



Tek-Care Installation Instructions

IL236A
Section D
Rev.4 - 9/92

APARTMENT ENTRANCE/EMERGENCY SYSTEMS

APPLICATION

The Tek-Care Intercom System is a combination of a regular apartment entrance system and an emergency communication and annunciation system. As well as standard lobby-to-tenant communications, the emergency function of the system permits occupants to summon emergency assistance. The emergency switch on the suite station, when pulled, illuminates a corresponding suite light, initiates a tone at the manager's annunciator panel, activates a corridor lamp outside tenant's door, and creates communication to the manager.

Options include additional annunciator panel, multiple suite stations in the same suite, up to three entrances, and post office door release.

PROCEDURE

1. Read installation instructions before proceeding.
2. Install housings and wiring.
3. Install equipment and connect wires.
4. Apply power and check operation.

EQUIPMENT LOCATION AND HOUSING INSTALLATION

Entrance Panel: (CM192 series) Flush wall mounting requires the use of an OH190 series housing. Surface mounting requires the installation of TekTone® OF190S series surface frame. See Fig. 1 for housing size needed, dimension chart and installation details.

Number of Suites	FLUSH HOUSING Wall Opening			SURFACE FRAME overall		
	Model	Width A	Hgt	Model	Width	Hgt.
16-60	OH192	8-1/2"	17-1/4"	OF192S	10-1/4"	19"
64-120	OH194	16-1/2"	17-1/4"	OF194S	18-1/4"	19"
124-140	OH195	20-1/2"	17-1/4"	OF195S	22-1/4"	19"
144-180	OH196	24-1/2"	17-1/4"	OF196S	26-1/4"	19"

Notes:

1. For larger sizes, consult factory representative for dimensions.
2. The use of a PO201 post office lock panel or other accessory may require use of the next larger housing size.
3. OF190S series depth from wall surface 2-1/4".

Suite Stations: (IR144) Should be located as shown on the plans, or where convenient for use, about 56" (142 cm) from the finished floor. See Fig. 3 for housing dimensions. Flush wall mounting requires the installation of an IH102 ring as shown in Fig. 3. Use IH101 box for conduit wiring.

Fig. 1

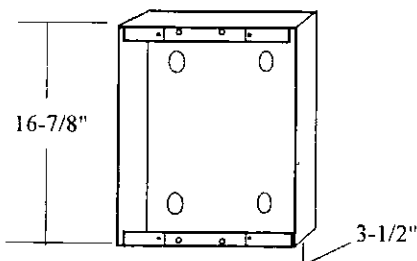
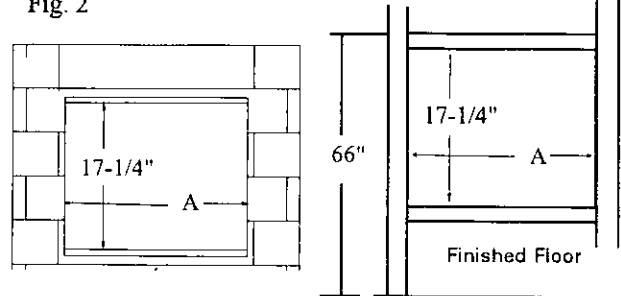


Fig. 2

ENTRANCE PANEL ROUGH-IN FRAMING DETAIL

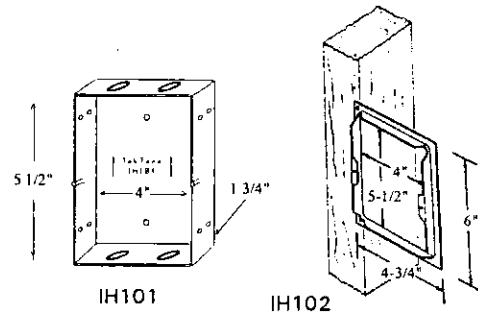


Manager's Panel: (CM800 series)

No. of Lamps (CM800)	Frame	Housing		
		Flush	Surface	Width A
4-24	OF201	OH201	OH301	4-1/2"
28-64	OF202	OH202	OH302	8-1/2"
68-104	OF203	OH203	OH303	12-1/2"
108-144	OF204	OH204	OH304	16-1/2"
148-184	OF205	OH205	OH305	20-1/2"
188-224	OF206	OH206	OH306	24-1/2"
228-264	OF207	OH207	OH307	28-1/2"
268-304	OF208	OH208	OH308	32-1/2"

Manager's Station: (IR104B) See suite stations.

Fig. 3



Corridor Lights: (LI003AN) Locate above or beside door of associated suite where visibility is unobstructed. Requires the use of an IH104 ring as shown in Fig. 4.

