

## 2A AND 2B KEY TELEPHONE SYSTEMS

### IDENTIFICATION

#### 1.00 GENERAL

1.01 The 2A and 2B key telephone systems are intercommunicating systems providing the following features:

- Loudspeaking and distant talking at a master station.
- Regular telephone set at secondary station.
- Signaling in both directions.
- Switching of master station to regular telephone set when required.
- Switching both master and secondary stations to a regular telephone set for picking up other services when required.

1.02 The 2A key telephone system uses a 321-type telephone set (Mfr Disc.) with a 112A amplifier at the master station. The 2B key tele-

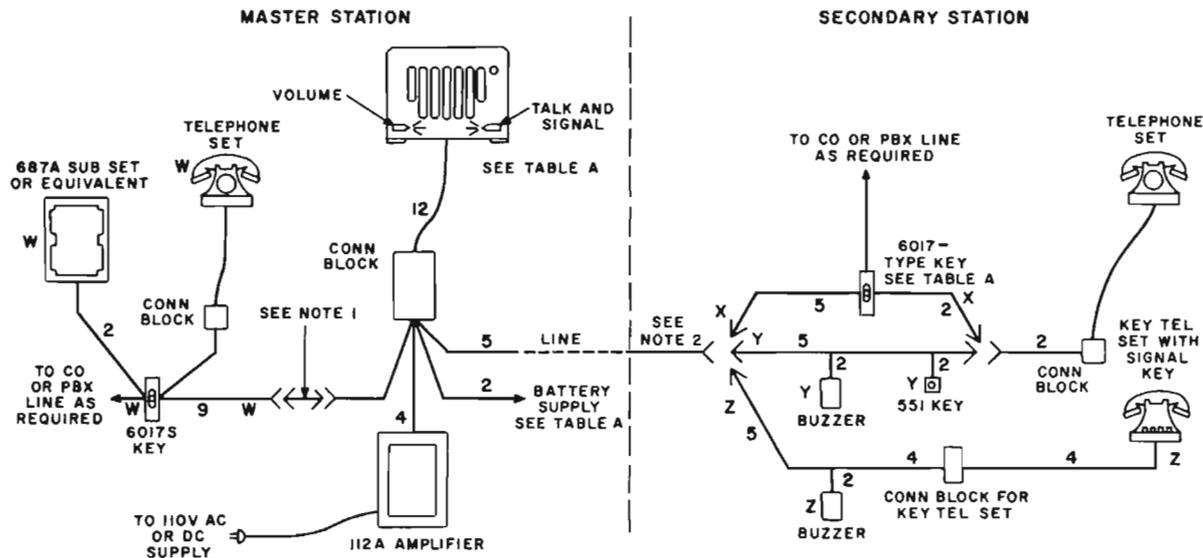
phone system uses a 330A telephone set at the master station.

1.03 Telephone sets of 300, 400, or 500 types are used with a 6017S key to transfer intercommunicating line from loudspeaking set to regular set at master station. Telephone set apparatus at secondary station need not be restricted to single-line type.

1.04 While the systems are intended primarily for a 2-station arrangement, with one master and one secondary station, it is also feasible to provide two or more secondary stations. However, if more than one secondary station is in use with the 321-type or 330A telephone set, transmission is likely to be unsatisfactory and howling may result.

