

Tek-Lite Installation Instructions

CM-700 SERIES

APPLICATION

The Tek-lite Intercom provides selective telephonic two-way communication between Master station and remote Room Telephones, in addition to emergency signaling from remote points. Calls from Room Telephones are announced by a steady light and steady call tone. The annunciator control unit permits emergency calls to be announced by a flashing light and intermitent call tone.

PROCEDURE

1. Read following instructions to determine equipment location and installation methods before proceeding.
2. Install Housings (or Boxes) and install wiring.
3. Install equipment.
4. Check wiring and connect.
5. Apply power and check operation.

FRAME & HOUSING DIMENSION CHART (Fig. 1)

No. of Stations	Housing					Wall Opening Width B
	Frame	Flush	Surface	Console	Pedestal	
4 — 42	OF-203	OH-203	OH-303	IH-303	PD-100	12¼"
43 — 82	OF-204	OH-204	OH-304	IH-306	PD-100	16¼"
83 — 122	OF-205	OH-205	OH-305	IH-306	PD-100	20¼"
123 — 162	OF-206	OH-206	OH-306	IH-306	PD-100	24¼"
163 — 202	OF-207	OH-207	OH-307	IH-307	PD-300	28¼"
203 — 242	OF-208	OH-208	OH-308	IH-308	PD-300	32¼"
243 — 282	OF-209	OH-209	OH-309	IH-309	PD-300	36¼"
283 — 322	OF-210	OH-210	OH-310	IH-310	PD-300	40¼"

Note 1: Add number of stations as suffix for model number. (eg. 40 stations: CM-700/40)

Note 2: All housing models; Height: 16", Depth: 4"

Note 3: Only one 50 name Directory Panel is provided with each master.

Note 4: Brushed clear anodized aluminum is standard finish on frames. Other finishes available on request. Extra delivery time required.

EQUIPMENT LOCATION

Room telephones should be located where convenient for use. Telephones may be wall mounted (TA-102) or desk mounted (TA-102FC). For wall mounting install single gang outlet box vertically at the desired location.

Emergency Stations should be located where needed (bedroom, or near doors are good locations). Install single gang outlet box vertically at desired location.

Master Station should be located within easy access of operating personnel. Keep away from direct heat or extreme cold. Wall mounting of the master station requires installation of an CH-200 series housing and an OF-200 series frame. (See Fig. 2)

For housing size needed, and housing dimensions see Fig. 1 (Frame & Housing dimension chart).

Power transformers may be located on fuse panel, or other convenient source of 117 VAC.

Transformers should be located within 50 feet of Central Equipment if possible, and must be kept away from any source of direct heat.

Central Equipment (PK-601A and PK-610B) should be located within 50 feet of Master or may be mounted inside if sufficient room is available.

Entrance Panel Rough-In Framing Detail

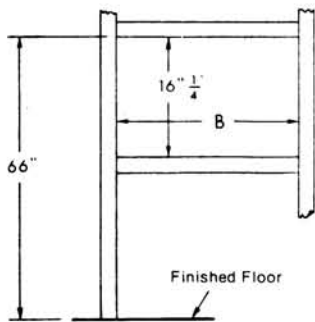
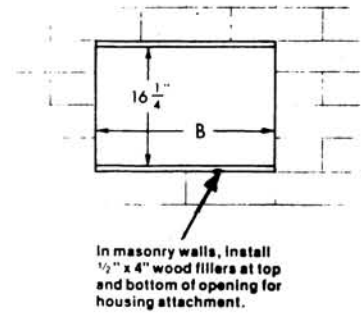
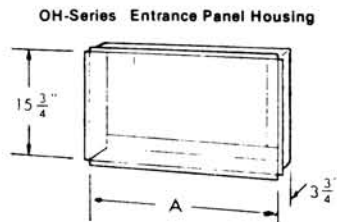


Fig. 2



WIRING (See Fig. 3)