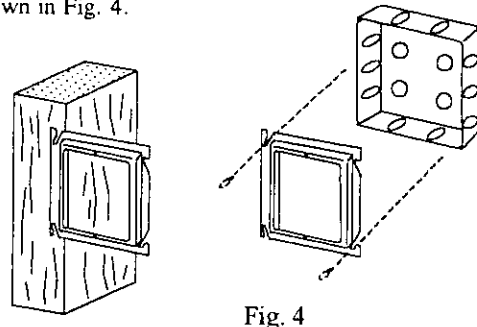


Fig. 4

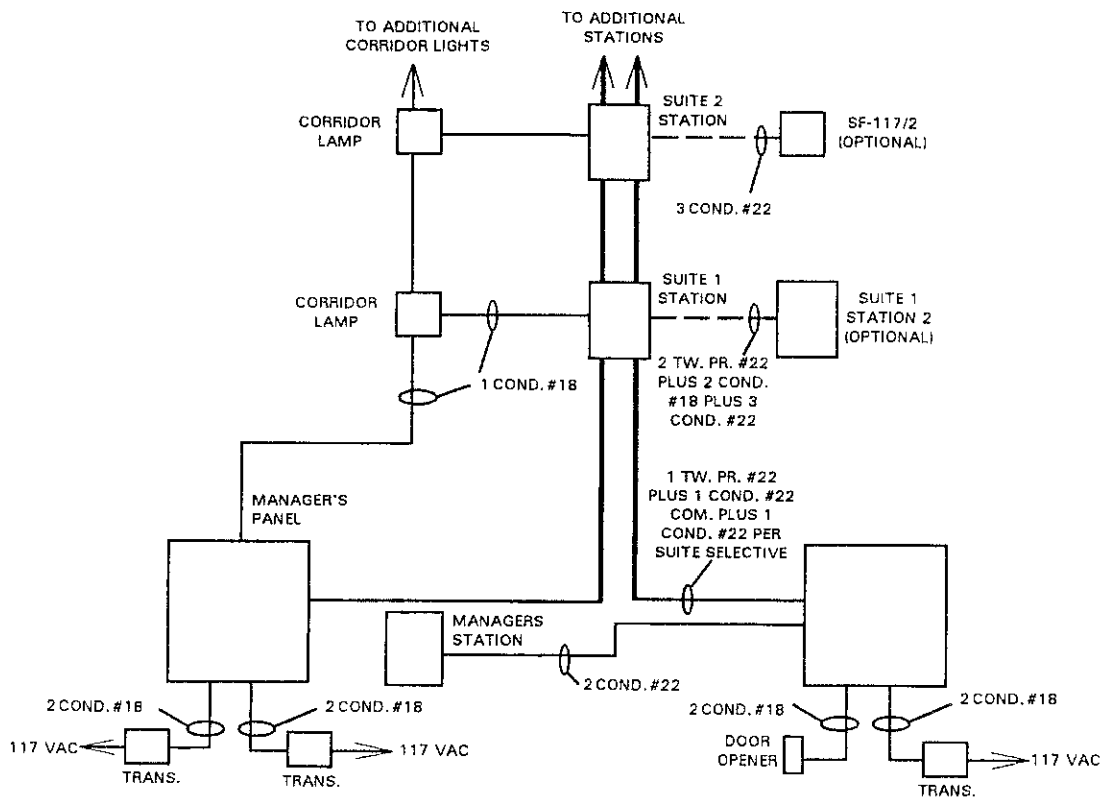


42 Central Drive
Farmingdale, NY 11735-1202
TOLL-FREE 1-800-666-4800

Phone (631) 777-5500 Fax: (631) 777-5599
Email: info@alpha-comm.com
Internet: http://www.alpha-comm.com

BLOCK WIRING DIAGRAM

Fig. 5



WIRING

Suite Stations: May be used in risers as shown in the wiring layout diagram (Fig. 5). Each riser requires one twisted pair #22 and one conductor #22 common, plus one conductor #22 selective per suite served by that riser, originating from the entrance panel, plus one twisted pair #22 and one conductor #18 common plus one conductor #22 selective per suite served by that riser originating from the manager's panel. Maximum length is 400 feet (120 meters). Additional risers may be added as needed. Cable should not be run in the same conduits as (or close to) electrical wiring, fluorescent lights or other electrical equipment. Leave sufficient cable in each box to make connections. Do not cut cable at each station.

Corridor Lights: Requires one conductor #18 common from manager's panel plus one conductor #18 selective from associated suite station.

Manager's Station: Requires two twisted pairs #22 from entrance panel.

Transformers: Should be two conductor #18. Maximum cable length 80 feet (25 meters), up to 200 feet (60 meters) using #14 wire. Route cable away from station wiring.

Door Release: Wiring should be two conductor #18. Maximum length 50 feet (15 meters).

Second Entrance: An additional entrance panel may be accommodated by using a PK502. See installation instructions for proper method.

