

Installation

Notice

Instructions for installing a new Model 1100 phonograph are given on instruction tags attached in each phonograph shipped. Read the instructions on these tags before removing them.

NEW PHONOGRAPH

Upon receiving the phonograph, examine it immediately for hidden damage. If any damage is found, notify the transportation representative immediately and have proper notation made on freight bill with his signature attached. The Rudolph Wurlitzer Company is not liable for any damage in transit.

Unpacking

Remove all the parts contained in the coin box. Remove the cartons containing the tubes and tone arm.

Remove turntable and chassis clamping blocks, and into the tops of the openings from which the bolts were removed install the two small plug buttons shipped in the coin box. Remove the record tray shipping block, and the locking rod from the tray stack. Remove the shipping screws and washers which hold the chassis frame to the shelf. One of these will be found beneath the shelf under the tray stack and the other in the top of the shelf to the right of the turntable. After removing the screw and washer from the latter position install the large plug button shipped in the coin box. Remove the cardboard disc from the top tone arm housing. Remove all tapes which anchor the various parts of the mechanism and cabinet.

Remove the wood screws which hold the speaker baffle against the frame to allow the speaker baffle to float on the rubber mountings. Remove the two screws and nuts from the pre-amplifier mounting to allow it to float freely.

Installation

Install the amplifier tubes. Before inserting the tubes in the sockets, turn so that key on tube fits groove in socket. Check all plug connections to see that they are snug in their receptacles.

Remove the program holders from the program selector, insert program slips, and re-install the holders. Place the records on the record discs, and install the records and discs on the record trays in the proper program sequence. The phonograph should not be placed

in operation without its full complement of 24 records.

Install the tone arm cartridge. Install tone arm on its shaft and check to be sure the cartridge is snugly fitted. Install the record tray stack cover.

Level the cabinet through the use of the cabinet leveling adjustments. (Refer to the Adjustment Section of this Handbook.)

Oil all bearings and the motor, as described in the Lubrication Section of this Handbook.

Make certain that the line voltage and frequency as shown on the location power meter box, agree with the voltage and frequency stamped on the cabinet serial number plate.

Install the line plug in a suitable receptacle, turn on the line switch, and test the phonograph with coins for proper operation.

AUXILIARY SPEAKERS

Auxiliary Speakers may be connected directly to the Model 506 Amplifier in the Model 1100 Phonograph. Provision has been made for the use of either $3\frac{1}{2}$ ohm, 8 ohm, or 500 ohm speakers. However, only one of these types of installation may be used at a time.

Installation

The center terminal (B) in the upper row of terminals, located at the left end of the sloping front panel of the amplifier, is the common connection of the auxiliary speaker circuit (see figure 29). One wire of every auxiliary speaker line must always be connected to this terminal.

A single $3\frac{1}{2}$ ohm speaker, or two 8 ohm speakers in parallel, may be connected to terminals B and A.

A single 8 ohm speaker, or two $3\frac{1}{2}$ ohm speakers in series, may be connected to terminals B and C.

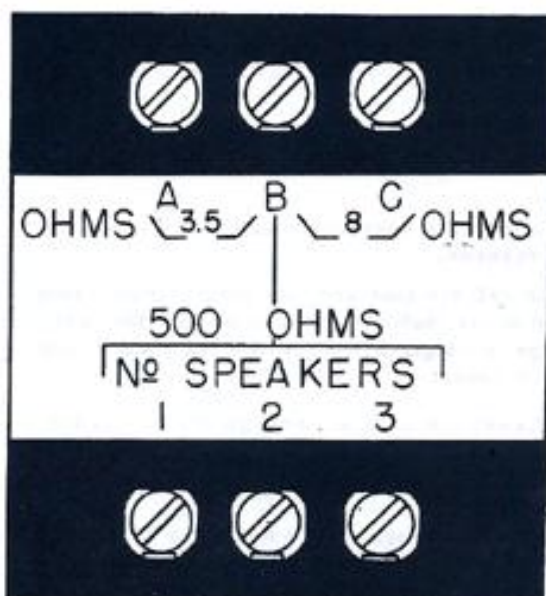


Figure 29-Model 506 Amplifier Terminal Board

The line from one 500 ohm speaker transformer is connected to terminals B and 1. The line from two 500 ohm speakers in parallel is connected to B and 2, while three 500 ohm speakers in parallel are connected to terminals B and 3.

Note

No more than two of these auxiliary speaker terminals should ever be connected at one time. This means that if a single 8 ohm speaker line is connected to terminals B and C, no other auxiliary speakers may be connected to this amplifier. Similarly, if one, two, or three 500 ohm lines are connected to their respective terminals as described above, no $3\frac{1}{2}$ or 8 ohm speakers may be used. One or two $3\frac{1}{2}$ ohm speakers or one or two 8 ohm speakers may be used, but $3\frac{1}{2}$ ohm and 8 ohm speakers cannot be used simultaneously without transformers.

