

## 1A AND 1A1 SPEAKERPHONE SYSTEMS

### IDENTIFICATION

#### 1.00 GENERAL

Speakerphone system 1A1 includes all the functions of speakerphone system 1A plus circuitry and apparatus which voice-switch the gain in the transmitting and receiving circuits.

#### 2.00 IDENTIFICATION

**2.01** As compared to speakerphone system 1A, the addition of a voice-operated switching circuit in speakerphone system 1A1 permits a 12-db increase in receiving volume and reduces far-end talker echo under most conditions.

**2.02** Both the 1A and 1A1 speakerphone systems which incorporate distant talking and loud-speaker features may be switched from hands-free

(distant-talking) to handset operation and vice versa.

**2.03** The following type services may be used with both speakerphone systems:

- Individual lines, 2-party flat, ring party of all services, 4-party selective, and 8-party semiselective service.

**2.04** The KS-14964 or KS-14964, List 2 control unit is used with the 1A speakerphone system; and the KS-14964, List 3 control unit is used with the 1A1 speakerphone system.

**2.05** Both speakerphone systems use the same groups of station equipment associated with the control units. Fig. 1 and 2 show the main station components.

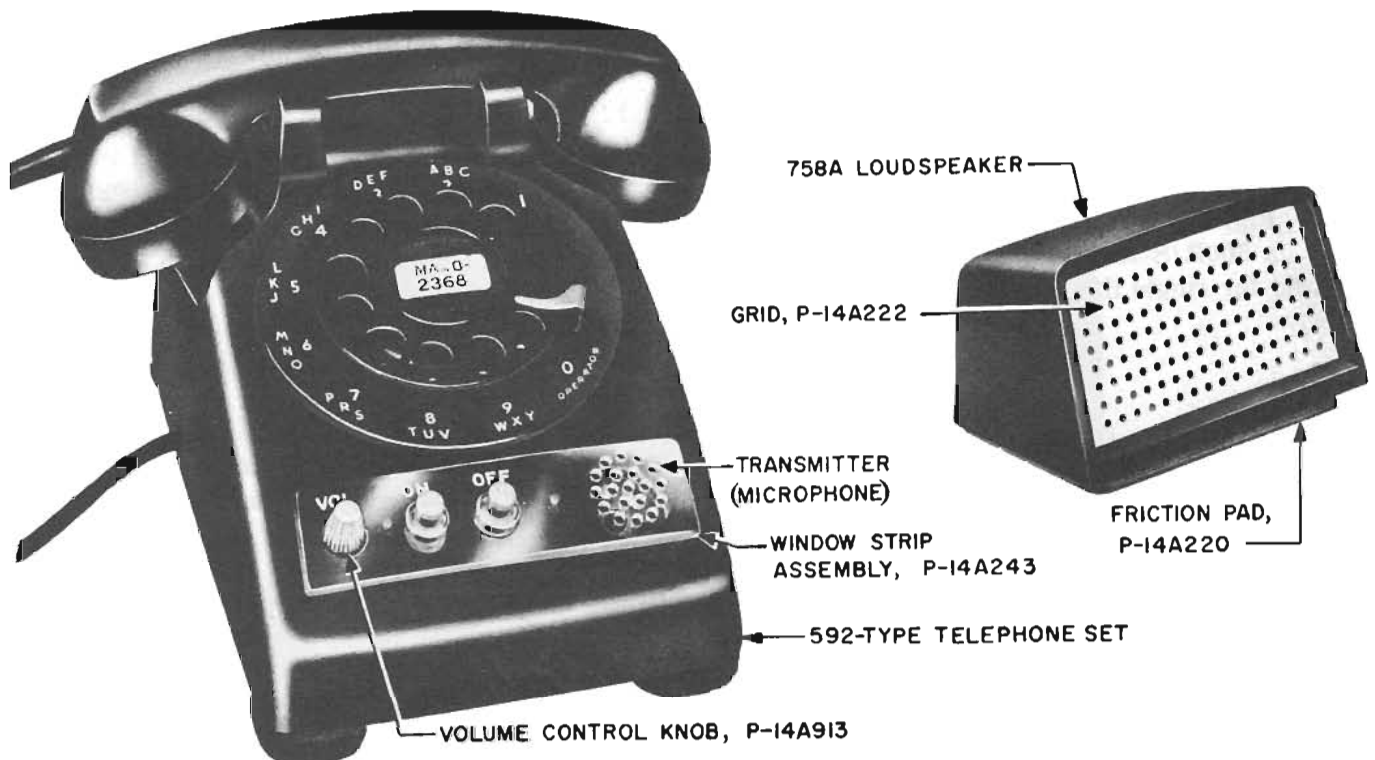
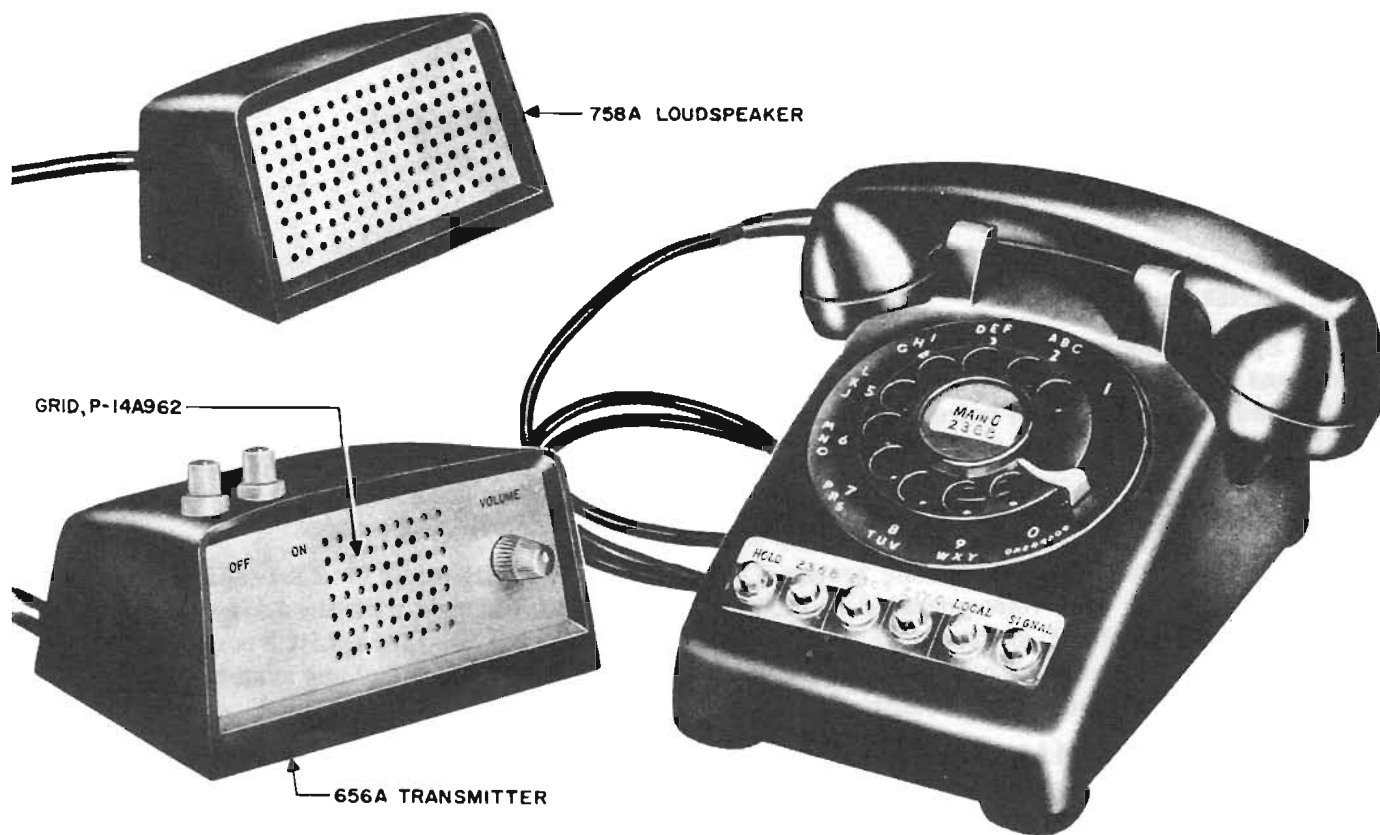


