

INSTRUCTION GUIDE

Door Chime Intercom DH720 Congratulations on a wise purchase!

Enclosed you will find:

- Indoor Speaker
- Outdoor Speaker
- Wire Labels
- Transformer
- Wire Nuts
- Pull Cord
- Wall Anchors
- Screws

INSTALLATION

Replacement for Existing Chime

1. Locate Indoor Speaker where chime is located. In many cases existing wiring can be used—see enclosed “Identifying Chime Wiring.”
2. If existing Chime is mounted at a height which is inconvenient to reach, a pull cord is provided to operate the intercom control button.
3. Important: Do not locate speakers more than 500 feet apart. Do not locate speakers back-to-back on the same wall.
4. Locate Outdoor Speaker where existing pushbutton is located. Use pushbutton wiring—see enclosed “Identifying Chime Wiring.” Note: If existing pushbutton is uneven or narrow surface, it will be necessary to locate Outdoor Speaker elsewhere.
5. Install Outdoor Speaker: (A) on an even surface; (B) on a surface wide enough for the speaker; (C) as close to existing wiring as possible.

Caution:

- Turn off house power at the source and leave it off until installation is complete.
- All wiring must comply with local wiring codes.

New Installation Location

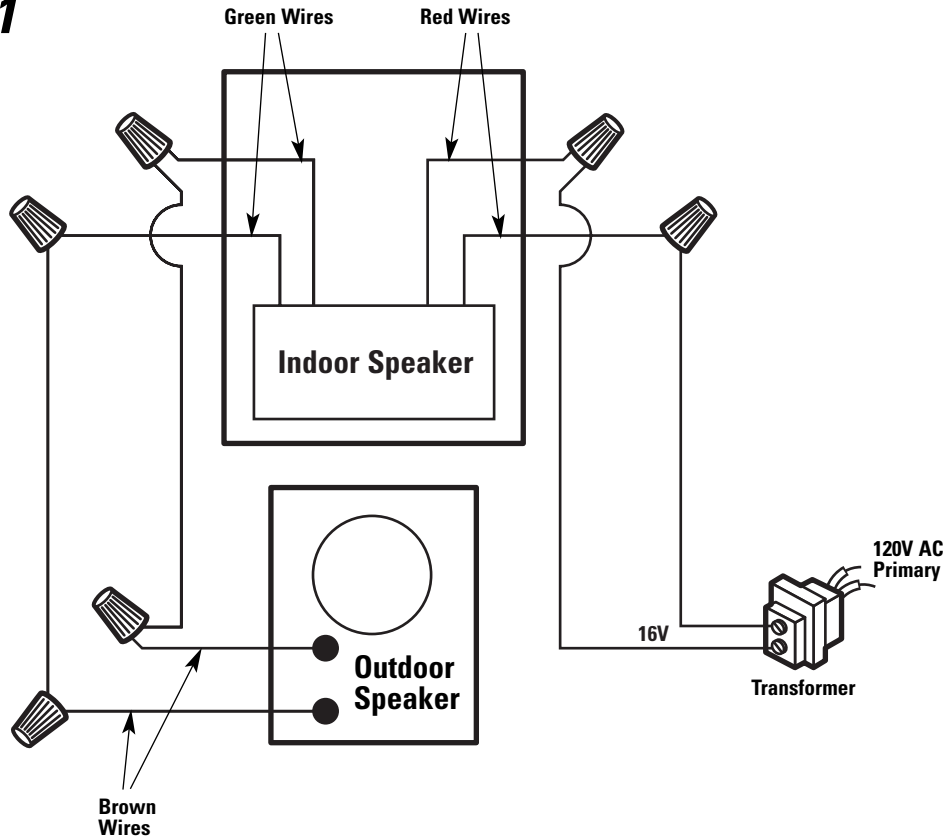
1. Install the Indoor Speaker at an easy operating location.

2. Install the Outdoor Speaker close to the door and at an easy operating position.
3. Try to install speakers where running the wiring will not present a problem. Avoid running the speaker wire next to any AC power wires.

