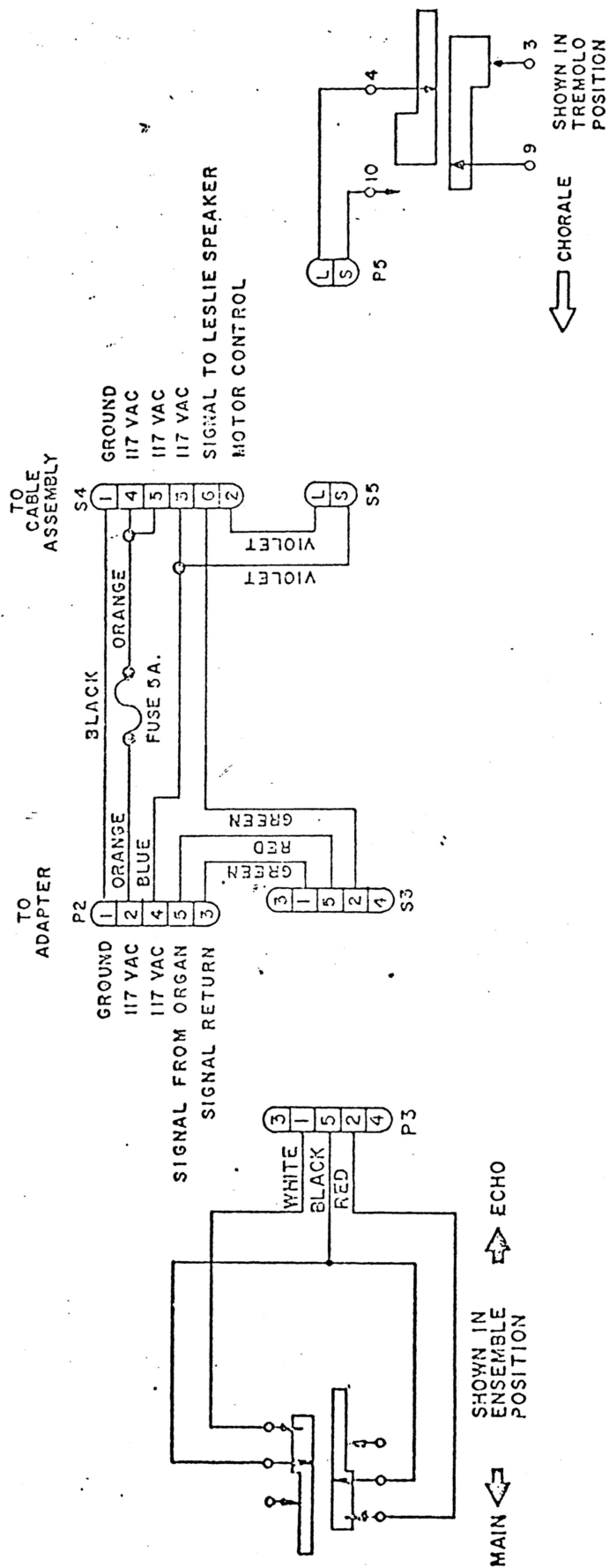
INSTALLATION

CAUTION: DISCONNECT ORGAN POWER BEFORE PROCEEDING!