Fig. 1 — Speakerphone Components, Microphone in Base of Set



**Fig. 2 — Speakerphone Components, Microphone Separate**

**2.06** Fig. 2 shows a key telephone set; however, a 500R/S telephone set or equivalent may be used for single line pickup.

**2.07** For information on the 500-type telephone set, see C Section entitled Telephone Sets, 500 Series, Identification and Assembly of Parts.

**2.08** The KS-14964, and KS-14964, Lists 2 and 3 control units (Fig. 3, 4, 5, and 6) consist of an assembly of electronic apparatus mounted on a base approximately 9-5/8 by 7-1/8 inches.

- The cover is approximately 4 inches deep with a beige-gray crinkle finish.
- The base may be mounted on a wall or desk.
- Entrance for inside wiring cable and power cord is located in bottom of unit.
- A screw-type terminal strip is provided for terminating inside wiring cable.
- A clamp is provided for fastening the inside wiring cable to the unit.

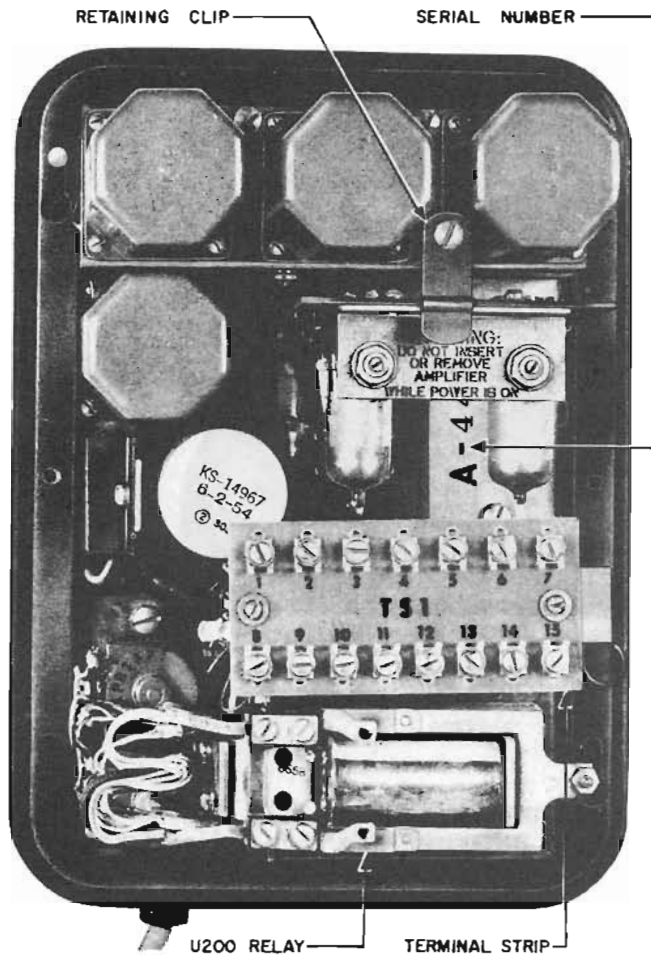


Fig. 3 - KS-14964 Control Unit

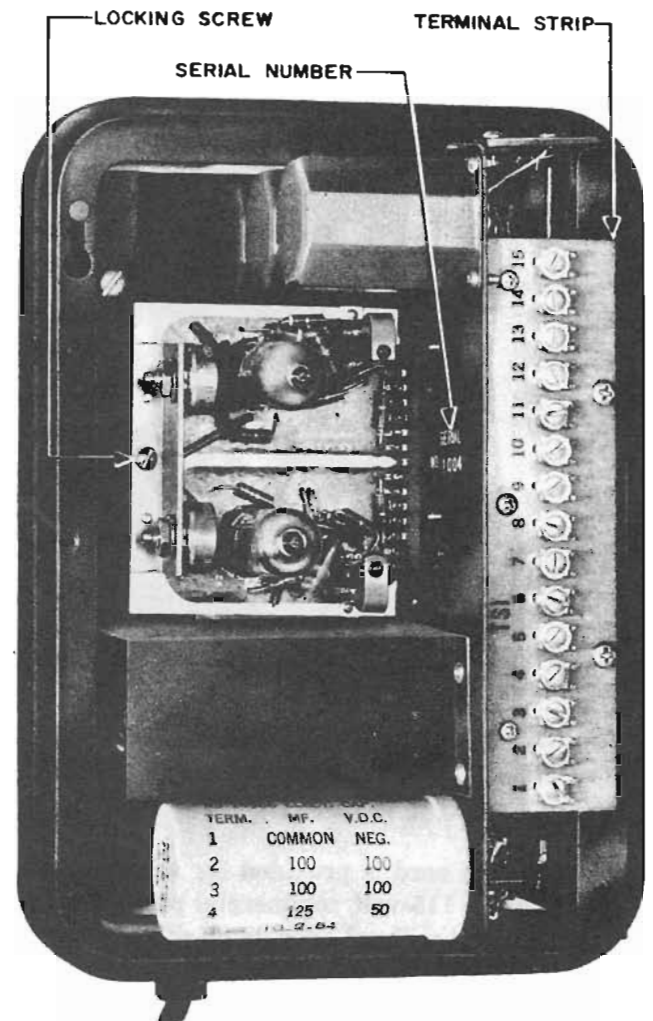


Fig. 4 - KS-14964, List 2 Control Unit

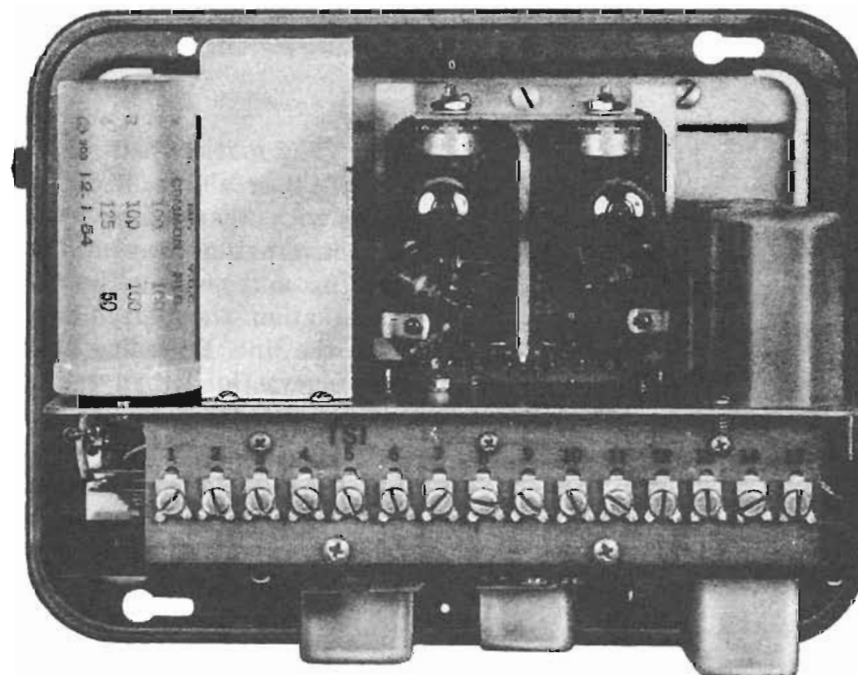


Fig. 5 - KS-14964, List 3 Control Unit, Top View

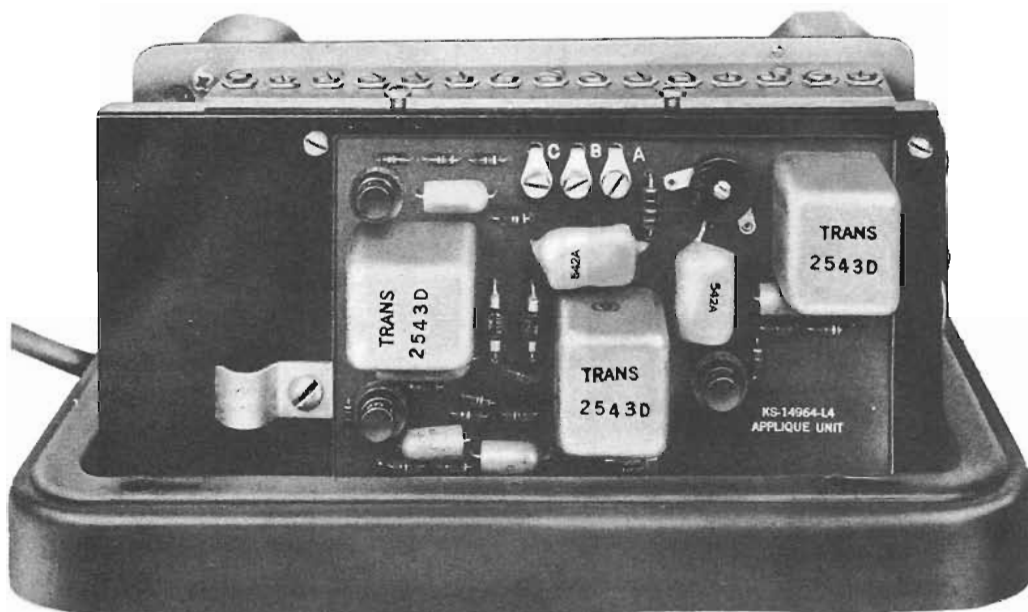


Fig. 6 — KS-14964, List 3 Control Unit, Side View

**2.09** A 6-foot cord is provided for connecting to 60-cycle 115-volt commercial power supply. The control unit will not operate on direct current.

**2.10** The KS-14964 and KS-14964, List 2 control units both use a KS-14990 amplifier. The KS-14964, List 3 control unit uses a KS-14990,

List 2 amplifier (Fig. 7). The KS-14990, List 2 amplifier differs only in that it includes a 400A varistor, and adjustments of the potentiometers are different.