New Installation

1. Install a 16-volt transformer (Carlson Model DH905). Mount the transformer to a junction box or a circuit breaker box. Do not mount transformer in high temperature area (i.e., attic). Follow transformer installation instructions. Connect primary side of the transformer to 120V AC.
2. Run standard 20 AWG (DH965) bell/chime wire from transformer’s secondary terminals to the Indoor Speaker location.
3. Run standard bell/chime wire from the Outdoor Speaker location to the Indoor Speaker location.
4. Connect brown Outdoor Speaker wires to green Indoor Speaker wires shown in Figure 1.
5. Connect transformer wires to red Indoor Speaker wires as shown in Figure 1.
6. Use wire nuts to make all connections. Insulate all connections with electrical tape.
7. If electric door strike feature is required, see “Optional Electric Door Strike Wiring.”

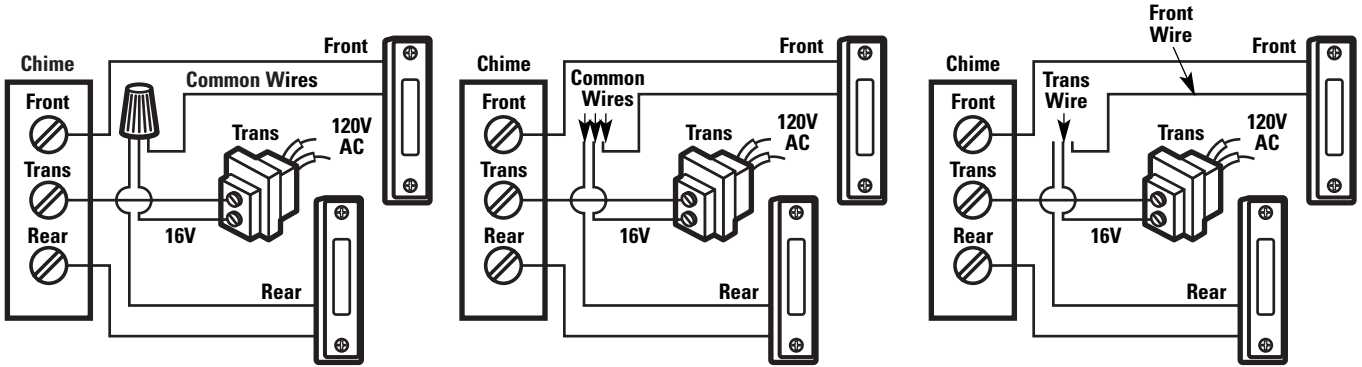
Figure 1



HOW TO IDENTIFY EXISTING CHIME WIRING

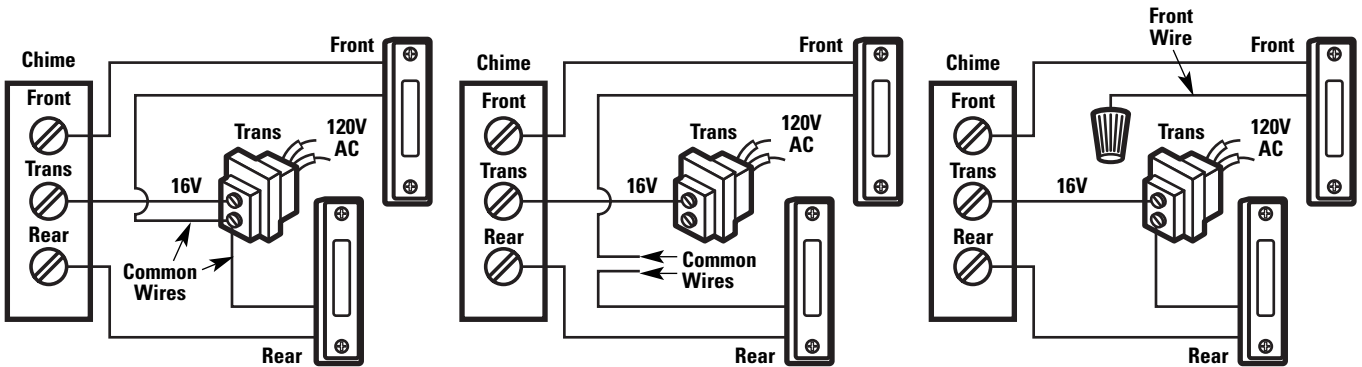
Identify the existing wiring by determining whether the common wire connection is at the transformer location or at the chime location. Follow the instructions and diagrams for identifying the individual wires. When wiring has been identified and labeled, proceed to installation instructions.

