

BELL SYSTEM PRACTICES
Station Installation and Maintenance

SECTION C54.102
Issue 1, 7-29-31
Standard

AMPLIFIER EQUIPMENT FOR DEAF SUBSCRIBERS APPARATUS AND USE

1. GENERAL

1.01 This section covers the auxiliary apparatus required at stations where an amplifier is provided to assist partially deaf persons in the use of the telephone.

1.02 In cases where it is desired to provide amplifier equipment at stations other than those for which the tables indicate this equipment to be available, the matter should be referred to the Engineering Department.

1.03 **Colored Finishes:** The tables show only black finished apparatus. Colored finishes for such of this equipment as is available in colors are covered in the sections describing the specific apparatus.

2. USE

Manual Stations

CLASS OF SERVICE	** ANTI-SIDETONE				SIDETONE	
	HAND TEL. SETS		DESK STANDS		DESK STANDS	
	Standard	Equiv.	Standard	Equiv.	Standard	Equiv.
(a) All manual stations except those listed in (b), (c) and (d)	207A-3	None	151AL	120AL 140AL	*(51CN)	(20CN) (40CN)
(b) No. 1 Residence System and No. 2 P.B.X.	None	None	None	None	None	None
(c) Local Battery Talking, Common Battery Signaling	None	None	None	None	51CN	20CN 40CN
(d) Magneto Stations	None	None	None	None	40CN	51CN 20CN

Dial Stations

(e) All dial stations except those listed in (f) and (g)	207 B-3 207 C-3 207 D-3	None	151AL	None	*(51CN)	(30CN)
(f) Two-Party Selective Message Rate — Party on Tip, No. 1 Residence System, No. 2 P.B.X. and No. 750A P.B.X. Key Stations	None	None	None	None	None	None
(g) **Local Battery Talking, Common Battery Signaling	None	None	None	None	50CN	None

Notes: * Desk stands shown in parentheses are not recommended for use at new installations as anti-sidetone equipment should be used.

** Portable amplifier is not arranged to be used at local battery talking, common battery signaling dial stations or anti-sidetone stations.

3. ALPHABETICAL LIST OF APPARATUS

Name	Code No. and Description
Amplifiers:	23A Amplifier. Single stage vacuum tube amplifier contained in black finished metal subscriber set box. Cover of box is fastened by a screw requiring 110 tool for its operation. Vacuum tube not furnished as part of amplifier. 27A Amplifier. Portable self-contained amplifier set arranged for use at stations having sidetone equipment. Consists of 23A amplifier and 6013A key in a wooden cabinet which has space for dry batteries and a desk stand. The vacuum tube, batteries, desk stand and cords are not furnished as part of the amplifier.
Backboard:	147A Backboard for mounting 23A amplifier when backboard is required.
Battery Box:	9A Battery Box. Black finished wooden box arranged to hold three Blue Bell dry cells and three 22-1/2 volt plate supply batteries. Contains 55A fuse mounted on 9A fuse block.
Batteries:	Blue Bell Dry Cell per KS-6542 for vacuum tube filament supply battery. 763 Eveready Dry Battery. 22-1/2 volt battery for vacuum tube plate current supply in 27A Amplifier. 765 Eveready Dry Battery. 22-1/2 volt battery for vacuum tube plate current supply in 23A amplifier at permanent installations.
Cords:	All Cords. For cord information refer to section on cords in Division C30.
Desk Stands:	Refer to tables on page 2.
Fuse:	55A Fuse. Tubular glass enclosed fuse for use in 9A battery box. Continuous current capacity 0.4 ampere.
Hand Telephone Sets:	Refer to tables on page 2.
Keys:	6013A Key. Black finished wooden box containing a 272C key for switching the 23A amplifier in and out and a 146E switch for regulating the volume of received speech at sidetone stations.

6013B Key. Key similar to the 6013A key but arranged for use at anti-sidetone stations.

Lamps:

LAMP CODE		RATED VOLTAGE
TUNGSTEN	CARBON	
E1		6
B2	2W	18
A1	2U	24
	2Y	48

Note: 15A type indicators require carbon filament lamps when one relay controls more than one lamp.

Lamp Indicators:

15A-3 Indicator. Black finished lamp indicator with beehive lens and suede covered base arranged for use unmounted or mounted. Contains single switchboard lamp and is used where low-voltage visual signal is required to supplement regular station ringer.

15A-C Indicator. Same as 15A-3 but finished in old brass.

Lens:

1-1/2 inch beehive white frosted lens. Used to replace damaged lenses of 15A type lamp indicators.

Subscriber Sets:

310B Subscriber Set. Black ebonized wood subscriber set containing 85 type relay and 1/2 m.f. condenser. Has space for maximum of 6 dry cells. Used where non-continuous low-voltage lamp signal is required.

534U Subscriber Set. Black finished steel bell box containing relay equipment required to control lamp signals when signal operating on continuous basis is required.

Note: Subscriber sets containing ringing and talking equipment are the same as at stations not requiring the amplifier.

Vacuum Tube:

215A Vacuum Tube (Type N). Small vacuum tube used in 23A amplifier.