In the event that it is found desirable to use several auxiliary speakers, some of which have $3\frac{1}{2}$ ohm voice coils and some of which have 8 ohm voice coils, the use of 500 ohm speaker transformers is recommended. When such transformers have been installed, the instructions for connecting 500 ohm speakers to the Model 506 Amplifier should be followed, as given above.

The use of 500 ohm lines is also highly

recommended in the following applications:

1. Where runs of wire of 200 feet or over are encountered, consisting of number 18 wire or larger. This refers to the actual length of wire used between speaker and amplifier.
2. In all cases where wire smaller than number 18 is used, except for extremely short runs of 25 feet or less.

Transformer Part No. 50214, is available to adapt $3\frac{1}{2}$ ohm speakers to 500 ohm line installations. Transformer, Part No. 49775, is available for use with 8 ohm speakers. Installation instructions are furnished with each transformer.

FADER CONTROL

After connecting the speaker lines to the proper terminals, the fader control on the back panel of the amplifier should be adjusted with a screwdriver (see figure 30). This adjustment is accessible through an opening in the back lower panel of the cabinet. As delivered, this control is set in the "Phono Only" position, and no output from the amplifier will be delivered to the auxiliary speakers. Setting this control to position "A" will result in 25% of the output of the amplifier being delivered to the auxiliary speakers, and 75% of the output of the amplifier to the phonograph speaker. In position "B" of the fader control, the output is equally divided, i. e. 50% of the output is delivered to the auxiliary speakers and 50% to the phonograph speaker. In position "C", 75% of the output goes to the auxiliary speakers and 25% to the phonograph speaker.

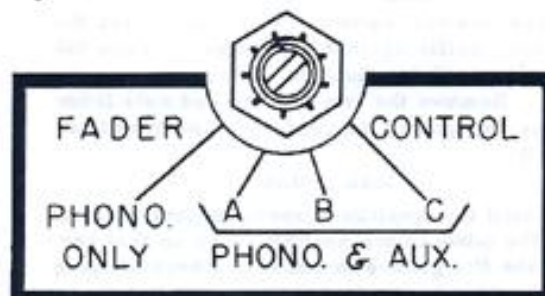


Figure 30-Model 506 Amplifier Fader Control

If the auxiliary speakers are correctly connected, no change in impedance matching results from changing the setting of the fader control.

Note

If the phonograph is operated without auxiliary speakers, or if auxiliary speakers have been used and are disconnected, the fader control setting should always be returned to the "Phono Only" position.

The main volume control on the phonograph will control the output to both the auxiliary speakers and the phonograph speaker. The percentages of output distribution, for the respective settings of the fader control as given above, remain the same regardless of the setting of the main volume control. In this way, the entire output of the phonograph amplifier is always utilized, either by the auxiliary speakers or by the phonograph speaker.

AUXILIARY AMPLIFIER AND VOLUME CONTROL

Should it be desired to install auxiliary speakers to which the volume level may be controlled entirely independently of the phonograph volume, the use of Kit No. 90 is recommended. This kit consists of a Model 227 Auxiliary Amplifier and a separate volume control unit. With this installation, the volume level of the auxiliary speakers connected to the auxiliary amplifier may be operated at any desired volume without regard to the setting of the phonograph volume control; even with the phonograph volume control in the off or zero output position.

Instructions and all necessary accessories and parts for complete installation are included with Kit No. 90. The volume control unit itself is mounted on the existing phonograph volume control, and the auxiliary amplifier is fastened to the floor of the phonograph cabinet. A description of the Model 227 Auxiliary Amplifier, which is included in Kit No. 90, is given in the General Description Section of this Handbook.

AUXILIARY CONTROL UNITS

Kit No. 96 Auxiliary Control Unit is available for use in installations where Kit No. 90, consisting of auxiliary amplifier and its volume control, has been installed and it is desirable to control the volume of both the phonograph and the auxiliary amplifier independently of each other from a remote point. When installed the electrical cancel system of the phonograph can also be operated from the remote point.

Installation

Kit No. 97 Auxiliary Control Unit may be used in two ways:

1. It may be used in installations where it is desirable to control the volume of the phonograph only from a remote point.
2. It may be used where Kit No. 90, consisting of auxiliary amplifier and its volume control, has been installed and it is desirable to control the volume of the auxiliary amplifier only from a remote point, independently of the phonograph volume control.

When installed, the electrical cancel system of the phonograph can also be operated from the remote point.