Wiring #1: Front and rear door pushbuttons - Common wire connection at chime

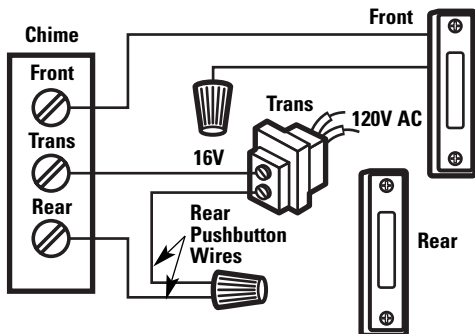


1. Disconnect the 3 common wires.
2. Touch each wire, one at a time, to the chime's FRONT terminal. The wire that causes the chime to sound is the TRANSFORMER wire. Label the wire TRANS.
3. One at a time, connect the remaining wires to the wire labeled TRANS. Then, operate the FRONT pushbutton. The wire that causes the chime to sound, label FRONT. Confirm that the other wire operates the rear pushbutton. Label the wire REAR.
4. Proceed to installation instructions.

Wiring #2: Front and rear door pushbuttons - Common wire connection at transformer



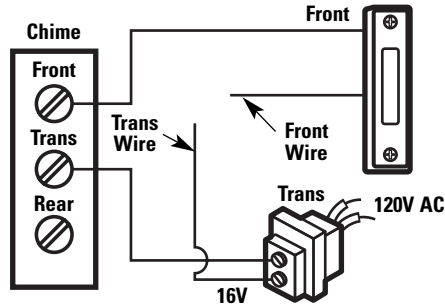
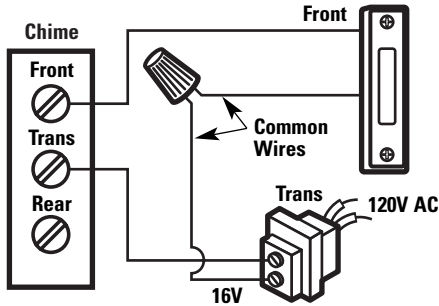
1. Disconnect the two common wires located on transformer screw terminal.
2. Connect one common wire to the transformer terminal and press the FRONT pushbutton. If wire operates the chime, label the wire FRONT. If not, connect other wire; and label wire FRONT.
3. Reconnect the REAR wire to the transformer terminal. (The FRONT wire can be used for connection to the Door Speaker.)



4. Disconnect the wires from the REAR pushbutton and connect them together. This wiring will be used as a second TRANSFORMER wire for connection to the Indoor Speaker.
Note: The rear button wire can not be used; therefore, the rear button will not operate intercom. If rear button is removed, fill hole with appropriate material.
5. Now, it will be necessary to run wiring from the Outdoor Speaker to the Indoor Speaker. Proceed to installation instructions.

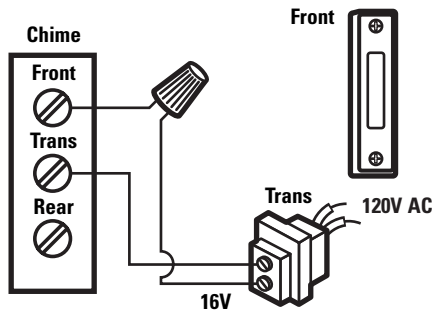
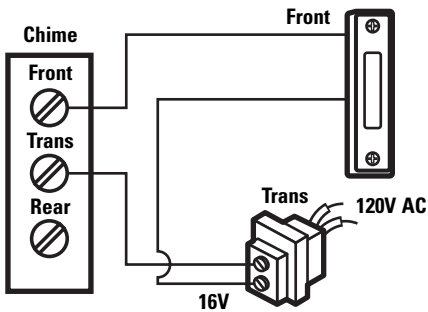
IDENTIFY CHIME WIRING (continued)

Wiring #3: Front door pushbutton only - Common wire connection at chime location



1. Disconnect the two common wires.
2. Touch each wire, one at a time, to the chime's FRONT terminal. The wire that causes the chime to sound is the TRANSFORMER wire. Label this wire TRANS. Label the other wire FRONT.
3. Proceed to installation instructions.