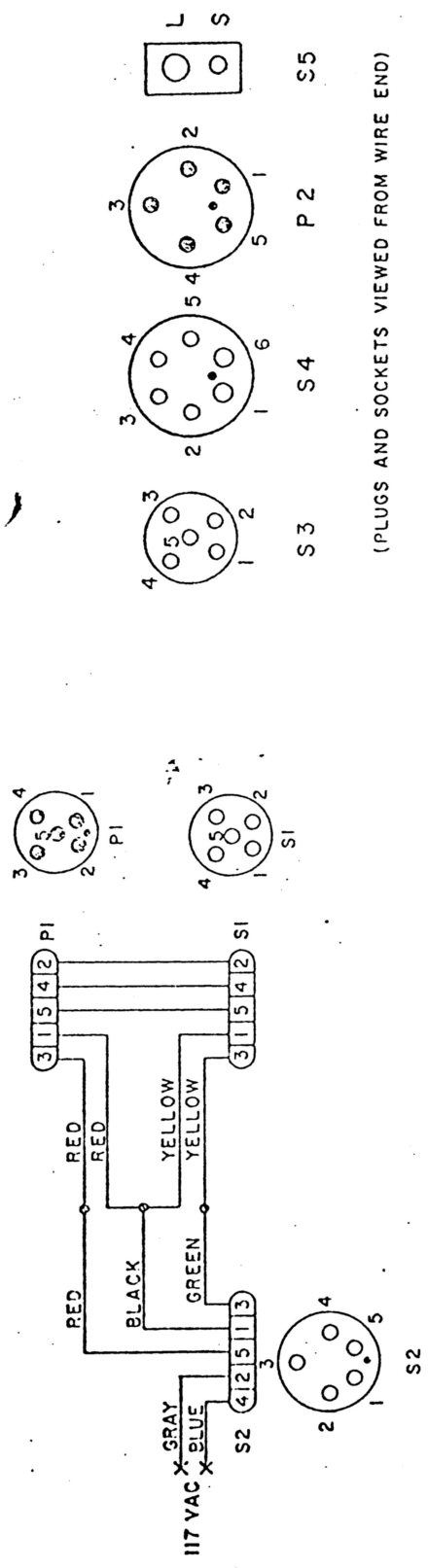
1. Mount the echo and tremolo switches under the keyboard shelf, in a position convenient for the organist. Wood screws are provided.
2. Route the control cable through the keyboard shelf and to the amplifier section of the organ. If no opening is provided, drill a 1-inch-diameter hole in the shelf, being careful to select a location where no internal component will be damaged.
3. Mount the console connector in such a position that the echo and tremolo control cables can reach the console connector and the adapter cable can reach its intended connections.

NOTE

At this point, read through the remainder of the instructions. For some organs the procedures described will shorten the over-all length of the adapter; this could affect the placement of the console connector.



Schematic, 012617 Console Connector Assembly and Controls

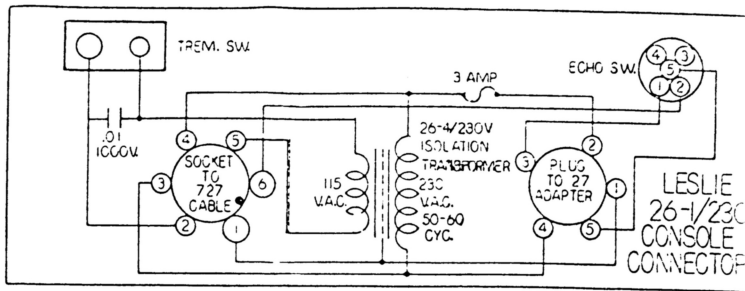


Schematic, 027011 Console Adapter

Console Connector Plug and Socket Base Diagrams

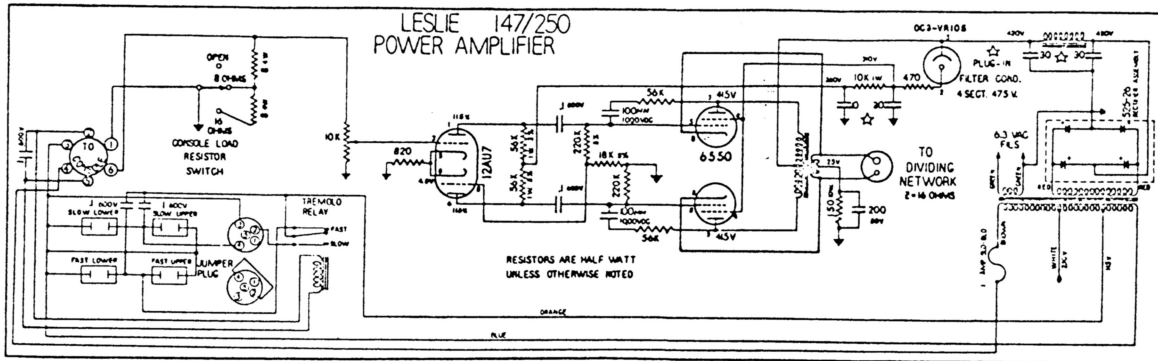
THE CONSOLE CONNECTOR

Except for those organ models which are already equipped for the external Leslie Speaker unit, as is explained in the owner's manuals, all installations of the Model 125, 145, or 147 require the use of a Console Connector. With 230/250-volt Leslie Speakers, the No. 26-1/230V Console Connector should be used. In design and function, this connector is almost identical to the No. 26-1. However, the No. 26-1/230V incorporates a step-down transformer to provide 115-volt power for the tremolo relay.



