



SERVICE SLANTS

YOUR QUESTIONS OR COMMENTS ON "SERVICE SLANTS"
ARE WELCOME AT ANY TIME

ISSUED BY WURLITZER SERVICE DEPT. NORTH TONAWANDA, N. Y.

Use of Part No. 49775 and 50214 Line Transformers with Remote Speakers for Improved Performance of Auxiliary Amplifiers.

Part No. 50214 Transformer is for use with $3\frac{1}{2}$ ohm speakers only, while Part No. 49775, slightly larger in size, may be used with either $3\frac{1}{2}$ or 8 ohm speakers. Each transformer should be installed as closely as possible to the speaker it supplies; inside the speaker case would be the ideal location, wherever possible. Transformers are recommended in the following applications:

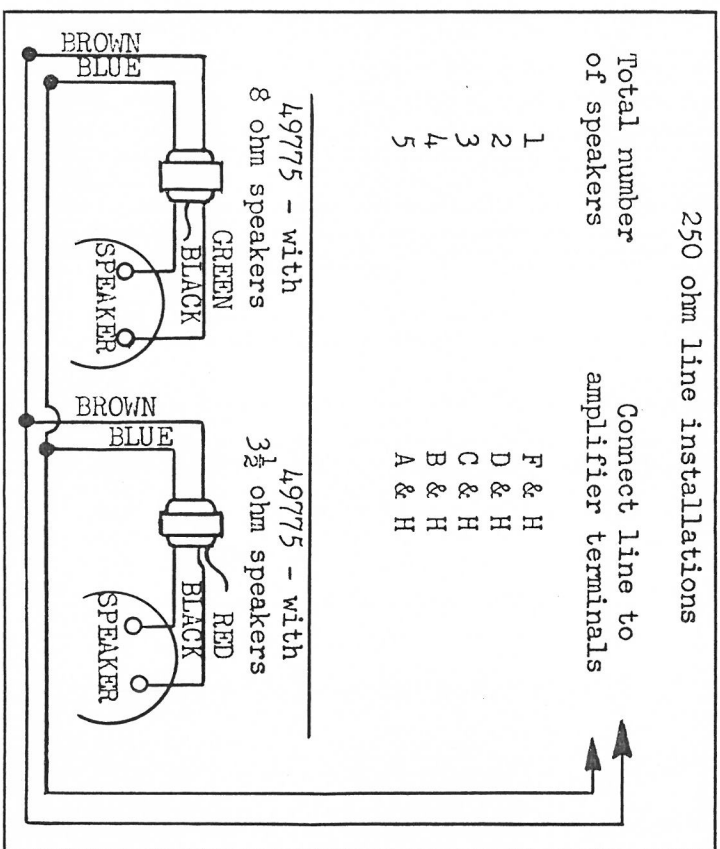
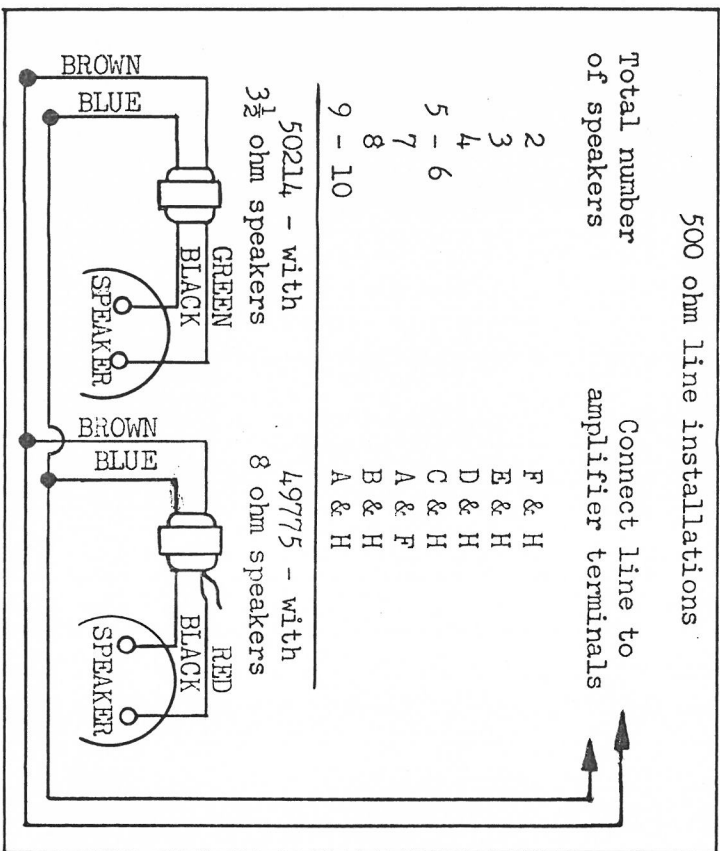
1. Where runs of wire of 200 feet or over are encountered, actual length of wire used between amplifier and speakers, consisting of number 18 wire or larger.
2. In all cases where wire smaller than number 18 is used, except for extremely short runs of 25 feet or less; for example, extruded plastic insulated "ribbon" wire.