Wiring #4: Front door pushbutton only - Common wire connection at transformer location

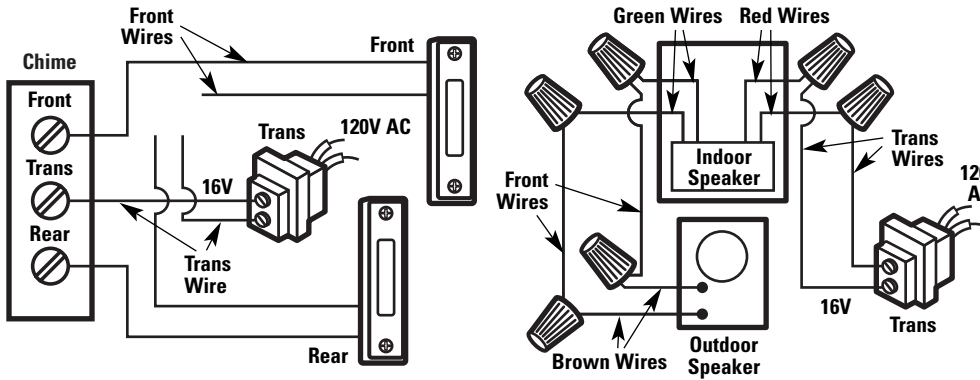


1. Disconnect the two wires from FRONT pushbutton.
2. Connect the two wires together. The wiring will be used as a second TRANSFORMER wire for connection to the Indoor Speaker. (The FRONT wire can be used for connection to the door speaker.)
3. It will be necessary to run wiring from the Outdoor Speaker to the Indoor Speaker. Proceed to the installation instructions.

INTERCOM INSTALLATION OPTIONS

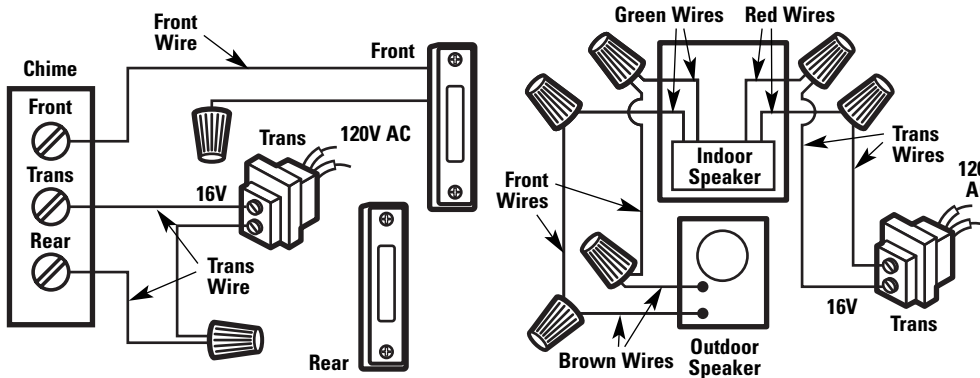
After you identify the chime wiring, proceed with the corresponding installation step.

Installation for Front and Rear Door Pushbuttons—Common Wire Connection at Chime Location



