

1A1 KEY TELEPHONE SYSTEM
STATION CONNECTIONS
USING 440 AND 460 SERIES KEY TELEPHONE SETS
CONNECTION DATA

1.00 GENERAL

1.01 This section covers station connections of 440 and 460 series key telephone sets. This includes key cable, connecting block, cord conductor, and internal set wiring connections.

1.02 Due to extensive changes marginal arrows have been omitted.

2.00 APPLICATION OF THE 440 AND 460 SERIES KEY TELEPHONE SETS

2.01 Only the 440 and 460 series key telephone sets indicated in Table A may be used in the 1A1 key telephone system.

2.02 These sets are equipped with an additional set of switchhook contacts (for A lead

control) and are furnished shop-wired for use in the 1A key telephone system. To use these sets in the 1A1 key telephone system, certain spade-tipped leads must be reterminated within the set.

2.03 Key telephone set internal wiring changes and connections are shown in Fig. 1 and 2.

2.04 Ringer and buzzer connections are shown in Fig. 3.

3.00 KEY CABLE

Key cable, connecting block, and cord conductor connections shown in Table A conform to key cable, connecting block, and cord conductor functional connection patterns established for 500-type key telephone sets.

KEYS ARE WIRED IN THE SHOP FOR USE WITH KEY TELEPHONE SYSTEM NO. 1A, REQUIRING BALANCE AND HOLD LEADS AS SHOWN IN FIG. 1, BELOW. CONNECTIONS MUST BE CHANGED FOR USE WITH KEY TELEPHONE SYSTEM NO. 1A1 REQUIRING AUXILIARY CONTROL LEADS AS SHOWN IN FIG. 2.

