



4000/A Series Master Intercom Installation and Use Instructions Used with one (1) or more Remote Stations (1 Master Maximum)

APPLICATION

The 4000/A series intercom system allows a single inside master station to selectively communicate with 1 to 18 remote stations, depending upon capacity of master station. Remote stations may signal the master (when they wish to communicate) by depressing a momentary call button, which will activate an 800 Hz buzzer at the master and will also light an LED visual indicator adjacent to the selector button for that remote station. Once called by the remote, the master can call back by voice.

PROCEDURE

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

HOUSING INSTALLATION AND EQUIPMENT LOCATION

INSIDE MASTER STATION

Locate master where needed at convenient speaking height, about 4.5 feet (137cm) from the finished floor, or on a desktop.

REMOTE STATION(S)

Locate remote station(s) at convenient speaking height, about 4.5 feet (137cm) from the finished floor, or on a desktop (depending upon type of remote station used).

SYSTEM POWER SUPPLY

Each 4000/A series master station has the system power supply built-in and does not require an external low-voltage power supply. Master connects directly to a 117VAC primary power source. Observe all local and national electrical codes.

WIRING

REMOTE STATION(S)

For remote cable runs up to 100m (approx. 330 feet) run a 2 conductor #22AWG cable from each of the remote stations, back to the 4000/A series master station. For runs up to 300m (approx. 1,000 feet) use #18AWG cable. Cables may be straight or twisted pair type and may be solid or stranded conductors.

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.

CONNECTIONS

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

MASTER STATIONS

1. On the 4000/A01 and/or 4000/A03 master station(s) terminal '4' is the 'common' terminal and connects to terminal '4' at each of the remote stations. Terminals '1' thru '3' (on the master) are the 'selective' terminals that individually go to the '1' terminals on each remote, selectively.
2. On the 4000/A06, 4000/A12 and/or 4000/A18 master station(s) terminal '19' is the 'common' terminal and connects to terminal '4' at each of the remote stations. Terminals '1' thru '18' (on the master) are the 'selective' terminals that individually go to the '1' terminals on each remote, selectively.

FINISH INSTALLATION

1. Install stations on housings (where appropriate). Do not overtighten screws.
2. Observe all local and national electrical codes.

TEST AND CHECKOUT

1. At the master station, make sure that each of the 'selective' call buttons are in the 'up' position, and that none of the LED indicators are lighted. If any of the LED indicators are lighted, depress the button associated with that indicator, down and then up, and it should extinguish. If not, you may have a wiring problem.
2. Check each unit in the system for operation in accordance with the operating instructions.
3. If feedback occurs between stations, check wiring and distance between master and remote station(s).

NOTE: The Alpha Communications® warranty is void if this system is installed or used in any manner other than described in this manual.

OPERATING INSTRUCTIONS

REMOTE STATION

TO CALL MASTER: Push button on remote station (if so equipped) to signal master station. A buzzer will be heard at the master station, and a Red LED will light, corresponding to that push button.

MASTER STATION

TO REPLY: Depress the push button corresponding to the remote that you wish to speak with, and depress the oversized 'Talk' button, and speak in a normal voice. Release the 'Talk' button hear the response. You may depress and release the 'Talk' button as often as you wish to have a complete conversation. When conversation is completed, depress the 'Off' button, ending the conversation.

CALLING ANOTHER REMOTE STATION

Same as previous paragraph.