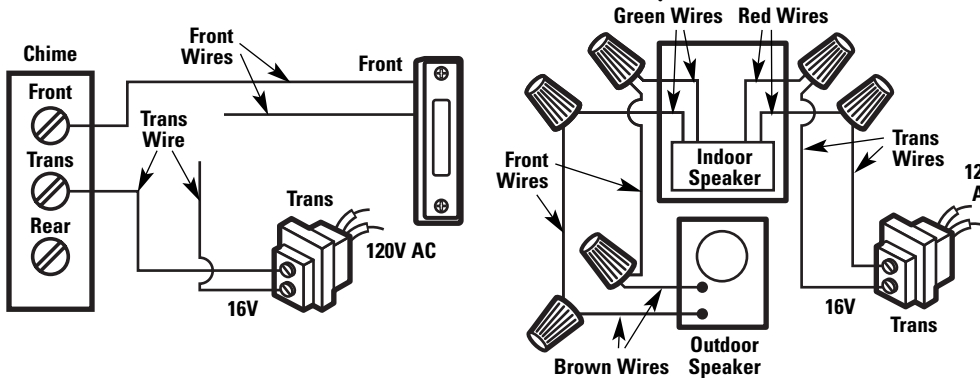
1. Label the FRONT and TRANS wires connected to chime terminal screws. Disconnect wires from chime and remove chime.
 2. Connect the two wires marked TRANS to the Indoor Speaker's RED wires.
 3. Connect two wires marked FRONT to the Indoor Speaker's GREEN wires.
 4. Disconnect FRONT pushbutton and remove pushbutton. Connect two front pushbutton wires to Outdoor Speaker's BROWN wires.
- Note:** The rear button wire can not be used; therefore, the rear button is removed, fill hole with appropriate material.

Installation for Front and Rear Door Pushbuttons—Common Wire Connection at Transformer Location



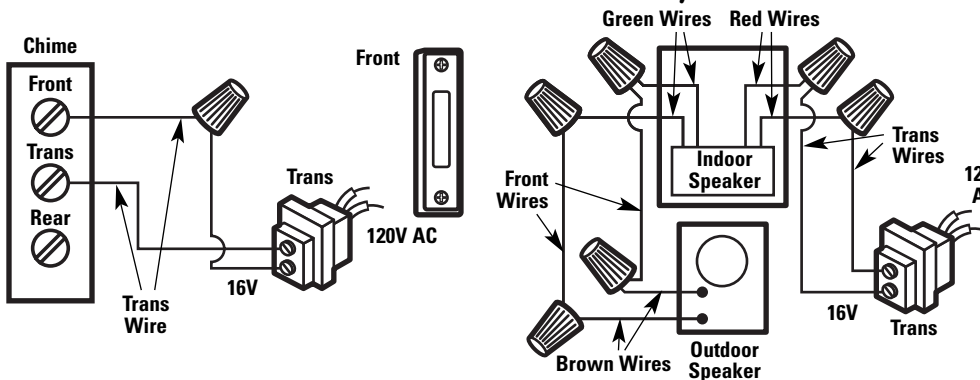
1. Label the two wires connected to the TRANS and REAR chime terminals. Label both wires TRANS.
2. Label FRONT wire connected to chime terminal. Disconnect all wires from chime and remove chime.
3. Since only one FRONT wire exists at chime location, it will be necessary to run at least one more standard bell/chime from the Outdoor Speaker location to the Indoor Speaker location. Run wire and label it FRONT.
4. Connect two wires marked TRANS to Indoor Speaker's RED wires.
5. Connect two wires marked FRONT to the Indoor Speaker's GREEN wires.
6. Connect two wires at Outdoor Speaker/pushbutton location to Outdoor Speaker's BROWN wires.

Installation for Front Door Pushbutton Only—Common Wire Connection at Chime Location



1. Label FRONT and TRANS wires connected to the chime terminal screws. Disconnect wires from chime and remove chime.
2. Connect two wires marked TRANS to Indoor Speaker's RED wires.
3. Connect two wires marked FRONT to Indoor Speaker's GREEN wires.
4. Disconnect front pushbutton. Connect two front pushbutton wires to Outdoor Speaker's BROWN wires.

Installation for Front Door Pushbutton Only—Common Wire Connection at Transformer