**2.11** The 661-type transmitter is a plug-in module for use with the 600-type (coded A and B) telephone sets. It provides the same features as the 656A transmitter with the addition of a muting switch.

**2.12** The muting feature of the 661-type transmitter allows, if desired, a private conversation with others within the room without having the conversation transmitted over the line. Depressing and holding the ON button for such a conversation short-circuits the transmitter and holds the line. Releasing the ON button resumes the conversation, when desired.

**2.13** An A13A cord is used when the 661-type transmitter is associated with the 600-type (coded A and B) telephone sets. This is arranged for plug-type connections and is associated with the last external plug of the mounting cord.

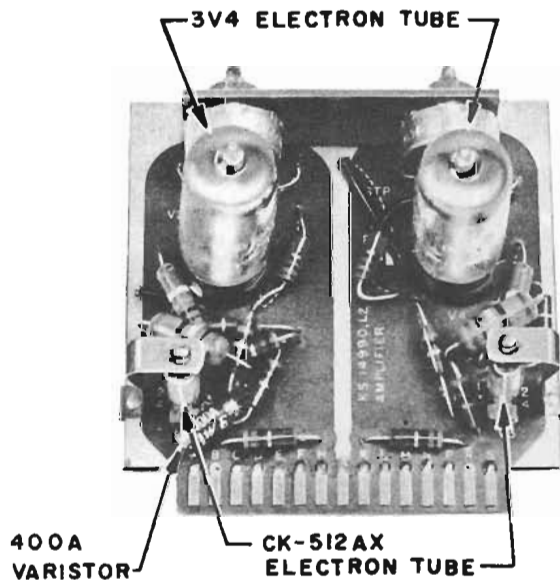


Fig. 7 — KS-14990, List 2 Amplifier