400 TYPE TELEPHONE SETS

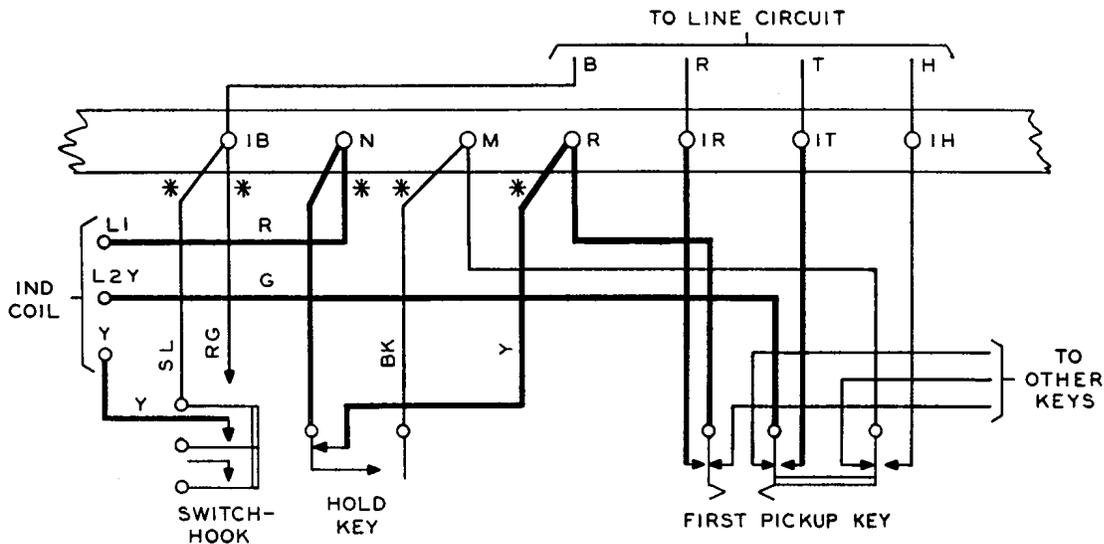


Fig. 1 - 1A System

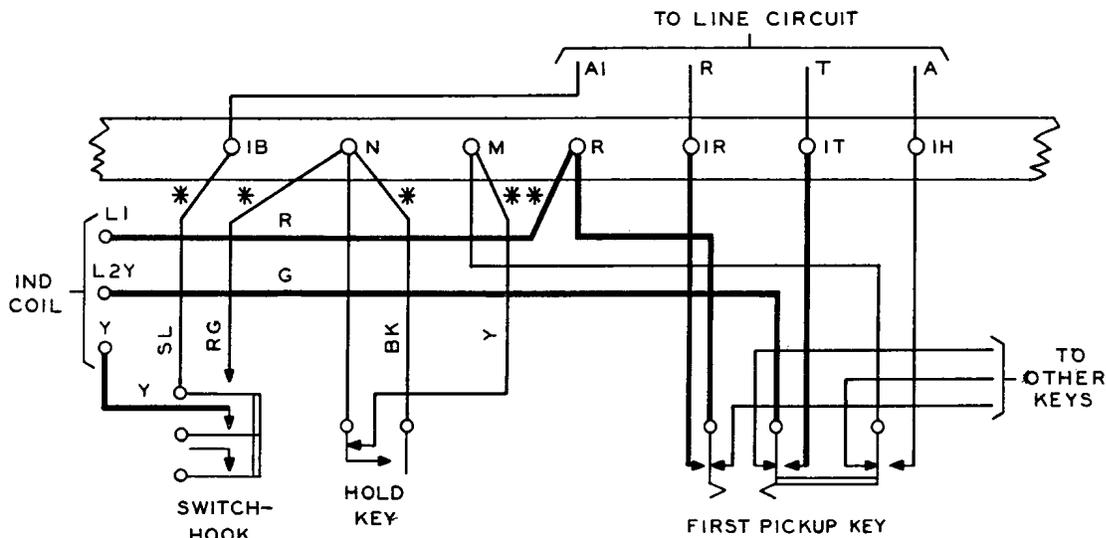