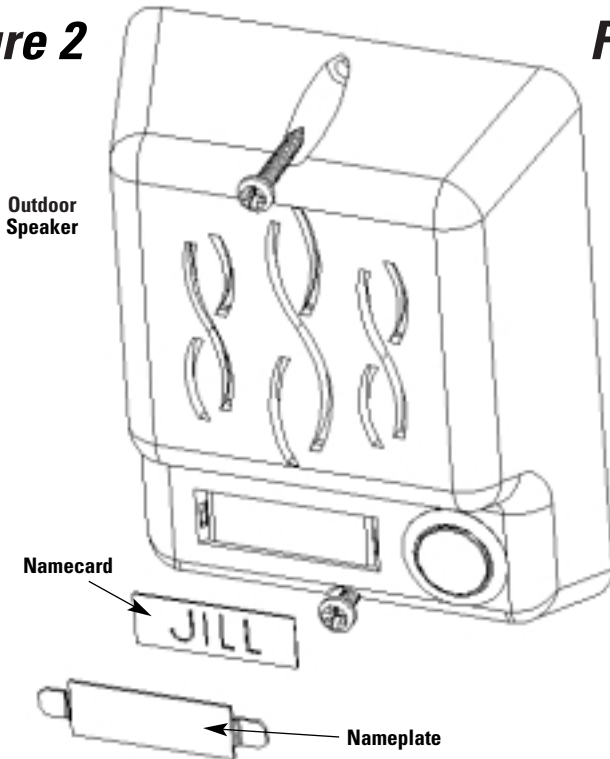
1. Label the two wires connected to TRANS and FRONT chime terminals—label both wires TRANS.
2. Run a pair of standard bell/chime wires from the Indoor location to the Outdoor Speaker location. Label wires DOOR.
3. Connect two wires marked TRANS to Indoor Speaker's RED wires.
4. Connect two wires marked DOOR to the Indoor Speaker's GREEN wires.
5. Connect wires at Outdoor Speaker location to the Outdoor Speaker's BROWN wires.

MOUNT THE SPEAKERS

Outdoor Speaker

1. Once the Outdoor Speaker wiring is connected, the speaker can be mounted.
2. Make sure speaker is mounted on a flat surface.
3. Use two screws (included) to mount speaker to surface. Use wall anchors if necessary. See Figure 2.
4. Remove nameplate and namecard from Outdoor Speaker. Write name on card and insert into nameplate. Snap nameplate into place. See Figure 2.

Figure 2



Indoor Speaker

1. Once the Indoor Speaker wiring is connected, the speaker can be mounted.
2. Attach pull cord if required. See Figure 3. Insert cord through hole in TALK/LISTEN button. Secure cord with knot.
3. Use two screws (included) to mount speaker to wall. Use wall anchors if necessary. See Figure 4.

Figure 3

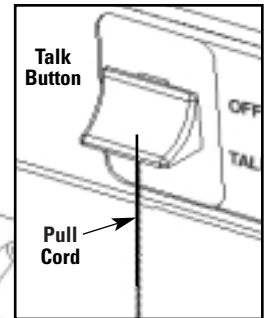
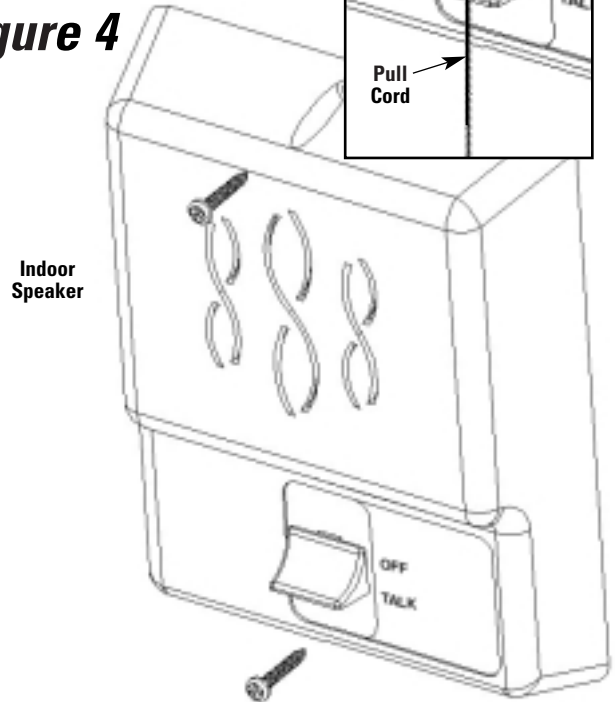


