

VOICE STATION SIGNALING ON MANUAL INTERCOMS

1. GENERAL

1.01 This section furnishes the identification, installation, and maintenance information for voice signaling on manual intercom circuits using a 107B loudspeaker set and a 6-button telephone set. A general purpose adapter (similar to the 66E8 connecting block) is being developed to allow this feature to be used with CALL DIRECTOR® telephones and 10- and 20-button telephone sets.

1.02 Whenever this section is reissued, the reason for reissue will be stated in this paragraph.

2. IDENTIFICATION

2.01 Purpose: To provide voice signaling on manual intercoms.

2.02 Application: For use with all 6-button telephone sets shown in Table A.

2.03 Ordering Guide:

- Set, Loudspeaker, 107B-*

(a) Replaceable Components

- Cord, Mounting, D6AF-87 (available in 7-, 14-, or 25-foot lengths; specify length desired)

* Refer to Table B for color selection.

(b) Associated Apparatus (order separately if required)

- Bracket, 77A
- Transformer, 2012B
- Key, 551A
- Buzzer, KS-20419, L1

- Clamp, 2A

3. INSTALLATION

Planning

3.01 An external 18- to 22-volt ac or dc power source is required. This power may be provided by:

- A 2012B transformer
- The 18-volt ac terminals of available power plant
- For temporary power supply, a 22.5- to 30-volt battery.

3.02 When a 2012B transformer is used for power, the customer must provide a separately fused ac receptacle NOT under control of a switch.

3.03 The maximum length of IW cable used between the power supply and loudspeaker should not exceed 200 feet.

3.04 The maximum length of IW cable used between the loudspeaker and the associated telephone set should not exceed 100 feet.

Installing

3.05 When a spare button on telephone set is used to operate voice signaling on manual intercoms, the button must be converted from locking to nonlocking by removing the locking pin. Refer to section for telephone set being used for method of removing locking pin. Table A gives a section reference to the list of 6-button telephone sets.

3.06 When an external 551A key is used to operate voice signaling on manual intercom, mount key on 77A bracket.

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3.07 Bring the loudspeaker mounting cord directly into the telephone set and insulate and store R and G leads. The power supply may be brought into the telephone set over spare cord conductors and connected to the loudspeaker set cord using spare terminals as shown in Table A and Fig. 1.

4. CONNECTIONS

4.01 Connect loudspeaker set mounting cord to telephone set (see Fig. 1) as follows:

- Connect (W) lead to tip of manual intercom line.
- Connect (BL) lead to ring of manual intercom line.
- Connect (Y) lead to BZ1 lead of telephone set using spare terminal as shown in Table A. If BZ1 is not available, use spare conductor in telephone set mounting cord (see Fig. 1).
- Connect (BK) lead to SG terminal of telephone set.
- Connect external 551A key or converted telephone set button—for 551A key, use spare conductors in telephone set mounting cord; for converted telephone set button, use appropriate cord conductors. See section pertaining to telephone set being used for conductor colors.

Note: Fig. 1 shows connections for a buzzer circuit in addition to intercom signaling. If buzzer is not required, these connections can be omitted.

5. OPERATION

5.01 The telephone set used to operate the voice signaling on manual intercom is used in the normal manner. The handset must be off-hook and the manual intercom line button depressed.

5.02 Operate loudspeaker as follows:

- (1) Turn the ON-OFF switch of the 107B loudspeaker set clockwise. This turns the loudspeaker on.

- (2) At calling station, lift receiver off-hook, depress manual intercom line button.
- (3) Depress voice signaling button on operating telephone set and hold depressed during voice signaling.



The possibility of acoustic feedback (singing) exists whenever the called party receiver is off-hook on the intercom line and the calling party has the voice signal key depressed. To avoid this problem, place the loudspeaker and telephone set as far apart as possible and set volume control of loudspeaker as low as possible.

- (4) Adjust volume control of 107B loudspeaker to a satisfactory level.