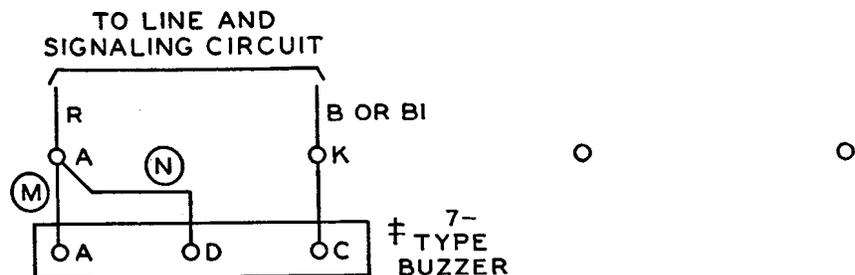
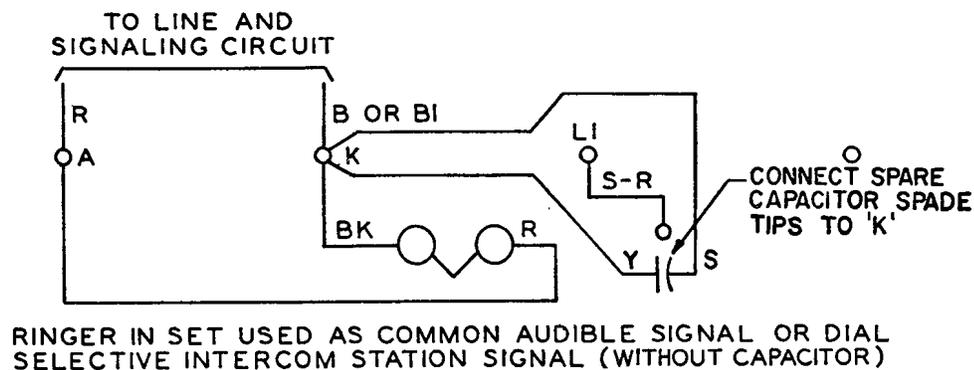
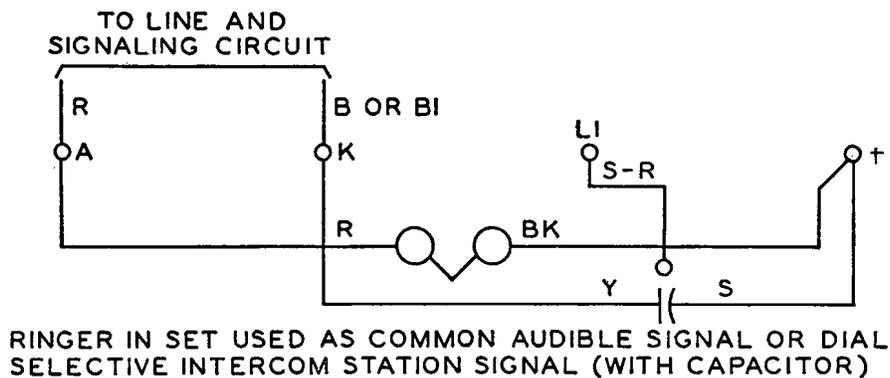
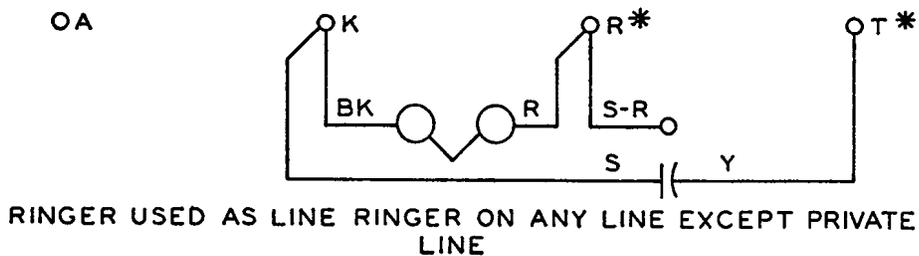