Both Kit No. 96 and No. 97 consist of a chassis pan, equipped with a cancel button and a terminal strip. The controls in both the phonograph volume control box and the auxiliary amplifier volume control box are wired as delivered to a terminal strip inside their respective boxes. To install Kit No. 96 or No. 97, it is only necessary to disconnect in the phonograph the control or controls, according to the type of installation being made. The controls are then removed from the volume control boxes in the phonograph, installed in the auxiliary volume control box, and the remote box installed and wired according to the instructions supplied.

Note

The cable for use with these controls must be ordered separately. The cable is supplied in bulk to any desired length, so that the required amount of cable may be specified for a given installation.

When ordering Kit No. 96 order by Part No. 51145, and be sure to order the footage needed of Part No. 50793 Cable. When ordering Kit No. 97, order by Part No. 51146, and also order the required quantity of Part No. 50799 Cable. Note that the cables are different.

When installing auxiliary equipment, all cables into the phonograph must be routed through the 2 inch opening at the lower rear of the cabinet, after removing the screen, or through the opening at the upper edge of the rear panel near the pre-amplifier, which will be found in later models. Inside the phonograph all cables must be anchored so that they cannot come in contact with any of the moving parts of the mechanism or with vacuum tubes or transformers, and from phonograph to auxiliary equipment, cables must be anchored every 18 inches or less and at all bends.

REMOTE CONTROL EQUIPMENT FOR MODEL 1100 PHONOGRAPH					
Model and Name of Remote Control Equipment	Order By Part No.	Multi-Wire System Parts Required	2 Wire System Parts Required	3 Wire System Parts Required	Wireless System Parts Required
2140 Bar Box	50479	Not Used	Not Used	Not Used	As Needed for Location
3020 Wall Box	45964	Not Used	As Needed for Location	As needed for location provided maximum wattage input rating of phonograph is not exceeded.	As Needed for Location
3025 Wall Box (3 wire only)	47055	Not Used	Not Used	As needed for location provided maximum wattage input rating of phonograph is not exceeded.	Not Used
3031 Wall Box (Multi-wire only)	45966	As needed for location provided maximum wattage input rating of phonograph is not exceeded.	Not Used	Not Used	Not Used
3045 Wall Box (wireless only)	47059	Not Used ¹	Not Used	Not Used	As Needed for Location
212 Master Unit	50869	Not Used	Not Used	Not Used	One for each six (or fraction) Model 2140 Bar Boxes
219 Impulse Stepper	46854	Standard on Model 1017	One for Each Phonograph	One for Each Phonograph	One for Each Phonograph
215 Impulse Transmitter	45963	Not Used	Not Used	Not Used	One Used for Each 3020 Wall Box
216 Impulse Receiver	45965	Not Used	Not Used	Not Used	One Used per Phonograph
218 Terminal Box (Multi-Wire)	46352	One Used per Phonograph	Not Used	Not Used	Not Used
222 Booster Transformer (3 Wire)	46375	Not Used	Not Used	As needed for location provided maximum wattage input rating of phonograph is not exceeded. One Used For Each 4 (or fraction) Additional Model 3020 or 3025 Wall Boxes over first 8	Not Used
Kit No. 49 (Adapt Model 222 to Model 1017)	48595	Not Used	Not Used	One Used for Each Model 222 Booster Transformer	Not Used
223 Booster Transformer (Multi-Wire)	46736	As needed for location provided maximum wattage input rating of phonograph is not exceeded. One used for Each 10 (or fraction) additional Model 3031 Wall Boxes over first 10	Not Used	Not Used	Not Used
Kit No. 43 (To Convert to Two Wire)	46285	Not Used	One Used for Each Model 3020 Wall Box	Not Used	Not Used
29 Wire Cable	46650	As Needed for Location	Not Used	Not Used	Not Used
2 Wire Cable	37870	Not Used	As Needed for Location	Not Used	Not Used
3 Wire Cable	46066	Not Used	Not Used	As Needed for Location	Not Used
21 Wire Cable	51406	Not Used	Not Used	Not Used	As Needed for 2140 and 212
5011 Mounting Bracket or 5111 Mounting Bracket	46442 51904	Not Used	As Needed for Model 3020, Wall Boxes Counter Mounted	As Needed for Model 3020 and 3025 Wall Boxes Counter Mounted	As Needed for Model 3020 and 3045 Wall Boxes Counter Mounted
5012 Mounting Bracket or 5112 Mounting Bracket	46447 51905	As Needed for Model 3031 Wall Boxes Counter Mounted	Not Used	Not Used	Not Used
5014 Mounting Bracket	51774	Not Used	Not Used	Not Used	Optional for Model 2140