TROUBLESHOOTING

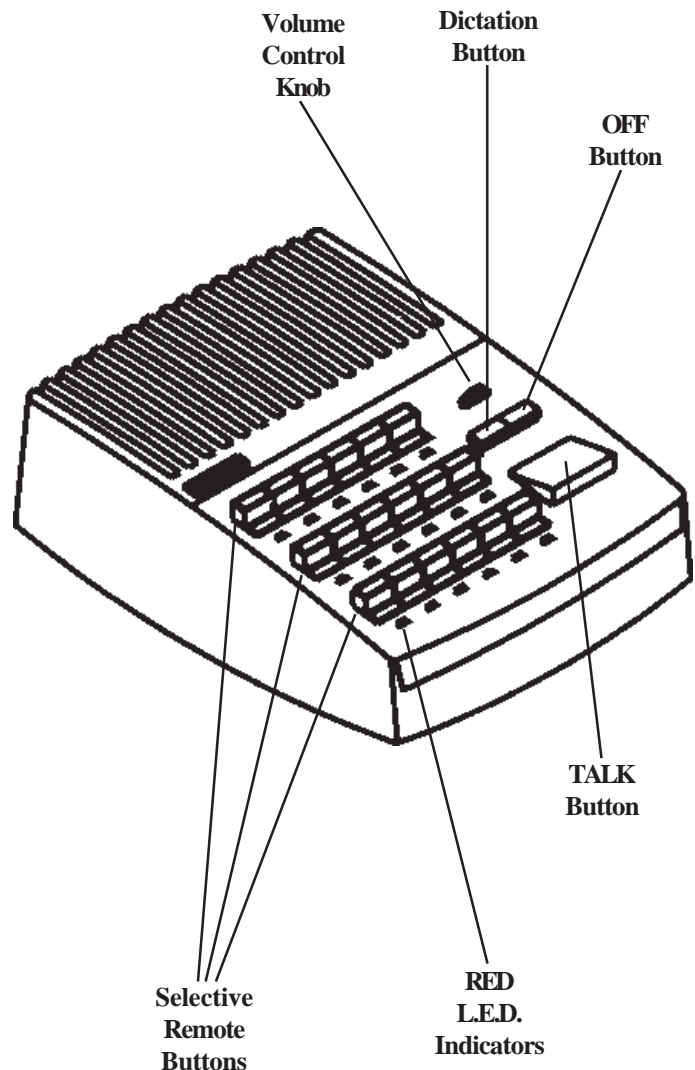
If the system fails to operate as required, review operating instructions again. If the equipment fails to operate as indicated in the instructions, check the following points:

- 1. ENTIRE SYSTEM DEAD:** Check 120VAC primary wiring connections.
- 2. NO CALL BUZZER OR LED AT MASTER:** Check wiring connections at the remote. Check that the calling remote pushbutton is making contact, by shorting out the two (2) wires (terminals '1' and '4') on the remote manually. If that does not work, short out the common wire ('4' on 4000/A01 or 4000/A03 or '19' on 4000/A06, 4000/A12 or 4000/A18) to the individual selective terminal (1 - 18) that is not functioning. Move remote wiring to another selective terminal on the master to see if that LED and buzzer functions when the remote calls.
- 3. LED AT MASTER WILL NOT EXTINGUISH:** Check wiring connections at the remote. **POLARITY IS IMPORTANT!** Try reversing the two (2) wires on the remote and see if the LED extinguishes. If it does, check that the call buzzer and voice still works properly.
- 4. BUZZER AT MASTER SOUNDS CONTINUOUSLY:** Check for shorts and grounds. Check wiring connections at the remote. **POLARITY IS IMPORTANT!** Try reversing the two (2) wires on the remote and see if the buzzer stops. If it does, check that the call LED and voice still works properly.
- 5. NO VOICE TO AND FROM REMOTE:** Check wiring connections at the remote. **POLARITY IS IMPORTANT!** Try reversing the two (2) wires on the remote and see if everything functions properly.