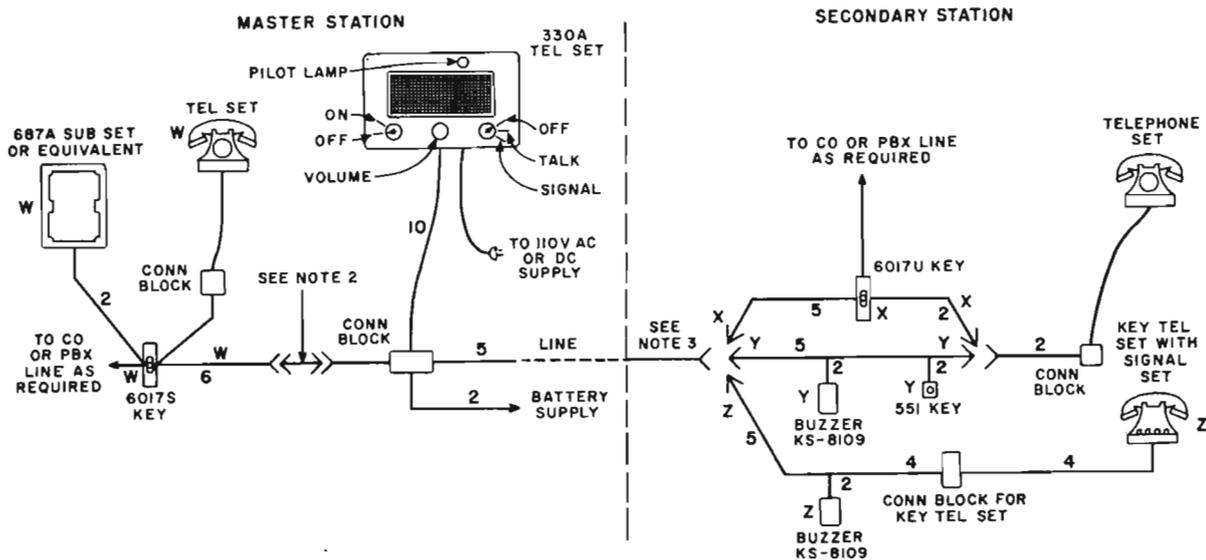
1.05 The 321-type and 330A telephone sets are for use only with an intercommunicating line. They should not be connected to a PBX or central office line.

1.06 General arrangement of apparatus and optional features for 2A and 2B key telephone systems are illustrated in Fig. 1 and 2, respectively.



- Note 1: When the optional use of a regular telephone set at the master station is not required, *W* wiring and apparatus may be omitted.
- Note 2: Use *X* wiring and apparatus to make telephone set at secondary station available for other services. Use *Z* wiring to provide for key telephone set at station; otherwise, use *Y* wiring and apparatus.
- Note 3: Numerals on the lines connecting the apparatus indicate the number of leads required.

