



# Tek-COM® SM201B Intercom Installation Instructions

IL331  
Section B  
Rev. 14 - 09/2004

## APPLICATION

The Tek-COM® SM201B intercom is a multipurpose, two-station intercom suitable for homes, offices, or wherever communication to a single location and convenient electrical door opening is desired. The solid-state design, combined with low voltage operation, permits easy and simple installation.

## PROCEDURE

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

## HOUSING INSTALLATION AND EQUIPMENT LOCATION

### Inside Remote Station

Locate remote station where needed at a convenient speaking height. Do not install back to back or on a common wall with the master station. The SM201B is surface mounted, or mounted to a standard single-gang ring.

Install an IH102 Housing for IR510B and IR501B Remotes. Reverse housing for use on finished walls as shown in *Figure 1—Mounting Diagram*. Leave about 2" (5 cm) of wall space on all sides.

### Outside Remote Station

For outside stations OR510, OR501B and OR502, install an IH101 Box. The OR610 Outside Station is surface mounted, or mounted to a standard single-gang ring. The OR510S and OR502S mount directly to the wall surface. Run wire/cable to the remote station.

### Master Station

Locate master station where needed and at a convenient speaking height. Do not locate the master near any source of direct heat, or too close to transformers, light dimmers, or other electrical devices or wiring. Do not install close to or on a common wall with remote station. Install single-gang electrical box, or surface mount.

### Transformer

**IMPORTANT!** Connecting this equipment to any power source other than a standard 16 VAC 10 VA transformer, or the TekTone® transformers specified, voids all warranties.

If there is no existing transformer, an SS105B plug-in type transformer may be used and must be provided with an electrical outlet at a convenient location within 50' (15 meters) of the master station.

An SS102A Transformer may be used and may be installed on the fuse panel or any other accessible source of 117 VAC within 50' (15 meters) of the master station. (Observe all local electrical codes.)

Figure 1—Mounting Diagram

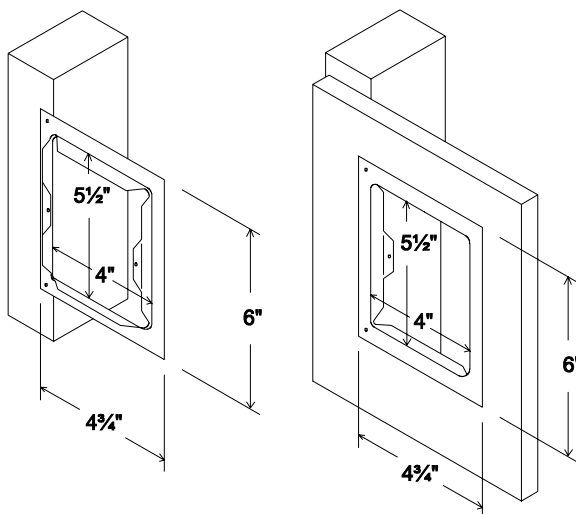
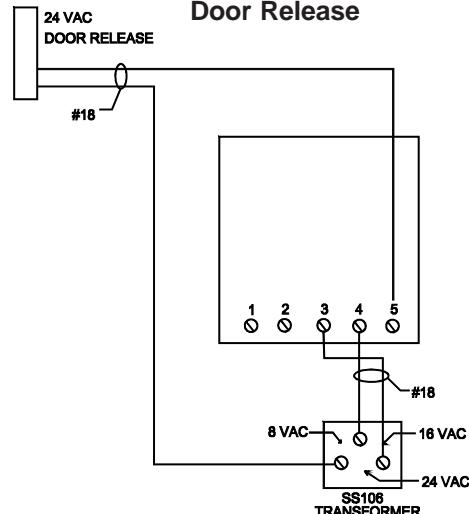


Figure 2—Alternate Diagram for 24 VAC Door Release



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TekTone®'s quality system is registered by UL® to the ISO 9001:2000 standard. (File #A10766.)

## WIRING INSTALLATION

Run two-conductor twisted #22 cable from the remote station location directly to the master station location. **Note:** Run shielded cable from the master to the remote station if the cable runs near any AC wires.

Run two-conductor #18 cable from the master station to the transformer location.

Run two-conductor #18 cable from the master station to the door opener location. Leave sufficient cable at each end to make connections (about 10" or 25 cm).

Make connections as shown in *Figure 3—Typical Wiring Diagram* or *Figure 2—Alternate Diagram for 24 VAC Door Release*.

