

TEK-TRIO™ MASTER STATIONS

WIRING INSTRUCTIONS

APPLICATION

The SM-103BD TEK-TRIO intercom is an all-purpose, three-station (1-Master, 2-Remote) intercom suitable for offices, homes, self-service gas stations, and many other applications. An additional button for optional door release is included. Solid-state design and low-voltage operation permit easy and simple installation using the following instructions:

INSTALLATION PROCEDURE

1. Read instructions completely before proceeding.
2. Install housings and wiring.
3. Connect wiring and install equipment.
4. Apply power and check operation.

EQUIPMENT LOCATION AND HOUSING INSTALLATION

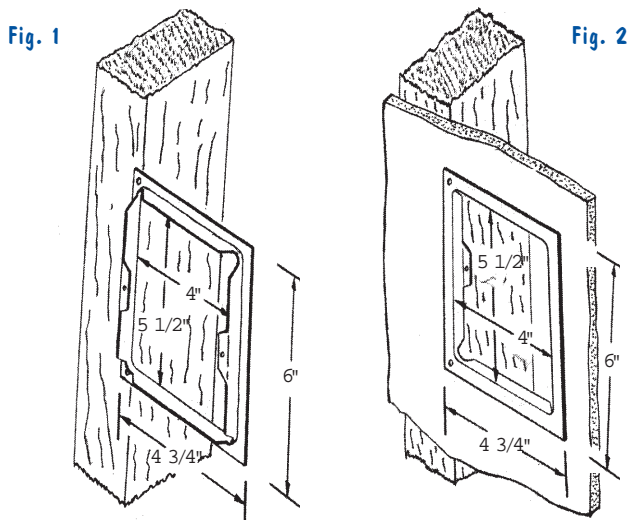
Inside Remotes - Locate speakers where needed at convenient speaking height. Do not install back to back or on a common wall with the master station.

Install IH-102 housing as shown in Fig. 1. Reverse housing for use on finished walls, as shown in Fig. 2. Leave about 2" (5cm) of wall space on all sides.

Use IH-400A cabinet for desk or surface mounting.

Outside Remotes - For outside stations OR-101, OR-103, OR-201 or OR-203, install IH-101(flush) or OH-700(surface) box. For OR-600 series outside stations, use single gang ring or box. Run wire/cable to remote speaker location.

Master Speaker - Locate master where needed, at a convenient speaking height. Do not locate master near any source of direct heat, or too close to transformers, light dimmers or other electrical devices or wiring.



Do not install too close, or on a common wall with remote station(s). Install IH-102 housing as shown in Fig. 1 or Fig. 2. Leave about 2" of wall space on all sides.

Transformer - IMPORTANT! Connecting this equipment to any power source other than a standard 16-volt 10 V.A. chime transformer, or the LEE DAN transformers specified, voids all guarantees.

Plug-In: A PS-20A plug-in type transformer may be used and must be provided with an electrical outlet at some convenient location within 50 feet (15 meters) of the master station.

Pigtail: A PS-3A type transformer may be used and may be installed on the fuse panel or any other accessible source of 117 volts A.C. within 50 feet of the master station. (Observe all local electrical codes.)

WIRING

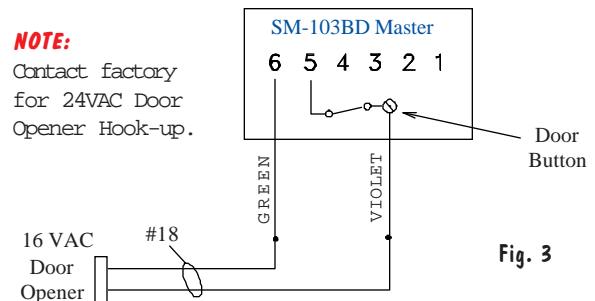
Run 3 conductor, twisted cable #22 from each remote speaker directly to the master speaker location. **NOTE:** It is recommended that shielded cable be used from the master to the remote station when the cable must be run near any AC wires!

Run 2 conductor #18 cable from the master speaker to the transformer location.

