The K-107A loudspeaker is designed for use with a standard telephone set, permitting a group of people to overhear both sides of a telephone conversation. A combination volume control and on-off switch is provided on the front panel. The loudspeaker is encased in a plastic housing available in color and equipped with a 4-conductor 9-foot cord also in color. An external power supply of 18 to 22 volts AC or DC is required. Height, 4 inches; width, 5 5/8 inches; depth, 3 3/4 inches.

**Figure 1. K-107(A) Telephone Loudspeaker**

### GENERAL INSTRUCTIONS

**POWER SUPPLY.**

The K-107A loudspeaker is designed to use a K-31(A)690 transformer, which requires a 105- to 125-volt ac receptacle (see figure 2). When incorporated in a key-phone system, the system power supply (18-volt ac) can be used (see figures 3 and 4). The maximum length of inside wire (IW) cable should not exceed 200 feet from the power supply to the K-107A speaker. Other power supplies may be used, such as the 18-volt ac terminals of a power plant.

**CONNECTIONS.**

The loudspeaker is connected to the telephone set receiver circuit and is under control of the switchhook and off-normal dial contacts. (Two spare conductors in the telephone set mounting cord or a separate 2-conductor mounting cord will be required.) Figure 2 illustrates the loudspeaker connections employing the K-31(A)690 transformer as a power supply and using a separate 2-conductor mounting cord. In this type installation, the 2-conductor cord, part No. 3031**(06)630, the transformer, and the 29**(783 connecting block must be ordered separately. If a single mounting cord is desired and the present telephone mounting cord does not have two spare conductors, a 6-conductor cord must be ordered separately in lieu of the 2-conductor cord.

### LOCATION.

A minimum separation of 3 feet should be maintained between the loudspeaker and the associated telephone instrument to prevent feedback. Greater separation will permit a higher volume adjustment without feedback, for maximum efficiency, the wire distance between the loud speaker and the associated telephone set should not exceed 100 feet of IW cable.

### OPERATION.

The telephone instrument used in conjunction with the K-107A loudspeaker is used in the normal manner. The handset of the telephone instrument must be off hook to use the speaker. Turn the on-off switch on the front panel clockwise to connect the power supply and adjust the volume to a satisfactory level. Turn the loudspeaker off when not in use. The telephone may be used in the normal manner with the loudspeaker turned off.
**Figure 2.** Loudspeaker Connections for K-500**30 Telephone. Transformer, Telephone Connecting Cord, and 10-Point Connecting Block Must be Ordered Separately. A 6-Conductor Cord Can be Used in Place of the Original Telephone Mounting Cord and K-3031**(06)650 Cord.

**Figure 3.** Loudspeaker Connections for K-564**30, K-565**30, and K-576**30 Telephones.

**NOTE 1.** In Key Systems, Use the Key System Power Supply and Spare Conductors in the Power Supply Cord. Otherwise Use K-31(A)690 Transformer and IW.

**Substitute Color Code Number**
Figure 4: Loudspeaker Connections Employing Key System Power Supply
K107(A)319
LOUDSPEAKING SYSTEM

NOTES:

1— Connect the red conductor of the cord assembly to terminal (R) on the network, the green conductor to terminal (GN) on the network, the yellow and black conductors to the 18V output of 31(A)690 transformer.

2— To turn unit on, turn potentiometer knob clockwise and adjust sound output. Turn unit off when not in use by turning knob to extreme counter-clockwise position.

3— Strap wire WI may be removed and replaced with a coupling capacitor in applications where desired, capacitor should be at least 2.2μf, 250V.