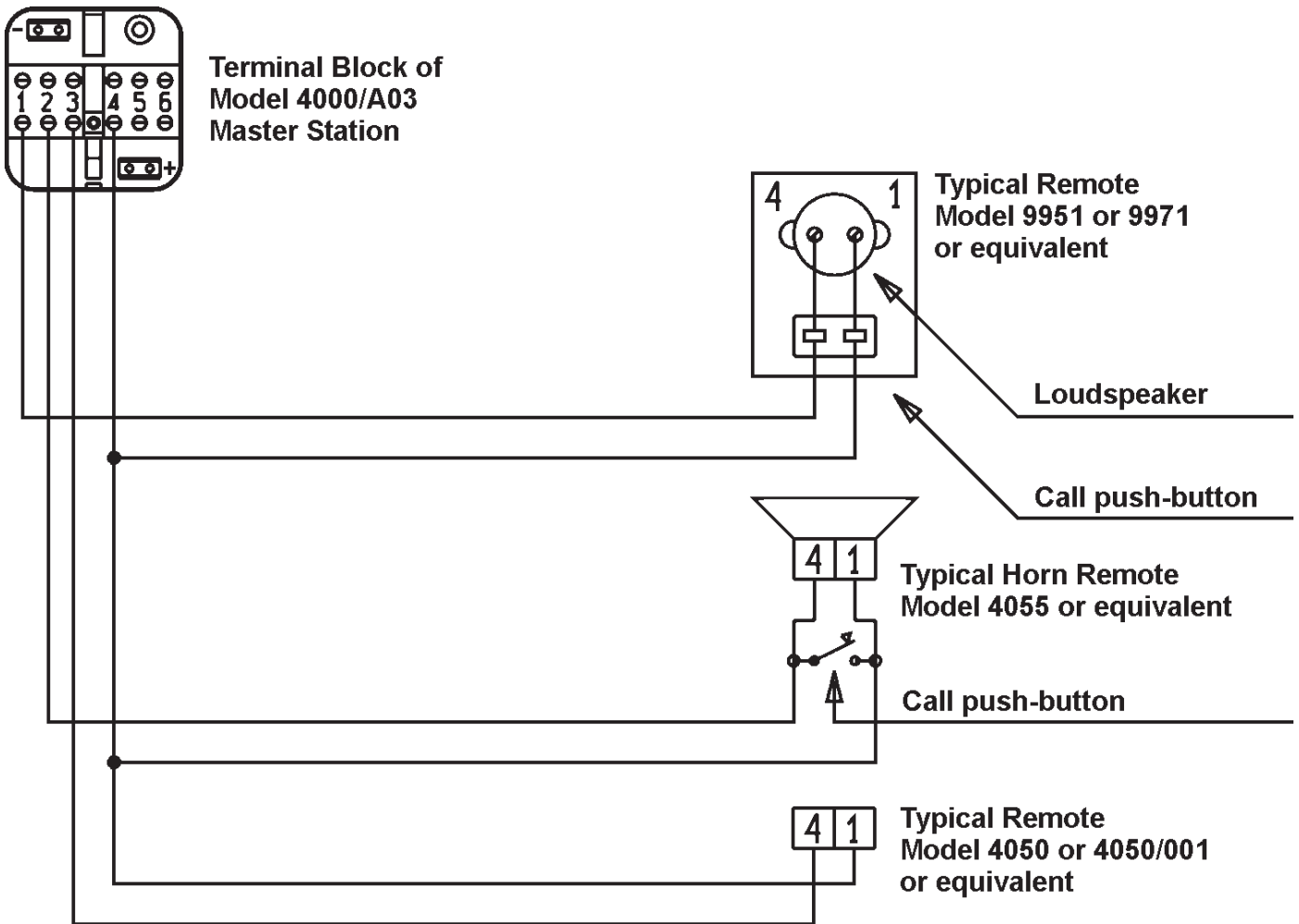
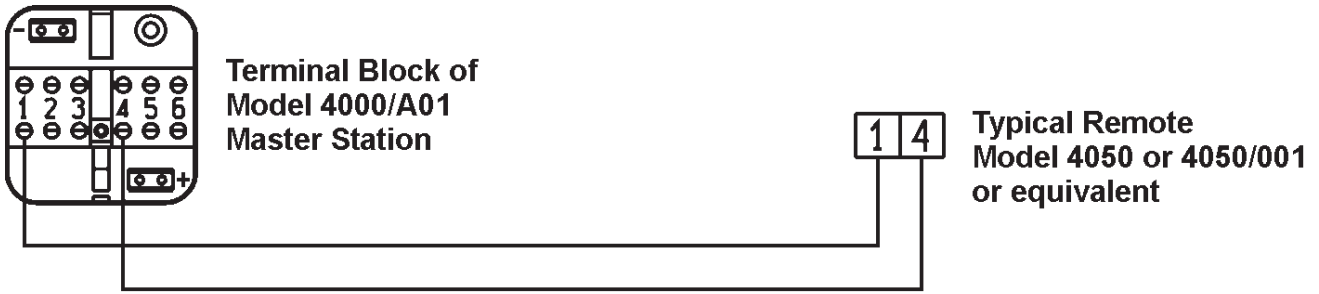
- 6. SQUEALING OR HOWLING:** Check wiring for pinching, crimping, crushing, shorting, or being too close to another source of audio interference. Make sure master is not too close to the remote station. Adjust volume control knob on master station as needed.
- 7. NO REPLY FROM 4050/001 REMOTE:** Make sure privacy switch is de-activated. Adjust volume control knob on master station as needed.

