

KC-19\* KEY TELEPHONE UNIT  
NINETEEN STATION COMBINATION INTERCOM

1. GENERAL

1.01 This section describes the physical and functional characteristics of the KC-19 Key Telephone Unit, Nineteen Station Combination Intercom for tone or rotary dial or both.

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

1.03 The KC-19 provides 19-station intercom selective signaling for a key telephone system using tone and/or rotary dial telephone sets. The KC-19 Intercom with cable attached is shown in Fig. 1.

2. DESIGN FEATURES

2.01 The KC-19 KTU:

- . is a self-contained intercom unit for use with rotary and/or tone dialing key telephone systems.
- . provides nineteen station and auxiliary equipment access codes.
- . provides one-second audible signal to the station.
- . accepts repeated dialing without re-operating the switch hook.
- . mounts in a key telephone equipment cabinet, relay rack, or directly on a wall.
- . connects with an A25B or equivalent 25-pair connector cable.

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. operates between -18 and -28 volts dc.

3. INSTALLATION

3.01 No special installation tools are required. Instructions are provided with each unit. Installation steps are:

- (a) Locate and secure the KC-19 housing in a 7" KTU apparatus mounting, relay rack, or on a wall.
- (b) Connect an A25B or equivalent 25-pair connector cable to the KC-19 plug and make connections as shown in Exhibits 1 & 2.
- (c) The arrangement shown in Exhibit 3 can be used by the installer to connect a KC-19 to a 66B3-50 terminal block. This wiring method utilizes the standard arrangement of an A25B connector cable. Strapped as shown, the terminal block will provide 19 terminations for T,R,LG,L,B() and R(). All power connections are at the bottom of the first block.

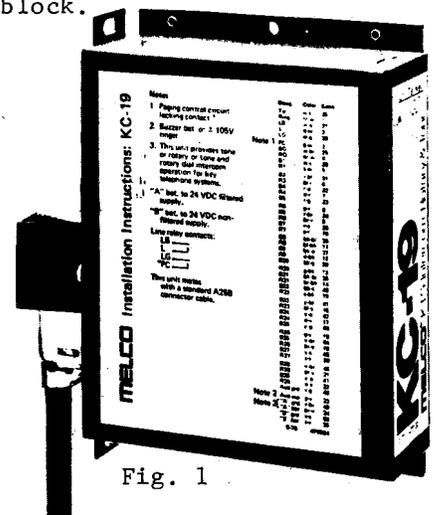


Fig. 1

- (d) An optional mounting panel, the Melco M-19, provides for rapid installation of the KC-19 intercom. For further details, see BSP 518-215-914SW.
- (e) Make all grounds common.
- (f) Leads LG and PC are connected to dry contacts that close when the KC-19 is seized. The contacts can be used to lock a paging circuit or a busy lamp circuit. To provide a locking ground on the PC lead for auxiliary equipment, connect lamp ground to the LG terminal.
- (g) Do not bridge the Tip and Ring to any line supplying a foreign source or current. (CO,FX,PL,etc.)
- (h) With tone and rotary dial test sets or telephones, test the lamp and signaling operation for all stations.
- (i) The functional schematic of KC-19 is shown in Exhibit 4.

4. MAINTENANCE

4.01 No provision is made for field adjustment or repair. Use the following maintenance procedures:

- (a) If no output is detected verify power connections and fuses. Check the cable plug and connector for dirt, corrosion and contact tension.
- (b) Test the system by removing the cable from the back of the KC-19 and connecting it to a substitute KC-19 unit.

4.02 The KC-19 is warranted against manufacturing and material defects for two years. If it fails within that time, it will be repaired or replaced without charge. See the Melco Warranty for replacement and repair information.

5. SPECIFICATIONS

5.01 The following is a list of specifications for the KC-19 Key Telephone Unit.

Operating voltage....-18V DC to-28V DC  
Range - For "A" and.....-24V DC nom  
"B" Battery

Operating current.....170 ma idle  $\pm$  30%  
(-24V DC nom).....350 ma operated  $\pm$  30%

Operating temperature.....0° to 50°C  
range.....31° to 122°F

Rotary dial parameters

Dial duty cycle.....40% to 80% break  
Loop limit.....800 ohms  
Dial speed.....8 to 12 pps

Interdigital time.....200 msec min

Tone dial parameters

Input signal level....-7.5 to + 4 dBm  
Bandwidth..... $\pm$  2% nom

Recognition time.....40 msec max  
Loop limit.....750 ohms  
Interdigital time.....40 msec min

Release time.....150 msec  $\pm$  10%

Audible signaling.....1 sec. nominal duration

Relay contact ratings

Lamp.....2 amps at 10V AC  
PC.....2 amps at 28V DC  
Ringing signal..0.5 amps at 10V AC to  
105V AC ringing generator

