



SB5000 Series Switchboard Installation and Use Instructions Used with the HT3009/2 or HT2009/2 Remote Handset Intercom Stations

HOUSING INSTALLATION AND EQUIPMENT LOCATION



**SB5070 (70-station)
MASTER (shown)**

APPLICATION

The SB5000 series Sentryvox™ intercom system allows any number of HT3009/2 and/or HT2009/2 series inside handset stations to communicate with the master/concierge switchboard unit, and to signal using lamp annunciation. When used as an apartment intercom system, the SB5000 master station can switch all handset communication to a conventional lobby panel, with electric door release.

PROCEDURE

1. Read installation instructions for each unit to determine equipment location and installation method.
2. Install housings and wiring.
3. Install equipment.
4. Check wiring and connect. Observe all local and national electrical codes.
5. Apply power and check system operation.

INSIDE HANDSET STATIONS

Locate stations where needed at convenient speaking height, about 4.5 feet (137 cm) from the finished floor. Handset can be secured directly to the finished wall surface or can be mounted over a single gang electrical 'gem' box or single gang electrical plaster ring.

SB5000 SERIES MASTER STATION

Locate desk master station at a convenient speaking location at the management office, security guard, concierge or main communication area.

SYSTEM TRANSFORMER

The SS050 (or SS100 or SS250) power transformer may be installed by the fuse panel or other accessible source of 117 VAC, preferably within 50' (15 meters) of the SB5000 master station, but no closer than 3 feet (1 meter) from the SB5000 master station.

ELECTRIC DOOR RELEASE (OPTIONAL)

The DO-001A (or equivalent type powered by 12VAC) electric door release is installed in the door jamb in place of the regular door strike plate. It can be electrically operated by the SB5000 master station, and the HT3009/2 and/or HT2009/2 series remote handsets, when switched to "lobby panel mode".

WIRING

INSIDE HANDSET STATIONS

Run 1 conductor (common) and 1-conductor (selective) #22AWG cable from handset to handset and to the SB5000 master station. Additional cables may be used to serve other stations on other risers (lines). Cables may be straight or twisted pair type and may be solid or stranded conductors. Optionally, you may home-run a separate 2 conductor #22AWG from each handset to the SB5000 master station.

Route cable away from AC power wiring, transformers, fluorescent lights, light dimmers or other electrical devices. Protect cable from damage. Shielded cable should be used if AC interference is a concern, or if cables cannot be run adequately spaced away from any source of electrical interference.

DOOR RELEASE

Run 2 cond. #18 from the door release location to the amplifier. Route away from station wiring. Note: if wire run is longer than 50 feet (15m), use #16AWG cable.

CONNECTIONS

Before connecting, make certain wires are free from shorts or grounds. Make connections as shown on Fig. 6 and as detailed in the following instructions.

REMOTE HANDSET STATIONS

1. Connect terminal (I) on all of the remote handset stations in common with all of the other remote handsets on the system. These wires will connect to the SB5000 master station terminal (6).
2. Connect terminal (II) on each of the remote handset stations individually and selectively. These wires will connect to the SB5000 master station lamp selective terminals. Underneath each 10-position lamp assembly on the master station is a 10-position terminal strip, for connecting each of the 10 selective wires for that bank of 10 remote handset stations.

SB5000 MASTER STATION

1. Connect master terminals 1 and 2 to 12VAC system transformer (polarity not important).
2. Connect master terminals 4 and 5 to 12-16VAC electric door opener, if used (polarity not important).
3. Connect master terminal 6 to the common wire (terminal I) on all of the remote handset stations.

TRANSFORMER

1. Connect transformer 12VAC terminals to SB5000 master station terminals 1 and 2 (polarity not important). Do not use this transformer to power any other device.
2. Do not connect transformer primary to 117 VAC until entire installation is complete and all wiring is checked.