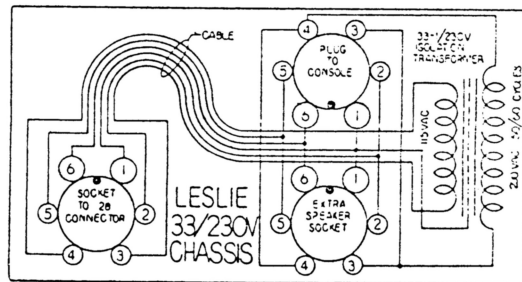
M O D E L S 1 4 5, 1 4 7, & 2 4 7

All the electrical modifications for 230/250-volt operation are incorporated in the Type 147/250 Amplifier, as is shown in the schematic below. (Compare with amplifier schematic in Owner's Manual.)



M O D E L 1 2 5

A conversion chassis, No. 33/250V is added to all 125 Speakers which are modified for 230 or 250-volt operation. The step-down transformer on this chassis furnishes 115-volt power (through the No. 125-20 Cabinet Connector) required for the amplifier and the tremolo motors. The No. 33/250V chassis is mounted above the No. 125-20 Cabinet Connector Chassis, and is connected to it by means of a multiple conductor cable. The 6-conductor cable from the organ console plugs into the No. 33/250V chassis instead of the No. 125-20 Cabinet Connector. The amplifier for this particular Leslie model is the Type 25/50, which differs from the standard Type 25 Amplifier in only one respect: the power transformer, part No. 25-1/50 is designed to operate on 50-cycle current (as well as 60-cycle). Addition of the amplifier (where the 125 is not already so equipped) and all other steps in the installation are as described in the Model 125 Owner's Manual, for the make and model organ involved.



Conversion to 60-Cycle Operation

It is possible to convert from 50-cycle to 60-cycle operation (or the reverse) merely by changing the rotor drive pulley on each of the motor assemblies. Parts numbers for the various models are as follows:

	<u>60-cycle operation</u>	<u>50-cycle operation</u>
Models 145 & 147		
Upper motor assembly	505	505/50
Lower motor assembly	300-405	300-405/50
Model 125 motor assembly	516	516/50

Multiple Speaker Installations

As the owner's manuals explain, when several speakers are connected to a console, only one of them can obtain its AC power from the console. A separate source of power must be provided for each additional speaker through use of a special power relay. In the case of speakers which are designed to operate on 230 or 250-volt power, it is the 5B/230 Power Relay which must be used. Otherwise, the installation is made according to procedures given in the owner's manuals.

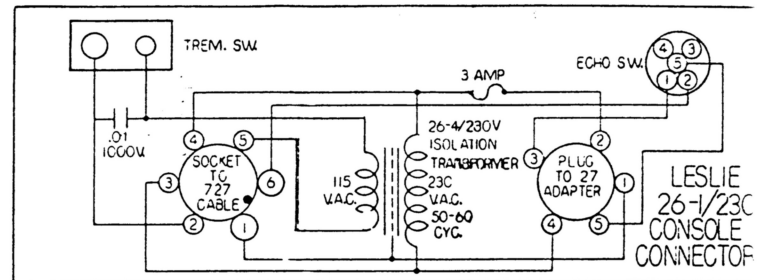
SUPPLEMENTARY INFORMATION for 230/250-Volt, 50/60-Cycle Operation

Leslie Speakers which have been modified for use with 230/250-volt power perform exactly the same as those using 115-volt power. The principal electrical change is the use of step-down transformers which make 115-volt power available for the tremolo motors, as well as the other voltages required for the amplifier's operation. Full details of the modifications are shown in the schematic diagrams (below) for the individual models.