Mounting.....Apparatus cabinet,  
relay rack or wall

Connections.....A25B or equivalent  
connector cable

Housing.....Epoxy coated aluminum

Dimensions.....7" x 4.8" x 1.5"

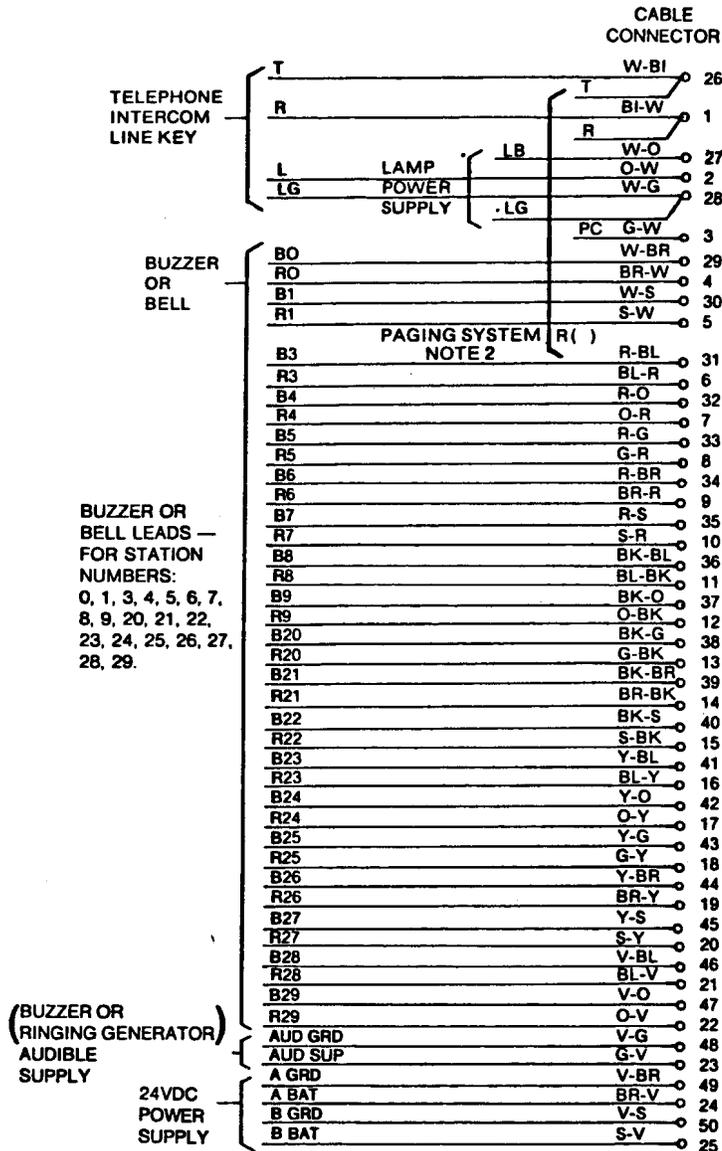
6. ORDERING GUIDE

6.01 Order the KC-19 as follows:

(QTY) UNIT TEL KEY KC-19

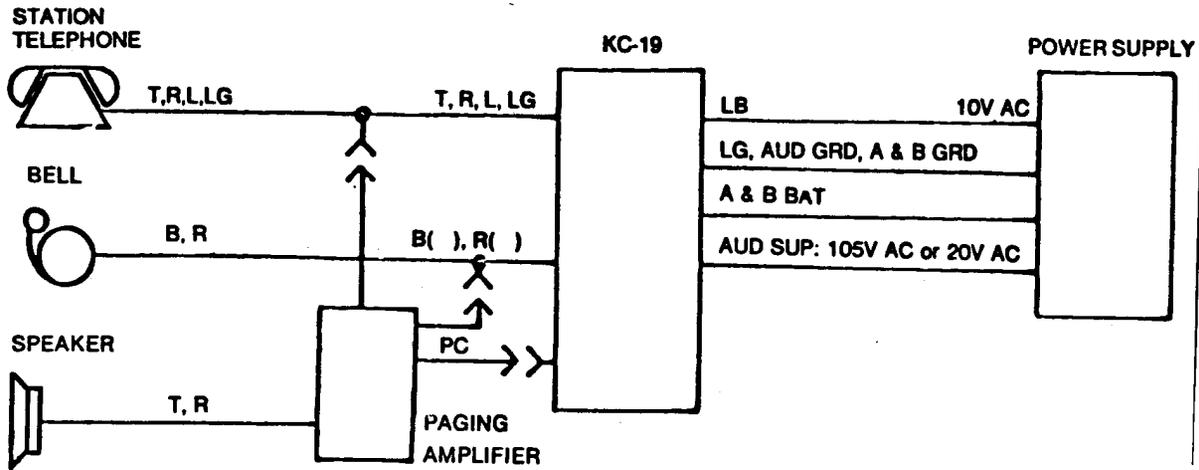
EXHIBIT 1

CABLE AND CONNECTOR FOR KC-19



NOTES:

1. DIGIT 2 CANNOT BE USED AS A SINGLE DIGIT INTERCOM LINE NUMBER.
2. TO PAGING SYSTEM — . CONNECT T, R, PC AND R( ) LEADS OF PAGING SYSTEM TO T, R, PC AND SELECTED R LEAD(S) OF KC-19.