Fig. 2 - 1A1 System

CONVERSION TABLE

WIRES IN TEL SET	ONE END CONNECTED TO	SWITCH	L1	HOLD KEY	HOLD KEY
	COLOR				
CONNECT TO TERMINALS IN SET	FOR KEY TELEPHONE SYSTEM NO. 1A	R-G	R	Y	BK
	FOR KEY TELEPHONE SYSTEM NO. 1A1	IB	N	R	M
		N	R	M	N



BUZZER SYSTEM SIGNAL - M WIRING FOR AC OPERATED AND N WIRING FOR DC OPERATED BUZZER

*TERMINALS ARE DESIGNATED 1R AND 1T IF RINGER IS CONNECTED TO THE FIRST LINE, 2R AND 2T FOR THE SECOND LINE, ETC.

† CONNECT AT SPARE TERMINAL OR BY MEANS OF A DC 161488 CONNECTOR.

‡ IF 152A CAPACITOR IS USED, CONNECT CAPACITOR LEADS TO BUZZER TERMINALS A AND D.

Fig. 3 - Ringer and Buzzer Connections

Lead Desig		Key Cable			44A Conn. Blk		Dial Sets		440EG		440FG		440GG		441EG		444EG		444FG		445EG		460GG		460HG		460MG		
		Pr No.	Inside Wiring				Manual Sets	440EE		440FE		440GE		441EE		444EE		444FE		445EE		460GE		460HE		460ME			
			Color				Features*	HPPP		HPPS		HPPC		HPPP-E		HPPP-L		HPPS-L		HPPP-L-E		HPPPPP		HPPPPS		HPPSSS			
			Color				Fab. Cord Mod	D14A		D12A		D12A		D18C		D18C		D16B		D22B		D22B		D20B		D18C			
1A	1A1		C Type	D Type	Term.	No.	Set Term.	D14G	D17A	D17A	D12A	D17A	D12A	D27A	D18C	D18G	D18C	D17A	D16B	D27A	D22B	D23C	D22B	D23C	D20B	D23C	D18C		
R T	R T	1	BL W	BL W	1 2	1‡	1R 1T	R G	R G	R G	R G	R G	R G	R G	R G	R G	R G	R G	R G	R G	R G	R G	R G	R G	R G	R G	R G	R G	
B H	A1 A	2	O W	O W	4† 5		1B 1H	Y BK	Y BK	Y BK	Y BK	Y BK	Y BK	Y BK	Y BK	Y BK	Y BK	Y BK	Y BK	Y BK	Y BK	Y BK	Y BK	Y BK	Y BK	Y BK	Y BK	Y BK	Y BK
R T	R T	3	G W	G W	6 7		2R 2T	BL W	BL W	BL W	BL W	BL W	BL W	BL W	BL W	BL W	BL W	BL W	BL W	BL W	BL W	BL W	BL W	BL W	BL W	BL W	BL W	BL W	BL W
B H	A1 A	4	BR W	BR W	9 10		— 2H	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G	(BR-R) BR-G
R T	R T	5	S W	S W	3 8		3R 3T	BR-Y BR-BK	BR-Y BR-BK						BR-Y BR-BK	BR-Y BR-BK	BR-Y BR-BK	BR-Y BR-BK			BR-Y BR-BK	BR-Y BR-BK							
B H-S	A1 A-S	6	BL-W W	BL R	1 2	2	— 3H-S§	(BR-BL) BR-W	(BR-BL) BR-W	BR-W	BR-Y	BR-W		(BR-BL) BR-W	(BR-BL) BR-W	(BR-BL) BR-W	(BR-BL) BR-W	BR-W	R-G	(BR-BL) BR-W									
R T	R T	7	BL-O W	O R	4 5		4R 4T														R-G R-Y								
B H-S	A1 A-S	8	BL-G W	G R	6 7		— 4H-S§								R-BL						R-BL		(R-BK) R-BL	(R-BK) R-BL	(R-BK) R-BL	(R-BK) R-BL	R-BK R-BL	R-G	
R T	R T	9	BL-BR W	BR R	9 10		5R 5T																R-W G-Y	R-W G-Y	R-W G-Y		R-W G-Y		
B H-S	A1 A-S	10	BL-S W	S R	3 8		— 5H-S§								G-BL						G-BL		(G-BK) G-BL	G-BK G-BL	R-W	G-BK G-BL	R-BK	R-BK	
GRD	GRD	11	O-W W	BL BK	1 2	3	G		G-W	BR-BK	G-W			G-W				G-W	R-Y BR-BK	G-W		G-W	G-Y	G-W	G-Y	G-W	R-Y R-BL		
R1 B1	R1 B1	12	O-G W	O BK	4 5		A K¶	Y-BL Y-W	R-G R-Y	Y-BL Y-W	BR-BL BR-W	Y-BL Y-W	BR-BL BR-W	Y-BL Y-W	R-W G-Y	Y-BL Y-W	R-W G-Y	Y-BL Y-W	R-BK R-BL	Y-BL Y-W	G-W Y-BK	Y-BL Y-W	G-W Y-BK	Y-BL Y-W	G-BK G-BL	Y-BL Y-W	R-W G-Y	R-W G-Y	
R T	R T	13	O-BR W	G BK	6 7		E1 E2								BK-BL BK-W	R-G R-Y					BK-BL BK-W	R-W G-Y							
B H	B A	14	O-S W	BR BK	9† 10		E3 E4								BL-W S	R-BK R-BL					BL-W S	G-BK G-BL							
R T	R T	15	G-W W	S BK	3 8		CR CT			S-R S-G		S-R S-G	BR-Y BR-BK		S-R S-G						S-R S-G		S-R S-G						
L LG	L LG	16	G-BR W	BL Y	1 2**	4	L1 LG		S-Y S-BK		S-Y S-BK			S-Y S-BK		S-Y S-BK	R-Y R-G	S-Y S-BK	BR-BL BR-Y	S-Y S-BK	R-Y R-G								
L LG	L LG	17	G-S W	O Y	4 5**		L2		S-BL		S-BL			S-BL		S-BL	R-BK	S-BL	BR-W	S-BL	R-BK								
L LG	L LG	18	BR-W W	G Y	6 7**		L3								S-W		S-W	R-BL			S-W	R-BL							
L LG	L LG	19	BR-S W	BR Y	9 10**		L4																						
L LG	L LG	20	S-W W	S Y	3 8**		L5																						

Note 1: Italic indicates spare conductors.

Note 2: () Indicate conductors not terminated in set.

* P means pickup; S, signal; C, cutoff; E, extension; L, illuminated.

† When exclusion feature is required in 1A1 key telephone system, strap terminal 4 of connecting block 1 to terminal 9 of connecting block 3.

‡ Block nearest cord butt.

§ May be S, 1S, 2S, 3S, or 4S depending on number of signal buttons on a particular set.

¶ Where common ringer is not used, connect cord conductor to A.

** LG leads strap together.

References: SD-69096-01; SD-69128-01; SD-69129-01; SD-69187-01; SD-69188-01; SD-69206-01.