**Note:** If door release operation from the master station is not needed, the door button may be used for other signal purposes. Simply run the door release cable to the optional signal device (bell, buzzer, etc.) which must be able to operate on 16 VAC 10 VA, or less.

## SM201B OPERATING AND CHECK-OUT INSTRUCTIONS

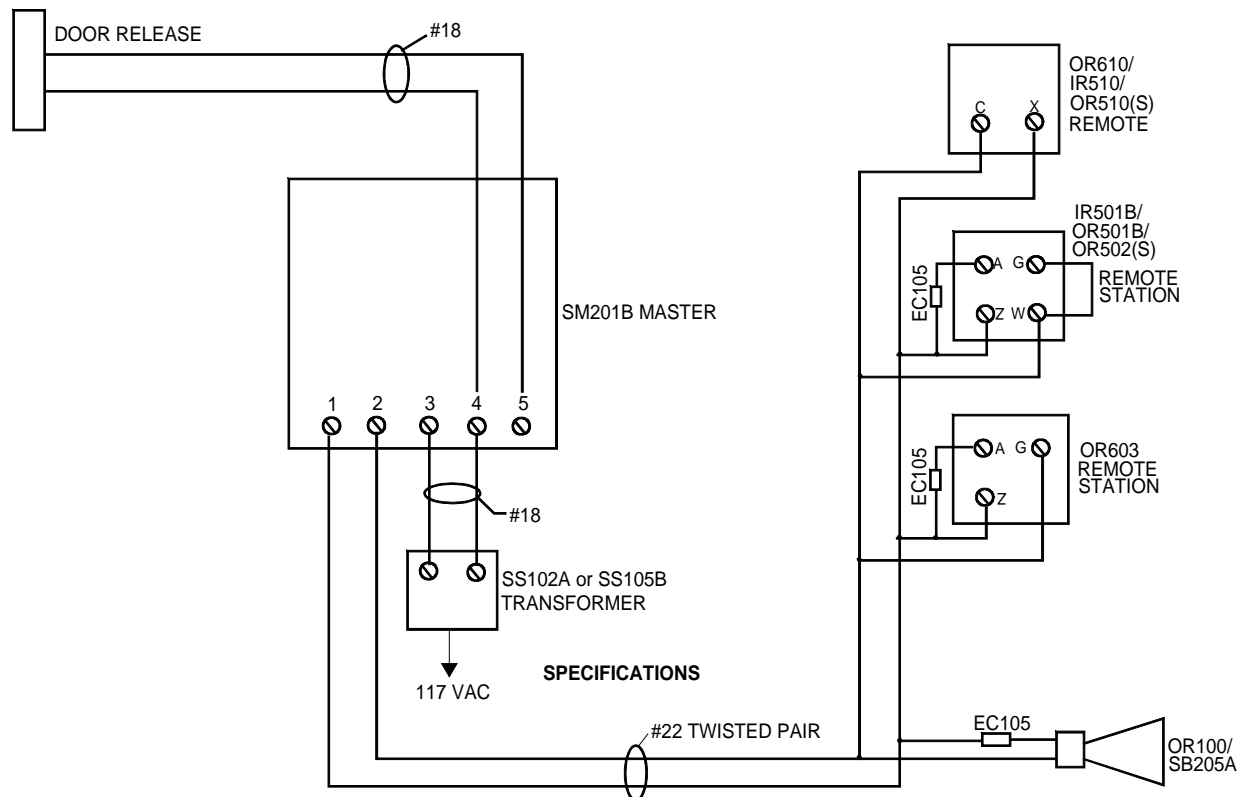
### At Remote Station:

Push button to call master, release to listen.

### At Master Station:

1. Push **TALK** button to speak, release to listen.
2. Push **DOOR** button to open door.
3. Push **OFF** button to silence speaker, if desired. Station will remain in **MONITOR** mode if **OFF** button is not pushed.
4. Press **TALK** button to re-activate speaker.
5. Adjust **VOLUME** with small screwdriver as needed through hole provided on lower front of panel. **Note:** If the volume is too high, distortion or howling may result.

Figure 3—Typical Wiring Diagram



### NOTES:

1. Add wire jumper to IR501B, OR501B, and OR502(S) Remote Stations as shown.
2. Add EC105 (15 uF non-polarized) capacitor to IR501B, OR501B, OR502(S), OR603, OR100, and SB205A Remote Stations as shown.
3. Locate remote station type on right and wire as shown using 2 conductor #22 twisted pair wiring.
4. Use #18 wire for door release and transformer wiring.
5. If using shielded cable, connect drain wire to terminal #2.