## SPEAKERPHONE SYSTEMS-3A

### **IDENTIFICATION**

### 1. GENERAL

- 1.01 The 3A speakerphone system is similar to the 1A and 1A1 speakerphone systems which incorporate distant talking and loudspeaker features.
- 1.02 This section is reissued to add the color line for 3A speakerphone apparatus (Table A).

# 2. IDENTIFICATION

- 2.01 The main difference between the 3A and other speakerphone circuits is a voice-switch circuit which controls the gain in the transmitting and receiving circuits.
- 2.02 The voice-switch circuit of the 3A speaker-phone system performs the following functions:
  - Increases receiving volume.
  - Eliminates singing and far-end talker echo.
  - Provides better operation under adverse room noise conditions.
  - Reduces voice-switching action.
- 2.03 The 3A speakerphone system may be used with all classes of service.
- 2.04 The 3A speakerphone components may be used with a 500R/S telephone set (Fig. 1); however, a key telephone set or equivalent may also be used.

- 2.05 All telephone sets used in the 1A and 1A1 speakerphone systems, with the exception of the 592-type set, may be used in the 3A speakerphone system.
- 2.06 For information on telephone sets used with 3A speakerphone systems, see section covering connections for particular type telephone set.



Fig. 1-3A Speakerphone Components

### 3. 55A CONTROL UNIT

- 3.01 The 55A control unit, used with the 3A speakerphone (Fig. 2), includes the following:
  - (a) A base to mount on a wall or desk.
  - (b) An entrance for inside wiring located at top or bottom of unit.
  - (c) A screw-type terminal strip for terminating inside wiring cable.
  - (d) Brackets to hold the inside wiring cable in unit.
  - (e) Voice-switching relay.
  - (f) Printed wiring boards.
  - (g) Component assembly boards.
  - (h) Power transformers.
- 3.02 Power is furnished from a 2012B plug-in type transformer. Standard inside wire is used to connect transformer to control unit with allowable maximum distance of 100 feet.

### 4. 666A TRANSMITTER

- **4.01** The 666A transmitter (Fig. 3) consists of the following:
  - Pushbuttons for OFF-ON operation and muting of transmitter.

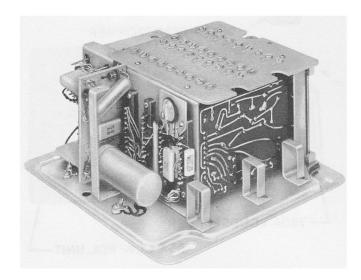


Fig. 2 — 55A Control Unit, Cover Removed

- Volume control button.
- 51A lamp for illumination of ON button.
- 3-stage transistorized amplifier.
- 11-terminal connecting block.
- T11A cord.
- AC1 transmitter unit.
- 4.02 The muting feature of the 666A transmitter allows, if desired, a private conversation with others within the room without transmitting the conversation over the line. Depressing and holding the ON button for such a conversation short-circuits the transmitter unit and holds the line. (Distant party can still be heard.) Releasing the ON button permits resumption of the conversation.

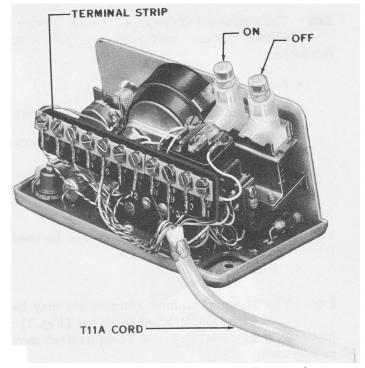


Fig. 3 - 666A Transmitter, Cover Removed

4.03 For transmitter associated with the 600type sets, see section covering modular units. mounted on a metal base plate and is enclosed in a plastic housing. Connections to the speaker are made by using a 2-conductor R2FK cord.

### 5. 760A LOUDSPEAKER

5.01 The 760A loudspeaker (Fig. 1) is a permanent magnet-type dynamic loudspeaker

5.02 For color information on the R2FK and the T11A cords, see section covering station cords.

TABLE A

COLOR LINE FOR 3A SPEAKERPHONE APPARATUS

Color	Color Code	760A Loudspeaker	666A Transmitter	55A Control Unit	2012B Transformer
Black	- 3	•	•		
Light Olive Gray	-49			•	•
Ivory	-50				•
Green	-51	•	•		
Yellow	-56	•	•		
White	-58	•	•		
Rose Pink	-59	•	•		
Light Beige	-60	•	•		
Light Gray	-61	•	•		
Aqua Blue	-62	•	•		
Turquoise	-64	•	•		

Note: For color information on telephone sets used with 3A speakerphone apparatus, refer to section on color.

• Indicates available colors.