Connections: Before connecting, make certain that wires are free from

shorts or grounds. Make connections as shown on the connective diagram (Fig. 6), observing the following points:

1. Do not apply power to transformer primaries until entire system has been checked for shorts and grounds.
2. The common wires connecting to terminals 1, 2 and 3 at the entrance panel amplifier should show open circuits when checked with an ohmmeter.
3. Use twisted pair wiring where shown. Do not interchange wires or reverse polarity.
4. Amplifier (PK543) should be installed inside panel housing when using OH190 series. Amplifier must be installed outside of entrance panel when using OF190S surface frame series. If it is necessary to install the amplifier elsewhere due to temperature extremes, etc., or because OF190S surface frame is being used, two conductor shielded cable must be used for the panel speaker wiring (connect shield to amplifier terminal G.) Note: The amplifier should be located at least three feet (one meter) away from transformers or other electrical equipment and must be kept away from direct heat or extreme cold.

Post Office Door Release: If used, connect across terminals E and L on PK543 amplifier at entrance panel.

Optional Accessories: Connect and install optional accessories according to instructions included with each accessory.

FINISH INSTALLATION

1. Install amplifiers in entrance panel and manager's panel housing (OF190 and OH200 series) in a position that will not interfere with panel mounted equipment. Directory panel removal and replacement instructions are included with the directory panels.
2. Install suite stations and manager's station on housing. Do not ever tighten screws on plastic panels.
3. Install corridor lights on housings.
4. Connect power transformer primaries to 117 V.A.C. (observe local electrical codes).

TEST AND CHECK-OUT

Test system components according to operating instructions. If any component does not operate as described, check troubleshooting section.

OPERATING INSTRUCTIONS

1. At entrance panel, press button corresponding to suite you wish to call. An electronic call tone should be heard at the suite station being called.
2. At suite station, press TALK button to speak to person at entrance and LISTEN button to hear person at entrance. After conversation is completed, press DOOR button to release door lock and allow entrance to building.
3. If an emergency occurs, pull cord on station. All emergency signals and indicators should be actuated. Wait for reply, then state problem. It is not necessary for tenant to operate any controls at suite station. After emergency is over, push emergency switch up to reset system.
4. At manager's station, controls operate same as suite station normal controls.
5. At manager's panel, when emergency tone (pulsating) is heard, press green TALK button to speak to tenant. The emergency tone should be silenced automatically and the yellow TONE-OFF indicator should be lit to indicate that the tone is silenced. When TALK button is released, manager should be able to listen hands-free to tenant calling. After conversation is completed and emergency has been resolved, reset emergency switch at the suite station. If all annunciator lamps are not lit, push the red OFF button to set the system in the standby mode. If more than one call occurs at the same time, all stations will be connected to the manager's panel.

TROUBLESHOOTING

If the system fails to operate properly, check wiring. If wiring is correct, check the following:

1. Entire normal communication system dead: Check 117 VAC at entrance panel transformer primary, 16 VAC at secondary, and wiring to amplifier terminals C and D.
2. No normal talk: Check to see if wiring to terminals 1 and 2 is shorted or open or if wiring to entrance panel speaker is shorted or open. Suite stations may be tested by replacement.
3. No listen: Check to see if wiring to terminals 1 and 3 is shorted or open. Check for shorts between terminals 1 and 2.
4. No door operation: Check to see if wiring to door release is shorted or open. Check for defective door release or defective door button on suite station.
5. No buzzing: Check wiring to amplifier terminal 2, entrance panel pushbuttons and wiring to suite stations terminal X.
6. Entire emergency communication system dead: Check 117 VAC at manager's amplifier transformer primary, 16 VAC at secondary, and wiring to manager's amplifier (terminals C & K).
7. No emergency talk: Check to see if wiring to terminals A and G on managers amplifier is shorted or open as well as wiring to E terminals on suite station.
8. No emergency listen: Check to see if wiring to terminals 2 and 3 on manager's amplifier is open.
9. Entire emergency annunciations system dead: Check 117 VAC at annunciator control unit transformer primary, 16 VAC at secondary and wiring to control unit terminals T1 and T2.
10. Annunciator lamp not illuminated: Check wiring to control unit terminal D and wiring to suite station terminal A.
11. No emergency call tone: Check same as 10 above. Also check to see if wiring to terminals P and B is shorted or if wiring to terminals P and S is open.
12. Tone-off lamp does not light: Check to see if wiring to terminal L is open.
13. Excessive hum or distortion: Check to see if wiring is installed too close to electrical wiring or devices. Be sure that twisted pair wiring is used as required. Be sure that amplifier volume is not set too high.
14. Radio interference: Check connection from amplifier terminal G to electrical ground. Note: This connection is not shown on the wiring diagram, since the situation is not always improved by adding ground. If problems persist, consult factory or service representative.

If these checkpoints fail to indicate the problem, there may be an equipment fault. Check with factory, or a qualified service company.

WIRING DIAGRAM

Notes:

1. Use twisted pair wiring where shown.
2. #22 wiring may be used where not indicated otherwise.
3. If post office door lock is used, connect across terminals E and L at entrance panel amplifier.