Fig. 1 - 2A Key Telephone System

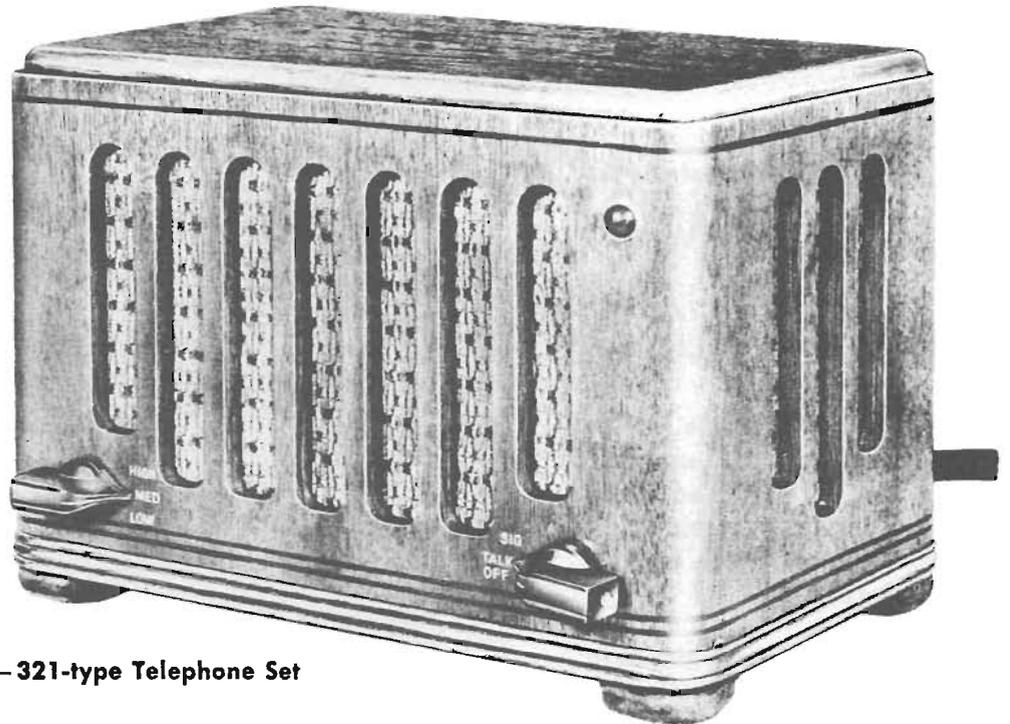


- Note 1: When battery voltage is 30 to 50 volts, change A3 pilot lamp to K2.
- Note 2: When optional use of a regular telephone set at the master station is not required, *W* wiring and apparatus may be omitted.
- Note 3: Use *X* wiring and apparatus to make telephone set at secondary station available for other services. Use *Z* wiring to provide for key telephone set at station; otherwise, use *Y* wiring and apparatus.
- Note 4: Numerals on the lines connecting the apparatus indicate the number of leads required.

