

CONSOLE CONNECTOR CONTROLS:

ECHO CONTROL

MAIN POSITION: With ECHO switch in this position, only organ's internal speaker will operate.

ENSEMBLE POSITION: With ECHO switch in this position, both internal organ speaker and external Leslie speaker will operate.

ECHO POSITION: Only Leslie speaker will operate with ECHO switch in this position.

TREMOLO CONTROL

CHORALE POSITION. Small Motor is actuated in lower and upper motor assemblies to slow Bass and Treble rotors to "Chorale" speed. TREMOLO switch contacts are "made" in this position.

TREMOLO POSITION. Bass/Treble rotors operate at fast speed for Tremolo effect when Tremolo Control is switched to this position.

ROTOR BRAKE ACCESSORY

The Tremolo control's circuitry makes no provision for completely stopping the rotors. This is not necessary in normal use, since the slow movement of the rotors at "Chorale" speed provides a pleasing effect when playing sustained notes and is virtually imperceptible in more rapid musical passages.

Where unusual requirements make it necessary to completely stop the rotor, an accessory brake may be installed. In most cases the 022186 brake should be used. However, for organ consoles with built-in LESLIE speaker controls, use the 022178 brake. Complete installation instructions are included with these brake kits.

CONNECTING CABLE

The 6-conductor connecting cable (017277) is supplied in a standard 30-foot length complete with plug and socket.

For longer console-to-speaker runs, two or more of these standard 30-foot cable assemblies may be connected in series.

In certain installations, a specific length of cable other than 30 feet is required. In such cases, bulk cable should be ordered, along with the necessary connectors, as specified in the parts list. In attaching the connectors to the cable the color coding should be followed exactly, with special care being given to all AC connections.

MULTIPLE SPEAKER INSTALLATION

When a particular installation requires greater volume than is obtainable without distortion from a single LESLIE speaker, additional speakers (with amplifier) may be added. Even where no additional sound volume is needed, a second LESLIE speaker

enhances any installation, adding fullness, and a richer pipe-like quality to the sound. Although the relative location of the two cabinets is not critical, it is usually possible to obtain a very interesting overall effect by placing the two speakers 15 to 20 feet apart.

All the speakers used in a multiple installation must be equipped with amplifiers. The speakers are connected together, with the first speaker in the "chain" connected to the console, the second speaker connected to the first, the third connected to the second, etc.

Procedure for connecting additional speakers:

1. Connect the speaker end of the console connecting cable to the power relay.
2. Connect the power relay pigtail to the speaker.
3. Plug the connecting cable for the additional speaker into the receptacle on the power relay.
4. Plug the line cord from the power relay into the nearest AC outlet.

This procedure should be followed, using an additional power relay, for each speaker added to the system.

Power Requirements in Multiple Installations

For the second and all successive speakers in multiple speaker installations, a power relay should be used. In most multiple installations involving 147 type speakers, a 034496 power relay should be chosen. However, in Wurlitzer 4300, 4500, and 4520 installations, use the 035642 power relay. The power relay makes it possible to obtain AC power from a source external to the organ. This eliminates the possibility of overloading the organ's power circuit. The power switch at the console still controls power for all speakers used in multiple installations.

BROADCASTING AND RECORDING

When a LESLIE Speaker is used in a broadcast or recording set-up, allowance must be made for the limitations of the microphone. The microphone will not pick up exactly the same sound and effects heard in the studio. The ideal set-up can only be accomplished by experiment. Here are a few general recommendations for recording and broadcasting:

1. Select a fairly "live" studio.
2. Play the organ at medium to full volume level.
3. ~~Place the microphone ten to fifteen feet from the speaker.~~
4. Do not place the microphone at the same height as the upper speaker.

NON-ORGAN USE OF THE LESLIE SPEAKER

The LESLIE Speaker is a high-quality product, designed expressly for use with electric organs and other musical instruments. The unique musical characteristics of this speaker are the result of electrical and acoustical properties very different from those found in "high-fidelity" sound equipment. The speaker will function satisfactorily only in its intended use as a musical instrument, and no other applications are recommended.