



## NH200A Amplifier and Power Supply Installation and Use Instructions Used with the HT3003/2 and/or HT2003/2 Series Inside Handset Intercom Stations

### APPLICATION

The NH200A series intercom system allows one or more HT3003 and/or HT2003 series inside handset stations to communicate with one or more door entry stations, and to release the door opener at each door entry station. A number of optional accessories are available to provide a complete entry intercom signaling and communications system.

### 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 electrical codes.
5. Apply power and check operation.

### HOUSING INSTALLATION AND EQUIPMENT LOCATION

#### INSIDE HANDSET STATIONS

Locate stations where needed at convenient speaking height, about 4.5 feet (137cm) 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.

#### OUTSIDE STATION(S)

Locate door station(s) at convenient speaking height on exterior wall near entrance. Door stations must have 16-ohm speaker and MK1C type electret condenser microphone installed.

#### NH200A AMPLIFIER/POWER SUPPLY

The NH200A is usually located in a separate equipment location. You can mount the NH200A by peeling and sticking using the self-stick mounting tabs or by screwing it to the mounting surface using the holes provided. It must be located away from any source of direct heat or extreme cold and in an accessible location. Keep at least 3 feet (1 meter) away from transformers, light dimmers or other electrical devices or wiring or sources of electrical interference.

#### DUAL ENTRY ADAPTOR (TU1007A)

For multi-entrance installations you must use one or more model TU1007A multi-entrance adaptors. When these adaptors are used, they should be installed next to the NH200A, in the central equipment location. They do not require any additional transformers.

The DO-001A (or equivalent 16VAC type) electric door release is installed in the door jamb in place of the regular door strike plate.

### WIRING

#### INSIDE HANDSET STATIONS

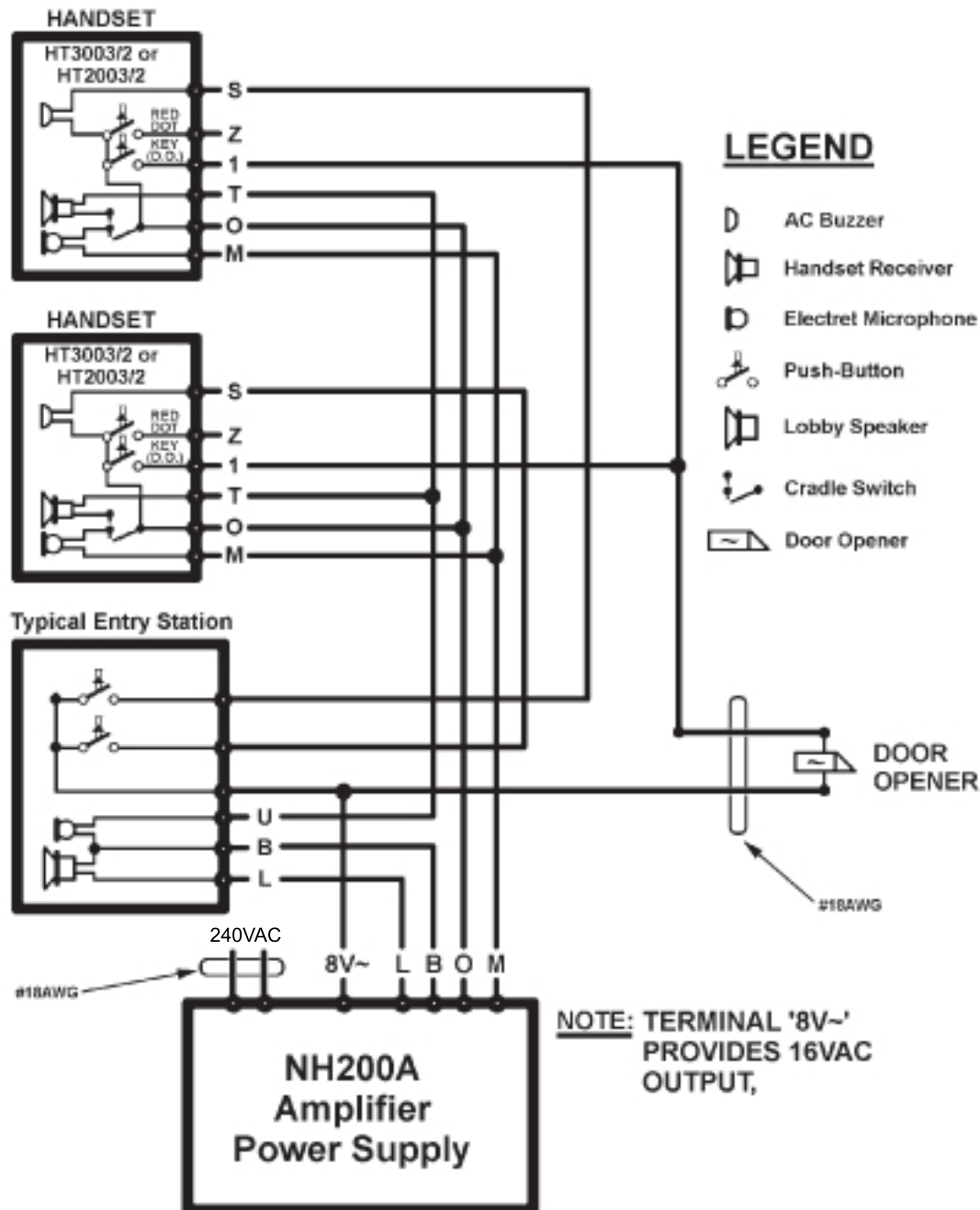
Run 4 conductor (common) and 1-conductor (selective) #22AWG cable from station to station and to the central equipment location. Additional cables may be used to serve other stations on other risers (lines). Cables may be straight or twisted pair type and may be solid or stranded conductors.

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 ENTRY STATION

Run 3 conductor #22AWG cable from speaker/microphone to NH200A amplifier. If the NH200A amplifier is not mounted behind the entry door station, and is mounted remotely, we recommend using shielded cable from the speaker/microphone wires to the NH200A amplifier/power supply. Run the #22AWG pushbutton wiring as well. Route cable away from inside station cable, AC power wiring, transformers, fluorescent lights, light dimmers and other electrical devices. Protect cable from damage. Shielded cable should be used if AC interference is a concern.

## TYPICAL WIRING LAYOUT DIAGRAM FOR A SINGLE ENTRANCE SYSTEM



### Notes:

1. Use #18AWG wiring to transformer and door opener. All other wiring can be #22AWG.
2. Talk down volume can be adjusted using volume control (potentiometer) on NH200A amplifier/power supply.
3. When connecting to a magnetic door lock or other 'fail safe' type door lock, use the optional model PK407A specialty relay, for each entrance door lock.
4. If the NH200A amplifier is not mounted behind the entry door station, and is mounted remotely, we recommend using shielded cable from the speaker/microphone wires to the NH200A amplifier/power supply.
5. Observe all local and national electrical codes.
6. All terminals connections shown may not be in the order that they appear on the equipment.