Although it is normally assumed that these particular Leslies will be operated under 250-volt conditions, the option has been provided for converting them to 230-volt operation. As the schematics show, the power transformer on the 147/250 amplifier, and the isolation transformer on the 33/250V Chassis, are equipped with a 230-volt tap on the 250-volt primary. Therefore, conversion from 250-volt to 230-volt operation is merely a matter of changing the connection to the 230-volt tap.

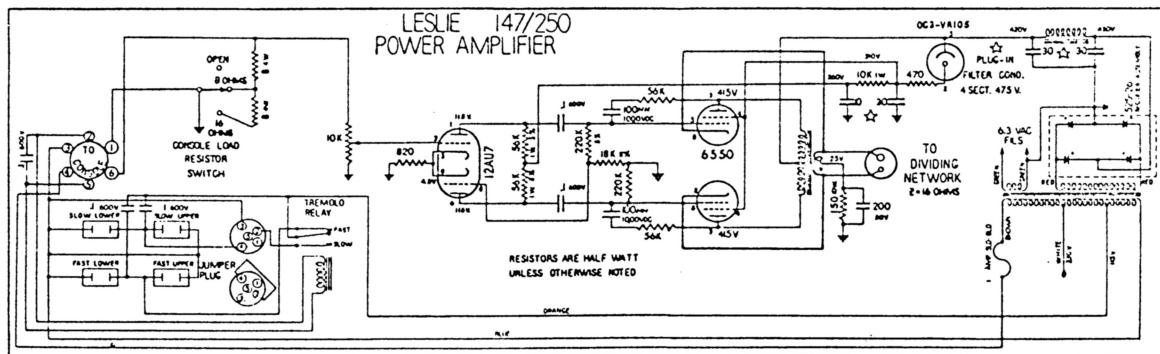
THE CONSOLE CONNECTOR

Except for those organ models which are already equipped for the external Leslie Speaker unit, as is explained in the owner's manuals, all installations of the Model 125, 145, or 147 require the use of a Console Connector. With 230/250-volt Leslie Speakers, the No. 26-1/230V Console Connector should be used. In design and function, this connector is almost identical to the No. 26-1. However, the No. 26-1/230V incorporates a step-down transformer to provide 115-volt power for the tremolo relay.



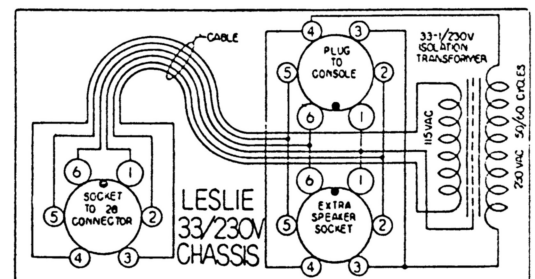
MODELS 145, 147, & 247

All the electrical modifications for 230/250-volt operation are incorporated in the Type 147/250 Amplifier, as is shown in the schematic below. (Compare with amplifier schematic in Owner's Manual.)



MODEL 125

A conversion chassis, No. 33/250V is added to all 125 Speakers which are modified for 230 or 250-volt operation. The step-down transformer on this chassis furnishes 115-volt power (through the No. 125-20 Cabinet Connector) required for the amplifier and the tremolo motors. The No. 33/250V chassis is mounted above the No. 125-20 Cabinet Connector Chassis, and is connected to it by means of a multiple conductor cable. The 6-conductor cable from the organ console plugs into the No. 33/250V chassis instead of the No. 125-20 Cabinet Connector. The amplifier for this particular Leslie model is the Type 25/50, which differs from the standard Type 25 Amplifier in only one respect: the power transformer, part No. 25-1/50 is designed to operate on 50-cycle current (as well as 60-cycle). Addition of the amplifier (where the 125 is not already so equipped) and all other steps in the installation are as described in the Model 125 Owner's Manual, for the make and model organ involved.



Conversion to 60-Cycle Operation

It is possible to convert from 50-cycle to 60-cycle operation (or the reverse) merely by changing the rotor drive pulley on each of the motor assemblies. Parts numbers for the various models are as follows:

	60-cycle operation	50-cycle operation
Models 145 & 147		
Upper motor assembly	505	505/50
Lower motor assembly	300-405	300-405/50
Model 125 motor assembly	516	516/50