



Loud Speaker

Model 100-A

Instructions



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RCA

Loud Speaker

Model 100-A

Continuous research and development on the part of the RCA and its manufacturing associates have resulted in an improved RCA Loud Speaker, Model 100-A, incorporating several new principles. Faithful reproduction over the entire musical scale, sensitivity, and ability to handle large volume without distortion are its predominating features. It reproduces music and voice with extreme clarity. Particular attention is drawn to the response provided in the lower or bass tones of the musical scale, and also in the upper register where many loud speakers fail. Excellent response is obtained over the entire acoustical band.

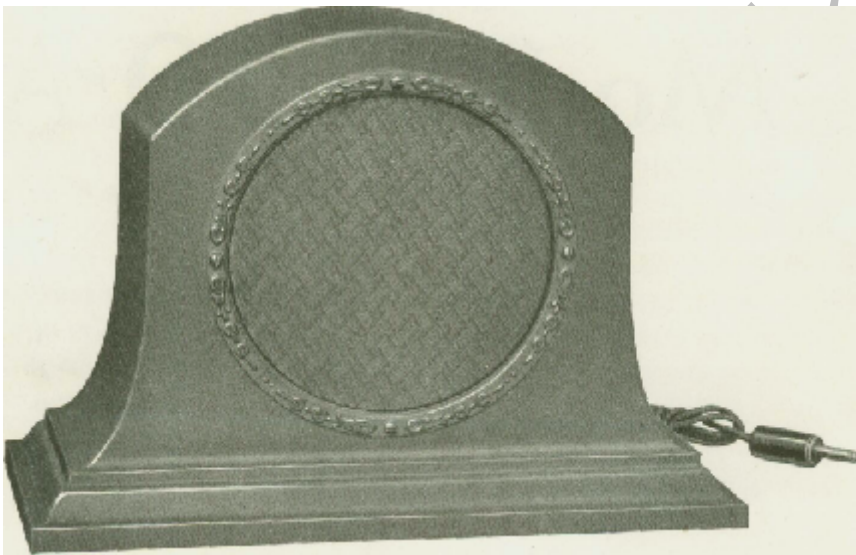


Fig. 1. RCA Loud Speaker Model 100-A

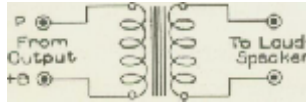
The Model 100-A Loud Speaker is another of the RCA acoustically synchronized products which is destined to continue the leadership established by RCA in the field of quality loud speakers. It is not to be confused with inferior types where the response to the musical scale is not uniform and where many notes are either subdued or exaggerated beyond their normal pitch.

USE

RCA Loud Speaker Model 100-A will give exceptionally good quality of reproduction when used with any modern type of radio broadcast receiver, but its superior tone qualities are particularly evident when used in connection with Radiolas. Its maximum possibilities are realized when it is connected to a radio receiver or an amplifier unit employing power-amplifier Radiotrons UX-120, UX-112, or UX-171 in the last audio stage.

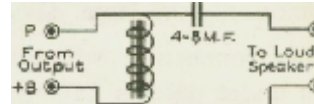
When the Loud Speaker Model 100-A is operated from two power-amplifier Radiotrons in parallel or from power-amplifier Radiotron UX-171 singly, except at voltages giving resultant plate current less than 10 milliamperes DC, a loud speaker output coupling system is recommended, consisting of either: an output transformer (Fig. 2), or a choke coil and condenser (Fig. 3).

Fidelity of reproduction can best be obtained by proper adjustment of the volume control of the radio receiver.



1:1 Ratio

Fig. 2. Loud Speaker Coupling Transformer Method



30 Henries or More not to Exceed 1000 Ohms D.C-Resistance

Fig. 3. Loud Speaker Coupling Choke and Condenser Method

INSTALLATION

Loud Speaker Model 100-A is shipped completely assembled and adjusted, and is ready for use upon removal from its shipping container. In unpacking, handle the Loud Speaker with care.

If operated directly from a receiver (with or without a power-amplifier Radiotron in the last audio stage), insert the plug on the end of the loud speaker cord into the telephone jack of the last audio stage.

If used with a receiver in conjunction with a power-amplifier unit, connect the loud speaker cord to the output of the power-amplifier unit, and plug the input cord of the latter into the telephone jack of the first audio stage of the receiver. The Radiotron in the last stage of the receiver may be removed if desired. In this case, reduce the filament voltage on the remaining Radiotrons to the correct value.

RCA Loud Speaker Model 100-A is similar to a musical instrument in **that** its location in the room should be chosen with care so as to obtain the most pleasing acoustical effects. Various locations should be tried in order to select the one which gives the best results.

MAINTENANCE

Should trouble develop in the operation of the loud speaker, look first for difficulties in the radio receiver (or power-amplifier unit, if used). See that all connections are tight, battery voltages are correct, and Radiotrons function properly, as outlined in instructions with the receiver.

Should the trouble appear to be confined to the loud speaker, look for loose cord tips or broken cords. **DO NOT ATTEMPT TO REPAIR OR ADJUST RCA LOUD SPEAKER MODEL 100-A BUT CONSULT THE AUTHORIZED RCA DEALER FROM WHOM IT WAS PURCHASED.**

NOTICE

The apparatus and devices which, or the use of which, are covered by patents are sold only under certain specified licenses set forth in a notice attached permanently to the said apparatus and devices, or if this is impracticable on account of size, then on tags or wrappers attached to the said apparatus and devices or on the cartons containing the same. This license notice is as follows:

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"The sale of this device carries a license under the patent claims of (a), but only for (i) talking machine uses, (2) radio amateur uses, (3) radio experimental uses and (4) radio broadcast reception; and only where no business features are involved.

"The sale does not carry a license under patent claims of (b) except only (1) for legitimate renewals and repairs in apparatus and systems already licensed for use under such patent claims on combinations, (2) for assembling by amateurs and experimenters, and not by others, with other licensed parts or devices, or with parts or devices made by themselves, but only for their own amateur and experimental radio uses where no business features are involved, and not for sale to or for use by others, and (3) for use with licensed talking machines and licensed radio broadcast receiving devices; and only where no business features are involved."

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