DOOR RELEASE

1. Connect 12-16 VAC electric door opener (if installed) to SB5000 master station terminals 4 and 5 (polarity not important).

FINISH INSTALLATION

1. Install handsets on housings or directly onto walls. Do not overtighten screws.
2. Make sure back of master station is secured properly.
3. Connect transformer primary to 117 VAC. Observe all local and national electrical codes.

TEST AND CHECKOUT

1. At all remote handset stations, make certain the handsets are completely hung-up on the handset cradle.
2. Check each handset unit in the system for operation in accordance with the operating instructions.

NOTE: System warranty is void if this system is installed or used in any manner other than described in this manual.

OPERATING INSTRUCTIONS

NOTE: Operating instructions are shown based upon a system with a concierge and remote apartment handsets. These instructions are applicable to other applications as well.

AT SB5000 MASTER STATION

TO ANSWER A CALL FROM THE REMOTE HANDSET:

When a tenant lifts his/her handset, a tone is heard at the concierge's master station, and a light will indicate which apartment is calling. To answer the call, the concierge should lift his/her handset, and depress the lighted button for that apartment. Conversation may now take place between the concierge and only the apartment whose button is depressed.

When conversation is done, depress apartment button once again, restoring it to its original (UP) position. Reset master handset into its cradle. NOTE: if handset is not fully hung-up you will not hear a tone when any remote handset calls.

TO PLACE A CALL TO THE REMOTE HANDSET:

Lift master handset and depress button for apartment you wish to call. Momentarily depress button marked 'CALL' to signal the apartment handset. When tenant answers, you may communicate. When finished, restore system to standby as in previous step.

TO PLACE A CALL ON HOLD:

When the concierge wishes to place one call on HOLD, to take another call, he/she shall restore the push-button to the (UP) position, for the apartment he/she wishes to place on hold. The concierge may depress the button for the other tenant, and speak to the other tenant by following the directions as indicated in 'answering a call from a remote handset'.

DOOR RELEASE

If an electric door release is installed, it may be operated from the SB5000 master station by pushing the button with the 'KEY' symbol. This will operate the electric door release at the building entrance. The door release will buzz while operating, indicating permission to enter.

AT REMOTE HANDSET STATION

TO PLACE A CALL TO THE MASTER STATION:

Just lift your handset, and wait for reply by concierge. If concierge doesn't answer right away, hang up. Your call will remain indicated at the master. Concierge will call back later.

TO ANSWER A CALL: When your handset is called, you will hear an electric buzzing sound. Lift your handset, and speak. If call is coming from a lobby entry panel station, you may depress your 'KEY' button for a few seconds to electrically release the entry door.