Leave sufficient cable at each end for connections (about 10" or 25cm).

Make connections as shown on the Typical Wiring Diagram Fig. 5. Be sure to add a jumper between the pushbutton and the speaker on the remote station as shown on the wiring diagram.

Door Opener (Optional): The SM-103BD master is equipped with a door opening button, which may be wired and connected as follows:



Run 2 conductor #18 cable from the master speaker to the door opener location. Make connections as shown on the following diagram Fig. 3.

Caution: Do not run door opener or transformer wires together with intercom wires!

NOTE: If the door opener operation from the SM-103BD master is not needed, the DOOR button may be used for other signal purposes. Simply run the door cable to the optional signal device (bell, buzzer, etc.) which must be able to operate on 15 volts A.C., 10 V.A. or less.

SM-103BD OPERATION & CHECKOUT INSTRUCTIONS

At Remote Speaker:

Push button to call master; release to allow communication by master.

At Master Speaker:

1. Push selector button (marked STN. 1, STN. 2) to channel-in to desired remote.
2. Push TALK button to speak; release to listen.
3. Push DOOR button to open door.
NOTE: Door release function works with one door only (however system is initially wired). The door release function has nothing to do with the STN. 1, STN. 2 remote selecting feature.
4. Push OFF button to turn system off when desired.
5. Push TALK button to re-activate speaker.
6. Adjust VOLUME as desired.

NOTE:

If the volume is too high, distortion or howling may result.