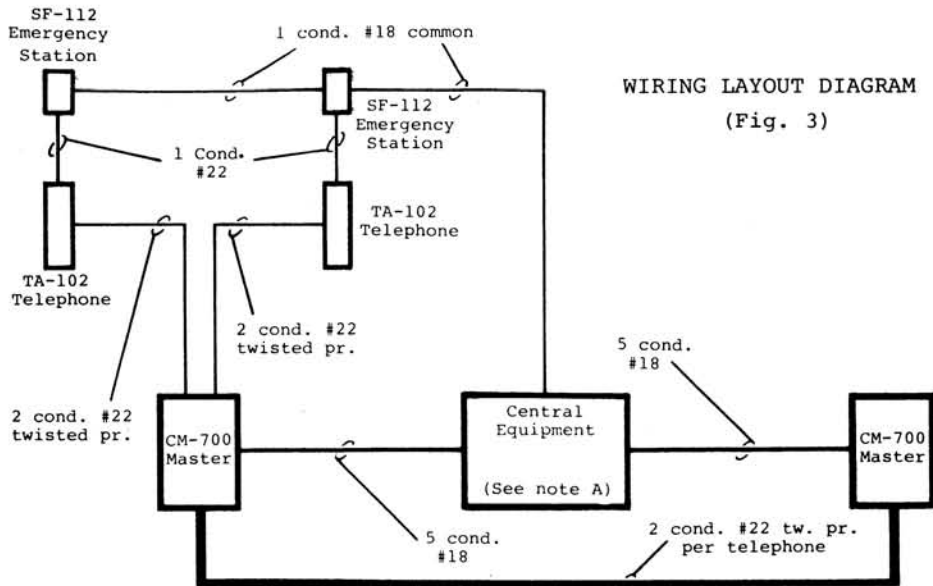
Room Telephone: Run 2 cond. #22 twisted (1 pair) per telephone to the master.

Emergency Stations: Run 1 cond. #22 from telephone to emergency station and 1 cond. #18 (common for all emergency stations) from emergency stations to PK-610B annunciator control unit. (If more than one emergency station is used per suite they should connect to the same wires.)

Transformers: Run 1 cond. #18 to CM-700 Master and 3 cond. #18 to central equipment.

MULTIPLE MASTER SYSTEMS:

1. Telephones may connect to any master. Run 2 cond. #22 twisted pair between masters and connect to same selective terminals on each master (DO NOT REVERSE POLARITY).
2. Run 5 cond. #18 (#16 for distances more than 100 ft.) from central equipment location to each master. (These wires may run from the central equipment to one Master and from there continue from Master to Master instead of the method described above.)



Note A: PK-610B, PK-601A and Transformers located in this area.

CONNECTIONS (See Fig. 4)

Before connecting make certain that wires are free from shorts or grounds. Check finish installation instructions for equipment mounting method before making connections. Make connections as shown on the connecting diagram. (Fig. 4)

Inside Master Stations: Wire gauge may be #22 unless otherwise indicated, but #18 is preferred for greater mechanical strength.

Do not apply 117 V.A.C. to transformer primaries until the entire system is installed and checked for shorts and grounds.

FINISH INSTALLATION

1. Install Room telephones on wall boxes (if wall mounted). Screw telephone base on to the telephone, and put handset on the cradle. Do not interchange telephone bases.
2. Install Emergency Stations on wall boxes. Set each switch to the OFF position.
3. Mount PK-602A in master in a position that will not interfere with switches and terminals.
4. Mount PK-610B nunciator control unit and PK-601A at central equipment location.
5. Install panels in master frame by inserting top of panel into top channel frame. Then push panel in at bottom. Panel should fall into place in bottom channel.
6. Connect power transformer primaries to 117 V.A.C. Measure secondary voltage, if less than 14 volts, disconnect power and check wiring.

TEST AND CHECKOUT

1. Place all telephone handsets on cradles. Set all emergency station switches to the OFF position. Make certain all master Station Selector switches are OFF (push to release to off or out position).
2. Check operation of all room telephones, emergency stations and masters according to operating instructions.

TEK-LITE OPERATING INSTRUCTIONS

Room Telephones

1. Calls are announced by buzzer. Lift handset to reply.
2. To call Master, lift handset. Wait for reply.

Emergency Station

Switch Emergency Station ON. Wait for help.

Master

1. Normal calls are announced by a steady call tone and an illuminated station selector lamp. To reply, lift handset and push the illuminated station selector button. The In-use lamp will be illuminated when handset is off cradle.
2. When communication is complete release station selector button and return the handset to its cradle. If the handset is placed in its cradle while a station selector button is depressed, a steady tone will be heard at ALL MASTERS until all station selector buttons are released.
3. Emergency calls are announced by a pulsating call tone and flashing station selector lamp. Emergency calls must be answered in person and can only be cancelled at point of origin.
4. To call a Room Telephone, lift handset, press appropriate station selector button and press call button. If the Room Telephone being called is in communication with another master a signal will be heard at the telephone and the other master indicating that another master is calling. When finished, release station selector button and return handset to cradle.

LIGHT TEST

To test lights, push Test Light button on bottom of selector panel. All call lights on the associated panel should be illuminated.