5.03 Do not turn loudspeaker ON/OFF switch to the OFF position. This will disable the voice signaling.

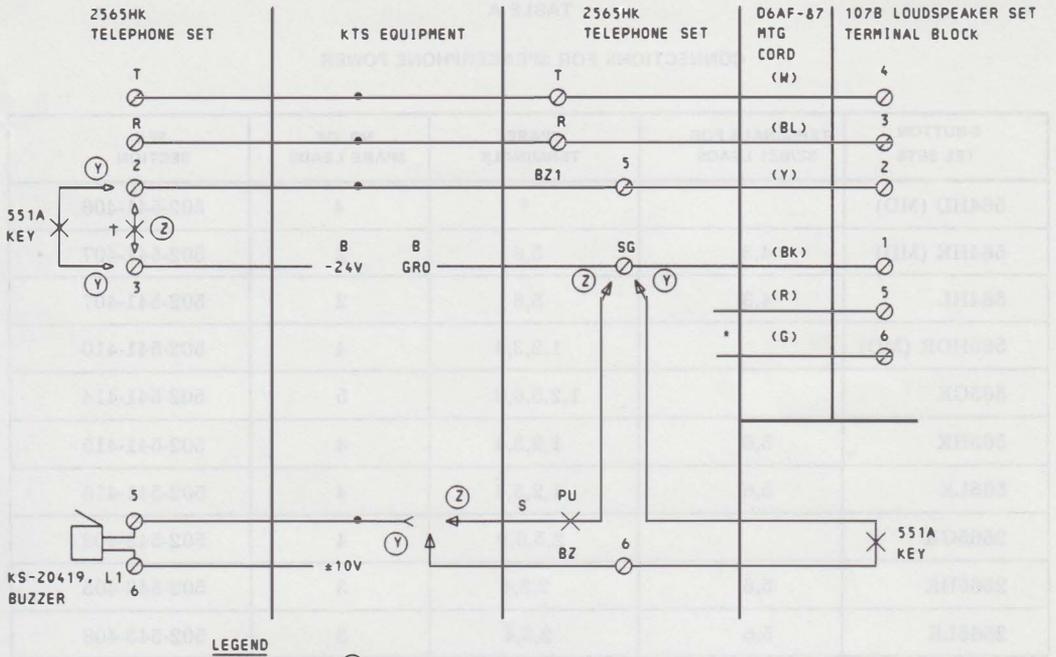
6. MAINTENANCE

6.01 For maintenance of the associated telephone set, refer to the section covering the type of set involved.

6.02 Maintenance of the 107B loudspeaker is limited to replacing the mounting cord.

6.03 When it is reported that voice signaling does not operate, check the following:

- Volume control on 107B loudspeaker turned too low
- ON/OFF switch on 107B loudspeaker turned to OFF position
- Power source disconnected
- Wiring of loudspeaker and nonlocking key.



- LEGEND**
- INSULATE AND STORE SPOKESMAN (R) LEADS
 - † CONVERTIBLE NONLOCKING KEY ON TEL SET OR EXTERNALLY MOUNTED 551A KEY
 - (Y) EXTERNALLY MOUNTED KEY
 - (Z) CONVERTIBLE KEY ON TEL SET

Fig. 1—Example of Connections for Voice and Conventional Signaling Arrangements for Manual Intercom Using 2565HK Telephone Set

Color	Terminal	Terminal
Black	-3	
White Green	-5	
Yellow	-2	
White	-4	
Black Red	-1	
Light Green	-6	
Light Gray	-7	
Light Blue	-8	
Light Green	-9	
Light Blue	-10	
Light Green	-11	
Light Blue	-12	
Light Green	-13	
Light Blue	-14	
Light Green	-15	
Light Blue	-16	
Light Green	-17	
Light Blue	-18	
Light Green	-19	
Light Blue	-20	
Light Green	-21	
Light Blue	-22	
Light Green	-23	
Light Blue	-24	
Light Green	-25	
Light Blue	-26	
Light Green	-27	
Light Blue	-28	
Light Green	-29	
Light Blue	-30	
Light Green	-31	
Light Blue	-32	
Light Green	-33	
Light Blue	-34	
Light Green	-35	
Light Blue	-36	
Light Green	-37	
Light Blue	-38	
Light Green	-39	
Light Blue	-40	
Light Green	-41	
Light Blue	-42	
Light Green	-43	
Light Blue	-44	
Light Green	-45	
Light Blue	-46	
Light Green	-47	
Light Blue	-48	
Light Green	-49	
Light Blue	-50	
Light Green	-51	
Light Blue	-52	
Light Green	-53	
Light Blue	-54	
Light Green	-55	
Light Blue	-56	
Light Green	-57	
Light Blue	-58	
Light Green	-59	
Light Blue	-60	
Light Green	-61	
Light Blue	-62	
Light Green	-63	
Light Blue	-64	
Light Green	-65	
Light Blue	-66	
Light Green	-67	
Light Blue	-68	
Light Green	-69	
Light Blue	-70	
Light Green	-71	
Light Blue	-72	
Light Green	-73	
Light Blue	-74	
Light Green	-75	
Light Blue	-76	
Light Green	-77	
Light Blue	-78	
Light Green	-79	
Light Blue	-80	
Light Green	-81	
Light Blue	-82	
Light Green	-83	
Light Blue	-84	
Light Green	-85	
Light Blue	-86	
Light Green	-87	
Light Blue	-88	
Light Green	-89	
Light Blue	-90	
Light Green	-91	
Light Blue	-92	
Light Green	-93	
Light Blue	-94	
Light Green	-95	
Light Blue	-96	
Light Green	-97	
Light Blue	-98	
Light Green	-99	
Light Blue	-100	

TABLE A
CONNECTIONS FOR SPEAKERPHONE POWER

6-BUTTON TEL SETS	TERMINALS FOR B2/BZ1 LEADS	SPARE TERMINALS	NO. OF SPARE LEADS	SEE SECTION
564HD (MD)		*	4	502-541-406
564HK (MD)	4,3	5,6	2	502-541-407
564HL	4,3	5,6	2	502-541-407
565HDR (MD)		1,2,3,4	4	502-541-410
565GK		1,2,5,6,9	5	502-541-414
565HK	5,6	1,2,3,4	4	502-541-415
565LK	5,6	1,2,3,4	4	502-541-416
2565GK		2,5,6,9	4	502-543-403
2565HK	5,6	2,3,4	3	502-543-405
2565LK	5,6	2,3,4	3	502-543-406

* Auxiliary terminal 812559623 (P-25E962).

TABLE B
COLOR ORDERING GUIDE

APPARATUS	COLOR	SUFFIX
Loudspeaker Set	Black	-03
	Moss Green	-51
	Yellow	-56
	White	-58
	Rose Pink	-59
	Light Beige	-60
	Light Gray	-61
	Aqua Blue	-62
	Turquoise	-64
Mounting Cord	Satin-Silver	-87