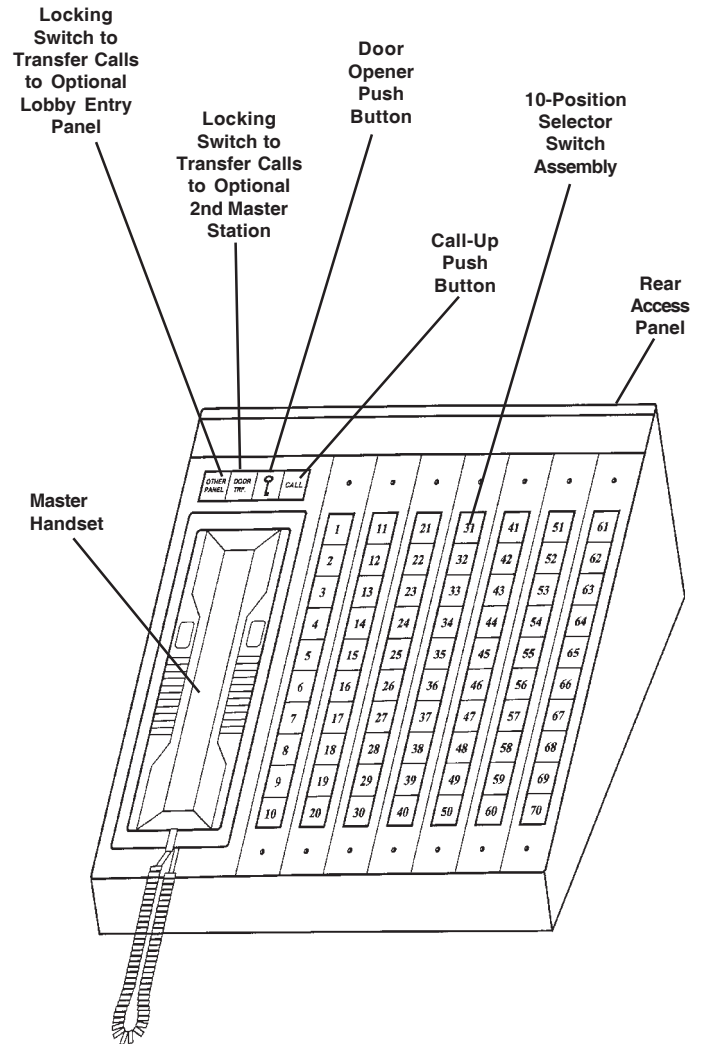
TROUBLESHOOTING

If the system fails to operate as required, review operating instructions again. If the equipment fails to operate as indicated in the instructions, check the following points:

1. **ENTIRE SYSTEM DEAD:** Check 12VAC at transformer secondary; wiring between transformer and master station; connections at SB5000 master station terminals 1 and 2; 117 VAC at transformer primary.
2. **NO CALL DOWN TONE AT MASTER:** Check that the handset at the master station is fully hung-up; check master handset cradle switch is operating properly and not sticking.
3. **NO CALL UP BUZZER AT HANDSET:** Temporarily switch handset with one from a functioning location; check wiring connections at remote handset and at master selector terminals; check that wiring inside handset base is not restricting movement of buzzer clapper; temporarily switch handset to another master switch that is functioning and try again.
4. **NO CALL DOWN LAMP INDICATION FROM A HANDSET:** Temporarily switch handset with one from a functioning location; check wiring connections at remote handset and at master selector terminals; temporarily switch bulb at master with one from a functioning switch; check that bulb is seated firmly in it socket.
5. **UNABLE TO RELEASE DOOR STRIKE:** Check wiring to master terminals 4 and 5. Temporarily remove door opener wires from terminals 4 and 5 and touch to terminals 1 and 2 to send power directly to door opener; check operating voltage of door opener; check wiring to door opener.
6. **HUM OR BUZZ:** Check system wiring installed too close to power wiring or electrical devices; check transformer installed too close to master station; check master station not installed too close to source of electrical interference.

PLEASE NOTE: If these checkpoints fail to indicate the problem, there may be an equipment fault. Contact the factory or qualified service representative.