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

4000/A18 Master Station Controls (shown)



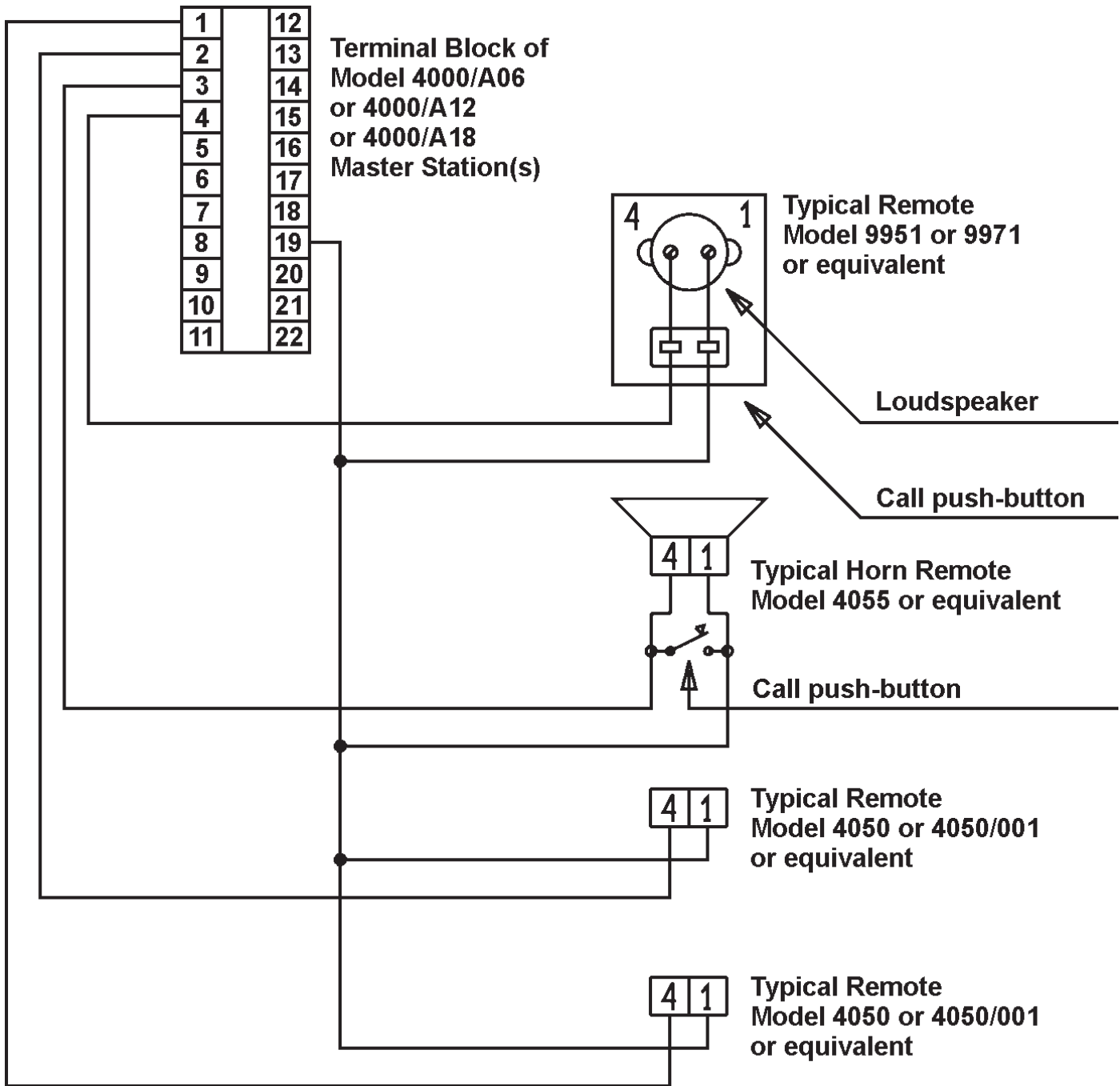
**TYPICAL WIRING LAYOUT DIAGRAM FOR THE
4000/A01 OR 4000/A03 MASTER STATION
UP TO THREE (3) REMOTE STATIONS**



Notes:

1. All other wiring can be #22AWG unless shown otherwise. If any wire run exceeds 330 feet use #18AWG in place of the #22AWG UP TO 1,000 feet.
2. Observe all local and national electrical codes.
3. All terminals connections shown may not be in the order that they appear on the equipment.

**TYPICAL WIRING LAYOUT DIAGRAM FOR THE
4000/A06, 4000/A12 OR 4000/A18 MASTER STATION
UP TO 18 REMOTE STATIONS**



Notes:

1. All other wiring can be #22AWG unless shown otherwise. If any wire run exceeds 330 feet use #18AWG in place of the #22AWG UP TO 1,000 feet.
2. Observe all local and national electrical codes.
3. All terminals connections shown may not be in the order that they appear on the equipment.

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