When Part No. 49775 and 50214 Transformers are installed:

1. They should always be connected in parallel; the brown and blue (primary) wires connect to the line which runs to the Auxiliary Amplifier.
2. All speakers in an installation must be connected so as to result in the same impedance; if 500 ohms is decided upon, then all speakers must be connected according to the 500 ohm table.
3. Both $3\frac{1}{2}$ and 8 ohm speakers may be used in a given installation. The total number of speakers installed must be used in determining which Auxiliary Amplifier terminals the line is to be connected to. For example, in a 500 ohm installation using two $3\frac{1}{2}$ ohm and three 8 ohm speakers, the total number of speakers is five and the line from the speakers is connected to terminals C and H at the Auxiliary Amplifier.
4. The number of speakers to be installed tells what type of installation should be used. There is no difference in the performance of either of the two types. If one or two speakers are to be installed, the 250 ohm line will be advantageous; while if a large number of speakers is to be used, with possibilities of adding more speakers at a later date, then the 500 ohm installation will be preferable.

(OVER)

In an installation using this system, where the original installation was made according to the procedure outlined on this sheet, additional speakers may be added at any time with very little trouble. For example, suppose an existing installation consists of two $3\frac{1}{2}$ ohm speakers equipped with 50214 transformers, and two 8 ohm speakers equipped for 500 ohms with 49775 transformers, with the 500 ohm line correctly connected to amplifier terminals D and H: an additional $3\frac{1}{2}$ ohm speaker equipped with a 50214 transformer, or an 8 ohm speaker equipped with a 49775 transformer, may be added at any time, by simply connecting the line from the additional speaker to the existing 500 ohm line at any convenient point, and changing the line connections at the amplifier to C and H terminals.



All brown & blue wires should be connected as shown to wire running to auxiliary amplifier.

Below is a list of voice coil impedances of various Wurlitzer Remote Speakers:

36	8 ohms	240 (outdoor)	8 ohms	580	8 ohms	4007	8 or 500 ohms see below t
37	8 "	241 (outdoor)	16 "	4000	star see below*	4008	8 or 500 ohms see below t
38	8 "	250	8 "	4002	star see below*	4009	8 ohms
39	8 "	250-A	8 "	4003	$3\frac{1}{2}$ ohms	4004-A	$3\frac{1}{2}$ or 500 ohms see below t
160	$3\frac{1}{2}$ "	420	8 "	4004	"	4005-A	$3\frac{1}{2}$ or 500 ohms see below t
210	$3\frac{1}{2}$ "	425	8 "	4005	"	4006-A	$3\frac{1}{2}$ or 500 ohms see below t
220	$3\frac{1}{2}$ "	430	8 "	4006	"	29577 kit	8 ohms

* - star speakers with 8 inch speakers, $3\frac{1}{2}$ ohms; larger speakers, 8 ohms.

t - sup- equipped with 500 ohm transformer; may be used with or without.