SB5000 COMPONENT LISTING



TYPICAL REPLACEMENT PARTS

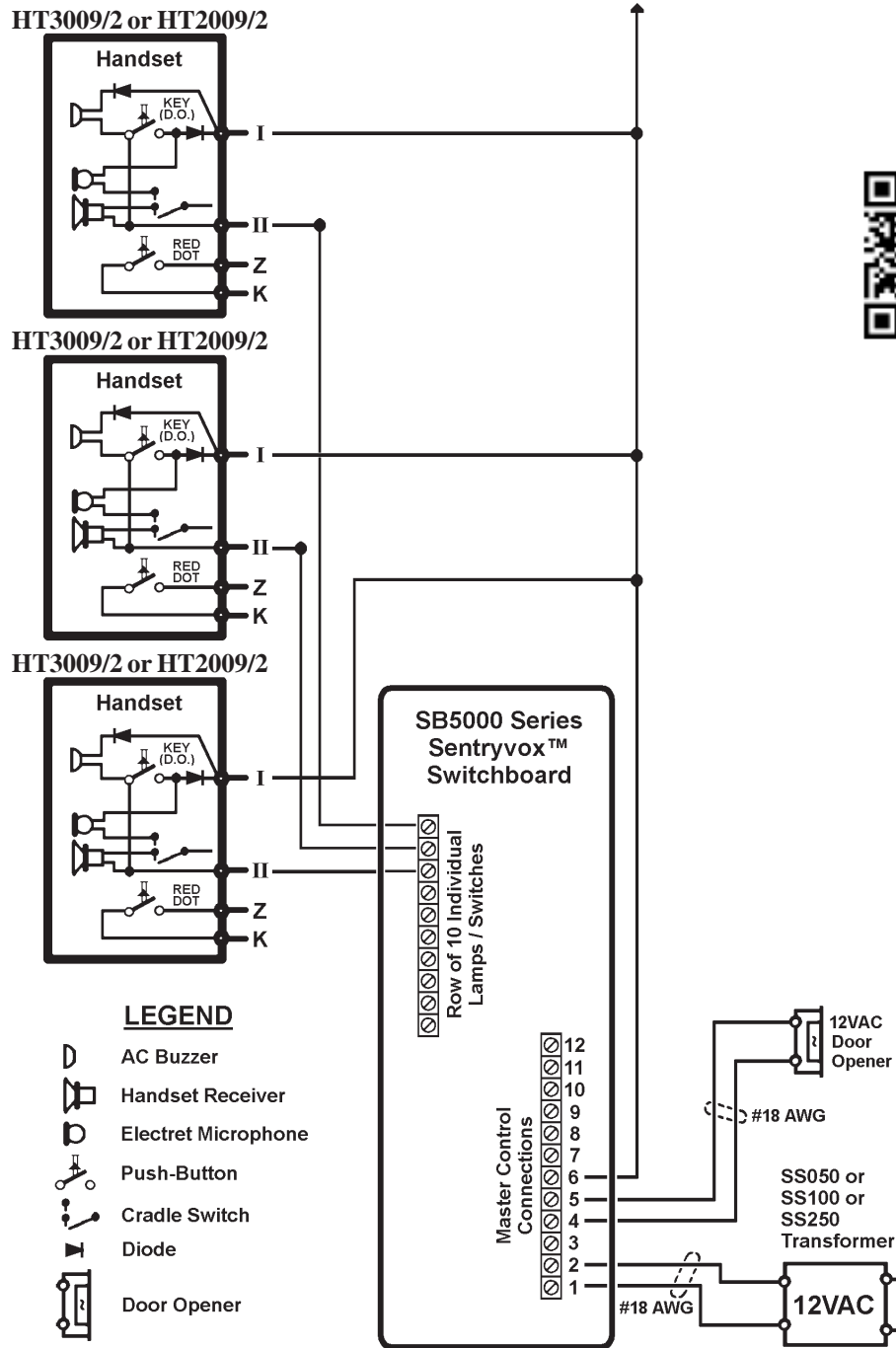
Model# SB5000-PSB: Main Power supply board, located inside master cabinet, under master handset station.

Model# SB5000-4: Main 4-switch control module located above master handset station.

Model# SB5000-10: 10-selector switch assembly. One (1) required for each 10 remote handsets. Includes switches and P.C. board with electronics for 10 remote handsets.

Model# LM5000: Replacement bulb for master station.

**TYPICAL WIRING LAYOUT DIAGRAM FOR S.T.R.™ SENTRYVOX™
SWITCHBOARD SYSTEM USING HT3009/2 AND/OR HT2009/2
(2-WIRE) REMOTE HANDSETS**



Notes:

1. All wiring is #22AWG unless shown otherwise.
2. Access to master station should be done from the rear, by removing the phillips head screws that hold the back plate in place.
3. Observe all local and national electrical codes.
4. All terminals connections shown may not be in the order that they appear on the equipment.

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