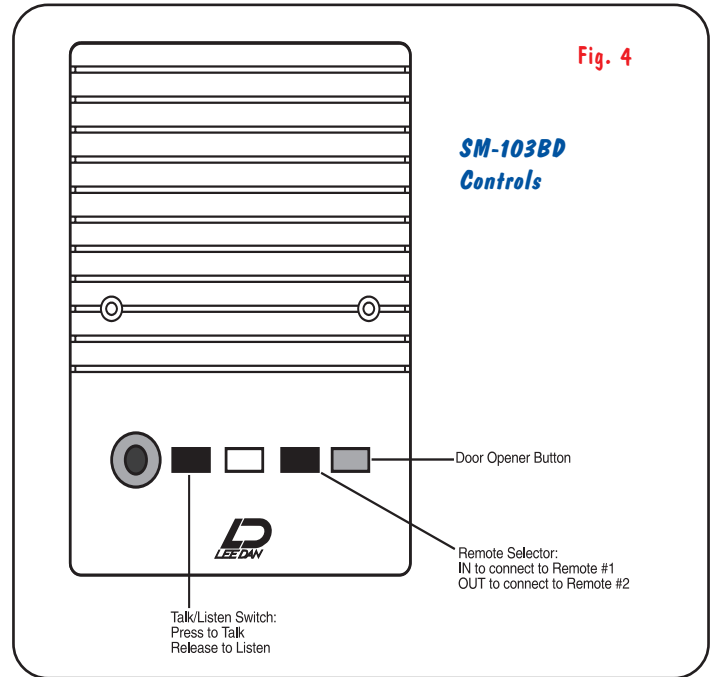


Fig. 4

SM-103BD Controls

Talk/Listen Switch:
Press to Talk
Release to Listen

Remote Selector:
IN to connect to Remote #1
OUT to connect to Remote #2

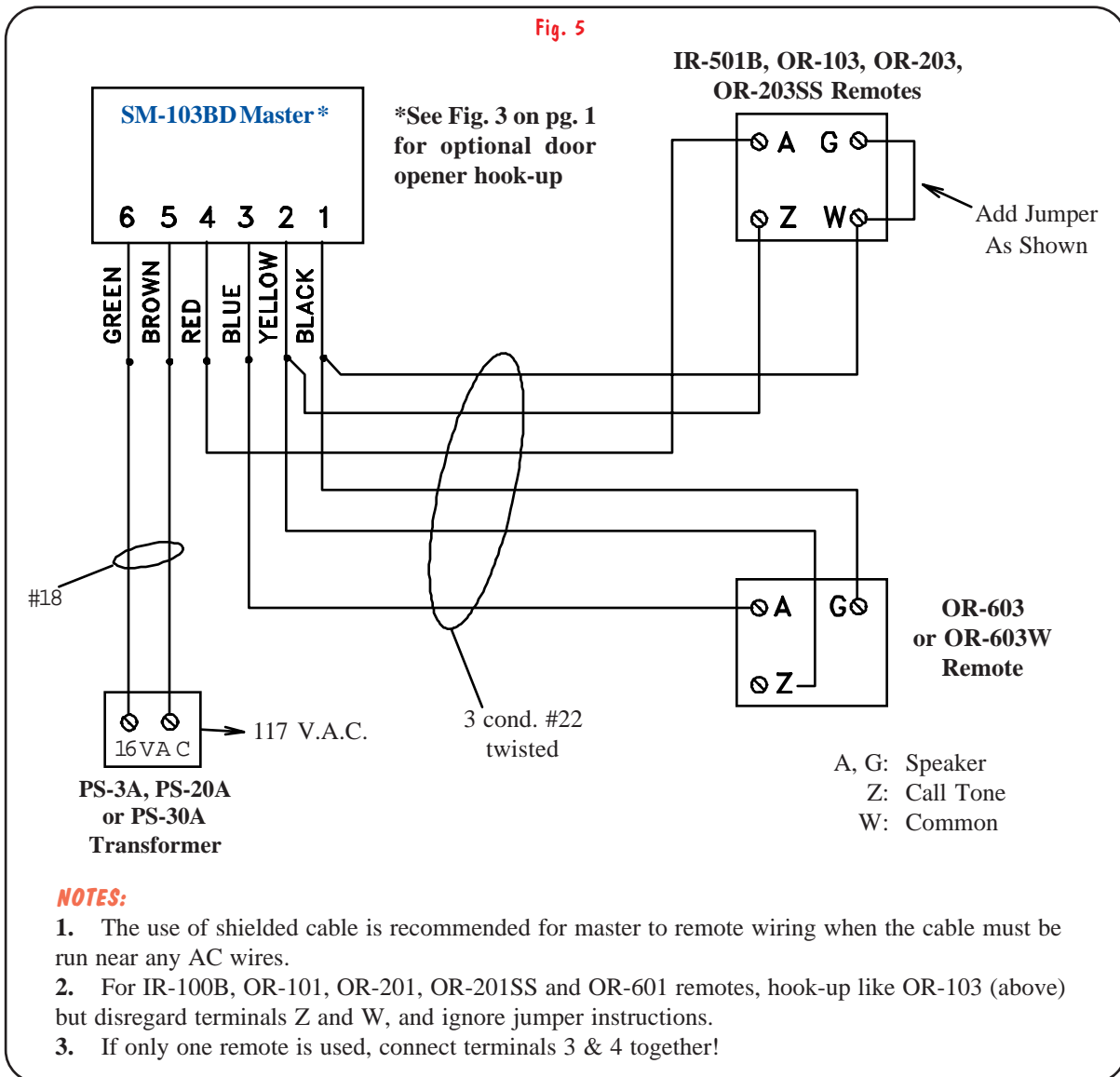


Fig. 5

SM-103BD Master*

6 5 4 3 2 1

*See Fig. 3 on pg. 1 for optional door opener hook-up

IR-501B, OR-103, OR-203, OR-203SS Remotes

Add Jumper As Shown

#18

117 V.A.C.

3 cond. #22 twisted

PS-3A, PS-20A or PS-30A Transformer

OR-603 or OR-603W Remote

A, G: Speaker
Z: Call Tone
W: Common

NOTES:

1. The use of shielded cable is recommended for master to remote wiring when the cable must be run near any AC wires.
2. For IR-100B, OR-101, OR-201, OR-201SS and OR-601 remotes, hook-up like OR-103 (above) but disregard terminals Z and W, and ignore jumper instructions.
3. If only one remote is used, connect terminals 3 & 4 together!