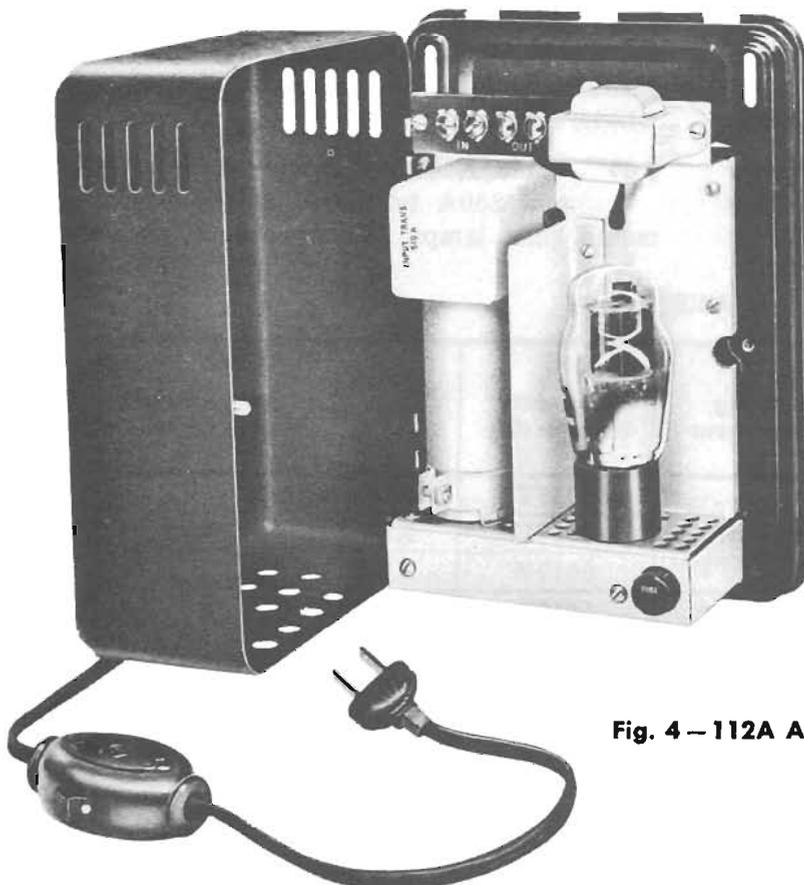
Fig. 2 - 2B Key Telephone System

**2.00 APPARATUS**

**2.01** A 321-type telephone set furnishes loudspeaking and distant-talking facilities at the master station (Fig. 3).



**Fig. 3 — 321-type Telephone Set**

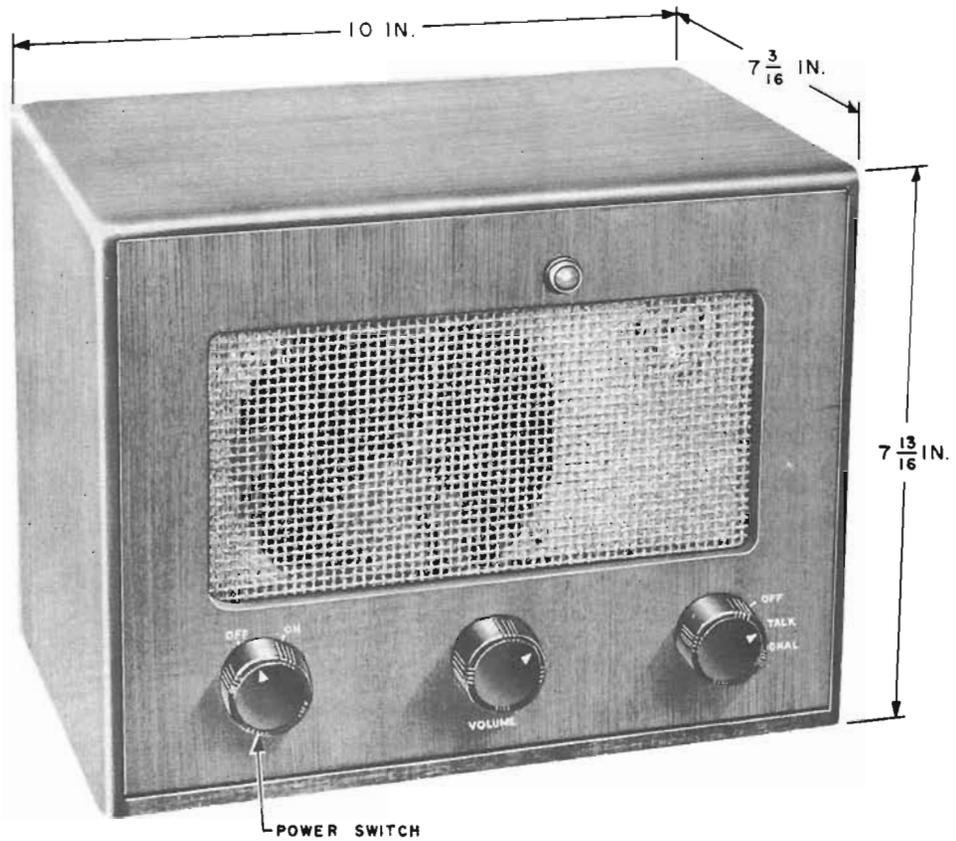


**Fig. 4 — 112A Amplifier, Internal View**

**2.02** The 112A amplifier is required with the 321-type telephone set to provide satisfactory loudspeaker volume (Fig. 4).

**2.03** The amplifier is mounted in a modified 534-type subscriber set housing. It is furnished with a power cord, equipped with an ON-OFF switch, for connecting to a 110-volt ac or dc power outlet supplied by customer.

Fig. 5 — 330A Telephone Set



2.04 A 330A telephone set incorporates the amplifier within the set. This amplifier differs from 112A amplifier in that it amplifies speech in both directions (Fig. 5).

2.05 Both sets are furnished in walnut-finished wooden cabinets. 321C, D and 330A telephone sets have a pilot lamp located on front.

2.06 Optional wiring is provided for voice signaling from secondary station. This option permits master station to be signaled by voice through loudspeaker when set is in OFF position.

2.07 If a transfer key is employed at master station, it must be left in normal position for voice-signaling feature to operate.

2.08 When key telephone set is employed at secondary station, transfer key is not required. However, a separate buzzer for receiving signals will be required.

2.09 Table A covers information on 321-type and 330A telephone sets, power requirements, pilot lamps, 6017-type keys, and buzzers.

TABLE A

Telephone Set*	Battery Supply	Switching Arrangement	Secondary Transfer Key	Buzzer at Secondary Station	Pilot Lamp
	volts				
321C	4-1/2	Locking Talk Key with Pilot Lamp	6017T	KS-8108	F1
321D†	14 to 30		6017U	KS-8109	A1
	24 to 50		6017W	KS-8110	C1
321A	4-1/2	Nonlocking Talk Key without Pilot Lamp	6017T	KS-8108	
321B†	14 to 30		6017U	KS-8109	
	24 to 50		6017W	KS-8110	
330A	14 to 30	Locking Talk Key with Pilot Lamp	6017U	KS-8109	A3
	30 to 50		6017U	KS-8109	K2

\* 110-volt ac or dc current required at each installation.

† Set is furnished wired for 14 to 30 volts.