Lead Desig		Key Cable			44A Conn. Blk		Dial Sets	464GG	464HG	464MG	465GG	465HG	465KG	465LG	465MG	465NG										
							Manual Sets	464GE	464HE	464ME	465GE	465HE	465KE	465LE	465ME	465NE										
		Features*	HPPPPP-L	HPPPPS-L			HPPSSS-L	HPPPPP-L-E	HPPPPS-L-E	HPPPPC-L-E	HPPPSC-L-E	HPPSSS-L-E	HPPSSS-L-E													
		Fab. Cord Mod	D28C	D29A			D25B	D26B	D25B	D22B	D35A	D32A	D35A	D29A	D35A	D29A	D27A	D26B	D27A	D26B	D27A	D22B				
Pr No.	Inside Wiring		Color		Term.	No.	Vinyl Cord	D28C	D29A	D25B	D26B	D25B	D22B	D35A	D32A	D35A	D29A	D35A	D29A	D27A	D26B	D27A	D26B	D27A	D22B	
1A	1A1	C Type	D Type	Term.	No.	Set Term.																				
R T	R T	1	BL W	BL W	1 2	1‡	1R 1T	R G																		
B H	A1 A	2	O W	O W	4† 5		1B 1H	Y BK	Y BK																	
R T	R T	3	G W	G W	6 7		2R 2T	BL W	BL W																	
B H	A1 A	4	BR W	BR W	9 10		— 2H	(BR-R) BR-G	(BR-R) BR-G																	
R T	R T	5	S W	S W	3 8		3R 3T	BR-Y BR-BK	BR-Y BR-BK																	
B H-S	A1 A-S	6	BL-W W	BL R	1 2		— 3H-S§	(BR-BL) BR-W	BR-BL BR-Y																	
R T	R T	7	BL-O W	O R	4 5		4R 4T	R-G R-Y	R-G R-Y																	
B H-S	A1 A-S	8	BL-G W	G R	6 7		— 4H-S§	(R-BK) R-BL	(R-BK) R-BL	(R-BK) R-BL	(R-BK) R-BL	R-BK R-BL	R-W	(R-BK) R-BL	R-BL R-G											
R T	R T	9	BL-BR W	BR R	9 10		5R 5T	R-W G-Y	R-W G-Y					R-W G-Y	R-W G-Y	R-W G-Y										
B H-S	A1 A-S	10	BL-S W	S R	3 8		— 5H-S§	(G-BK) G-BL	(G-BK) G-BL	G-BL	R-W	G-BL	G-BK	(G-BK) G-BL	(G-BK) G-BL	G-BK G-BL	G-W					G-BL		G-BL	R-BK	G-BL BR-W
GRD	GRD	11	O-W W	BL BK	1 2	G —		Y-BK	G-W	G-Y G-BK	G-W	G-Y G-BL	G-W	Y-BK												
R1 B1	R1 B1	12	O-G W	O BK	4 5	A K†	Y-BL Y-W	Y-BL Y-W	Y-BL Y-W	BK-W BL-W	Y-BL Y-W	G-W Y-BK	Y-BL Y-W	BK-W BL-W	Y-BL Y-W											
R T	R T	13	O-BR W	G BK	6 7	E1- E2							BK-BL BK-W	G-W Y-BK	BK-BL BK-W	R-W G-Y	BK-BL BK-W									
B H	B A	14	O-S W	BR BK	9† 10	E3 E4							BL-W S	Y-BL Y-W	BL-W S	G-BK G-BL	BL-W S									
R T	R T	15	G-W W	S BK	3 8	CR CT							S-R S-G		S-R S-G		S-R S-G	G-W Y-BK	S-R S-G	R-BK R-BL	S-R S-G		S-R S-G		S-R S-G	
L LG	L LG	16	G-BR W	BL Y	1 2**	L1 LG	S-Y S-BK	BL-W BK-W	S-Y S-BK	Y-BK G-W	S-Y S-BK	R-Y R-G	S-Y S-BK	S BK-BL	S-Y S-BK	BL-W BK-W	S-Y S-BK	BL-W BK-W	S-Y S-BK	Y-BK G-W	S-Y S-BK	Y-BK G-W	S-Y S-BK	Y-BK G-W	S-Y R-G	
L LG	L LG	17	G-S W	O Y	4 5**	L2 —	S-BL	BK-BL	S-BL	Y-BL	S-BL	R-BK	S-BL	BR-S	S-BL	BK-BL	S-BL	BK-BL	S-BL	Y-BL	S-BL	Y-BL	S-BL	Y-BL	R-BK	
L LG	L LG	18	BR-W W	G Y	6 7**	L3 —	S-W	S	S-W	Y-W	S-W	R-BL	S-W	R-S	S-W	S			S-W	S	Y-W	S-W	Y-W	S-W		
L LG	L LG	19	BR-S W	BR Y	9 10**	L4 —	S-BR	BR-S	S-BR	G-BL	S-BR		S-BR	G-S	S-BR	BR-S			S-BR	BR-S						
L LG	L LG	20	S-W W	S Y	3 8**	L5 —	BR	G-W					BR	Y-S	BR				BR							

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