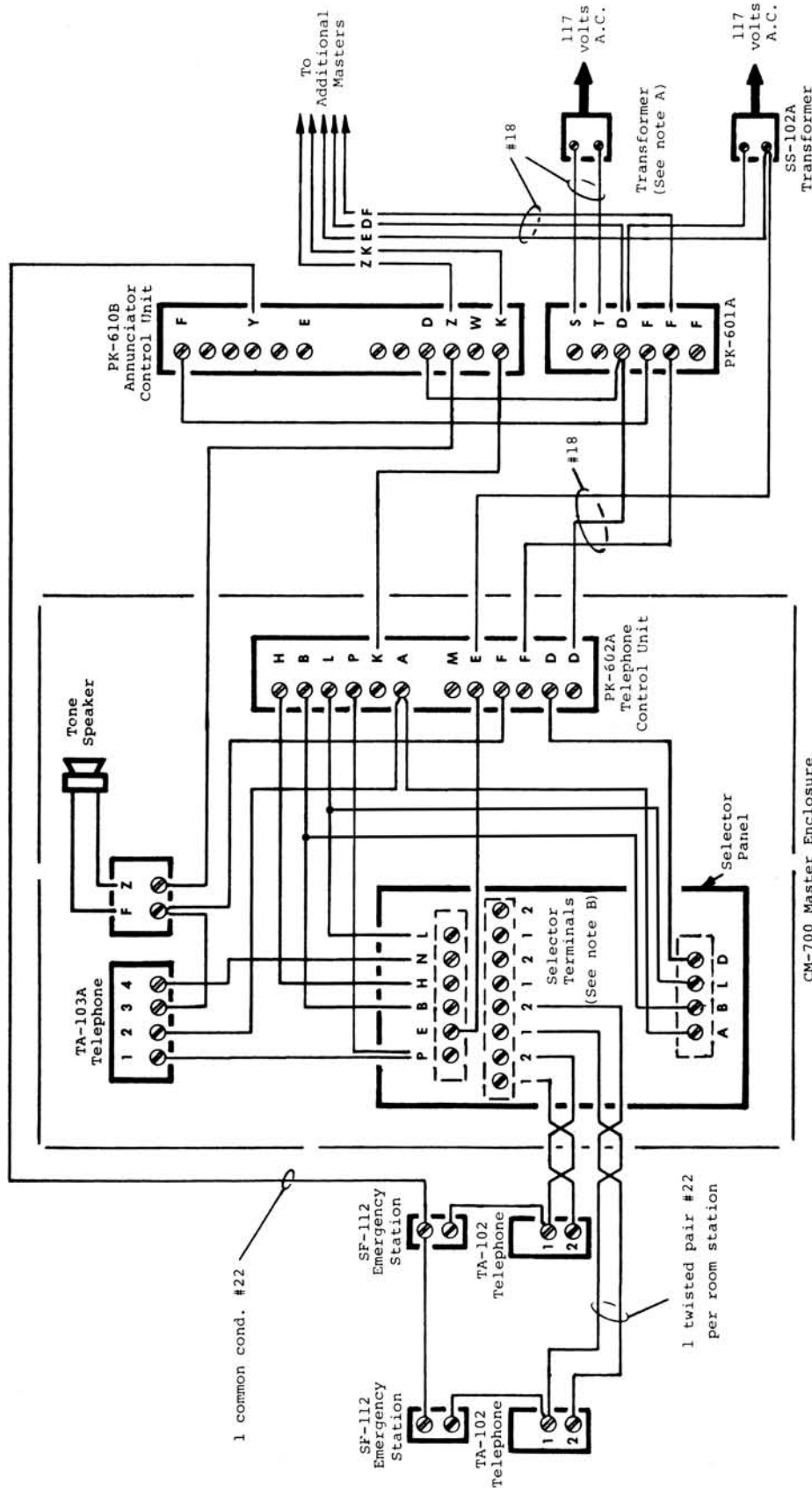
LAMP REPLACEMENT

Access to lamps is achieved by removing transparent lens on push-button. After replacing lamp, be certain to replace push-button identification and lens.

PUSH-BUTTON IDENTIFICATION

Carefully remove transparent lens by pulling, then mark white insert using dry transfer lettering or by other appropriate means. Replace insert and lens.

CONNECTING DIAGRAM (Fig. 4)



Note A: Use SS-102A for systems with up to 50 telephones.

In systems with more than 50 telephones use SS-106. (Use 16 V.A.C. connections)

Note B: In multiple master systems connect 2 cond. twisted pair between masters to same selective terminals on each master. (DO NOT REVERSE POLARITY).