Application Schematic of KC-19.

APPLICATION SCHEMATIC OF KC-19

EXHIBIT 2

EXHIBIT 3

SUGGESTED ARRANGEMENT OF A25B  
CONNECTOR CABLE, JUMPERS AND 66B3-50 CONNECTING BLOCK

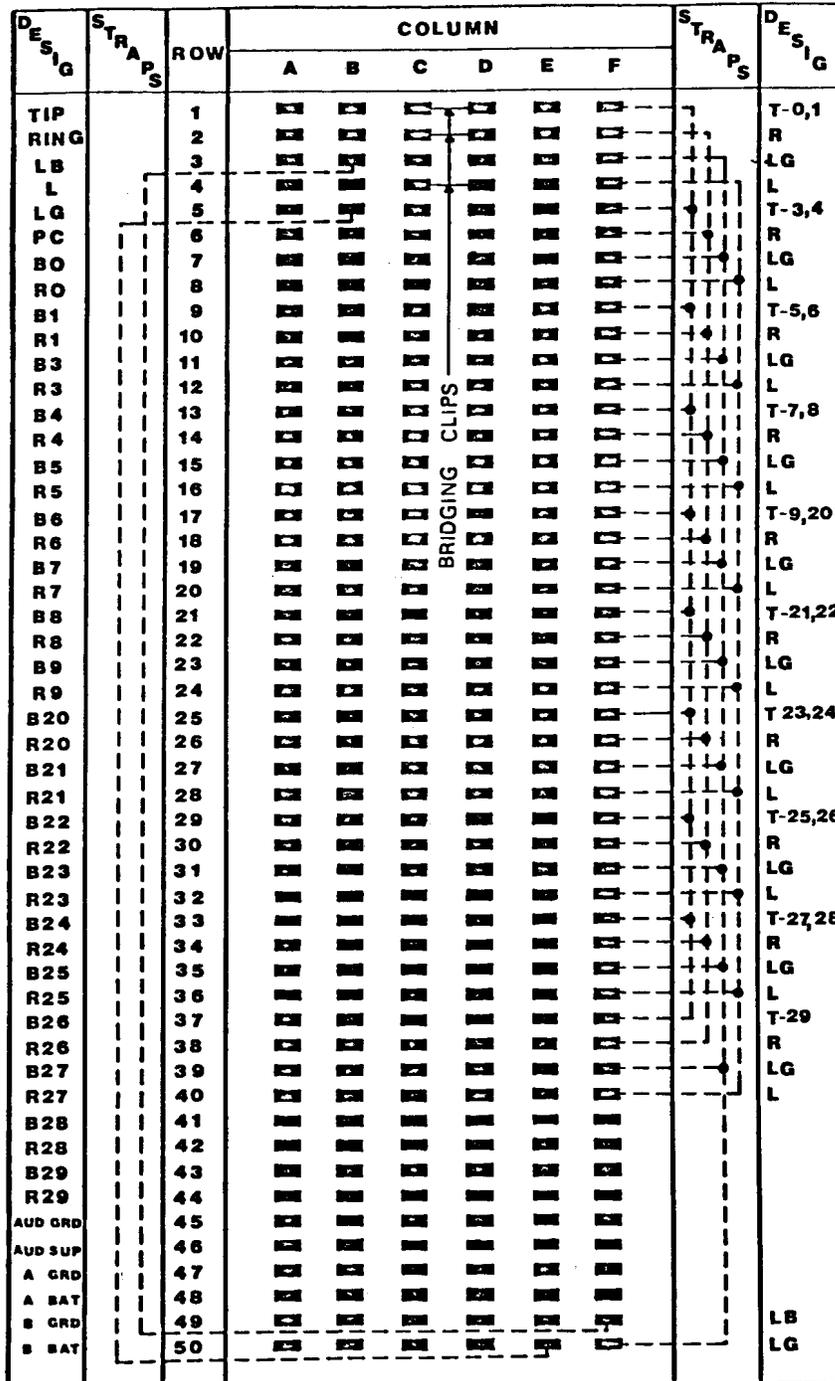


EXHIBIT 4

FUNCTIONAL SCHEMATIC OF KC-19