Figure 4



TIMEOUT AND VOLUME ADJUSTMENTS

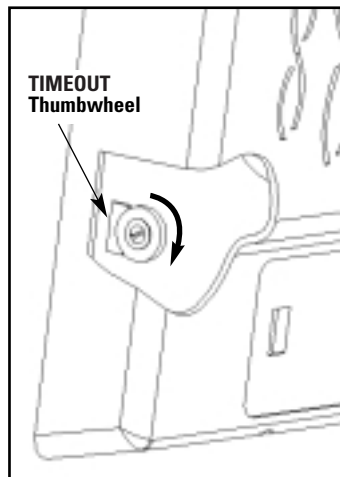
Timeout

The Outdoor Speaker operates "hands-free." The intercom conversation is controlled by the Indoor Speaker. Operation is as follows: To speak to the Outdoor Speaker, depress the TALK button. To listen to the Outdoor Speaker, release the TALK button.

When the TALK button is released, the Outdoor Speaker will be active until it times out. This timeout period is factory-set for 25 seconds.

If the owner desires a longer timeout period, it can be adjusted up to 35 seconds. Adjust timeout by turning TIMEOUT thumbwheel, located inside on the circuit board, pot clockwise to increase time. See Figure 5.

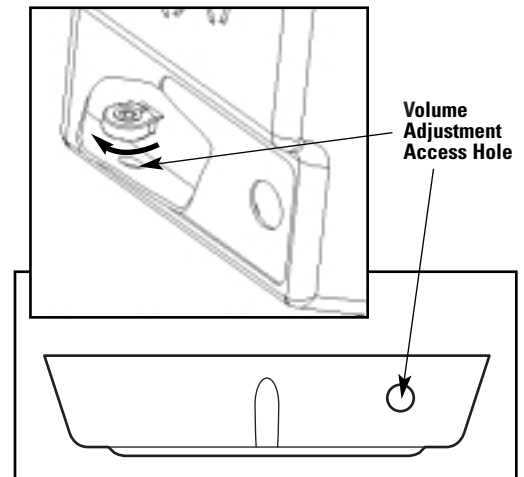
Figure 5



Volume

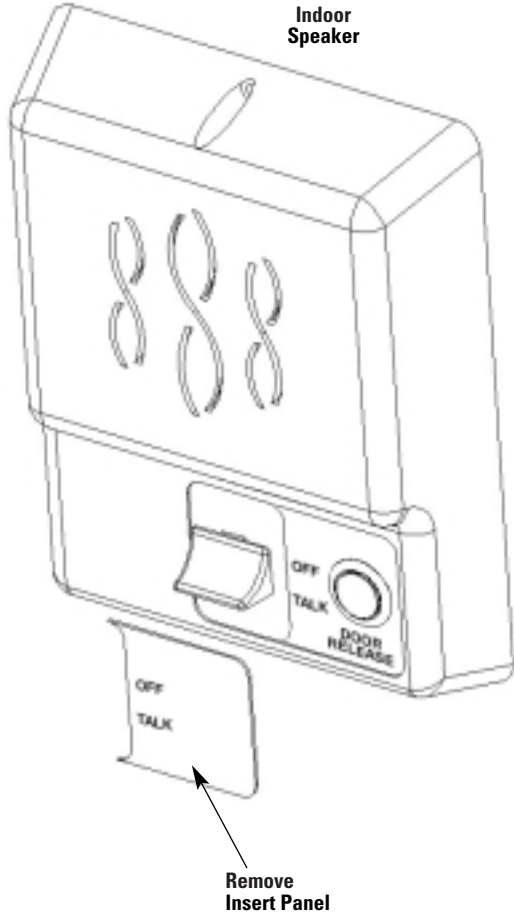
The volume is factory set. However, if the intercom volume needs to be adjusted, use a screwdriver through the hole in the bottom of the speaker to make the adjustment. Turn clockwise to INCREASE volume. See Figure 6.

Figure 6



OPTIONAL ELECTRIC DOOR STRIKE WIRING AND PUSHBUTTON INSTALLATION

Figure 7



An optional Electric Door Strike feature can be added to the Intercom system. This feature requires adding one DH1201 or DH1202 pushbutton and one DH970 Door Strike—both sold separately.

Pushbutton Installation

1. Remove insert panel from Indoor Speaker. See Figure 7.
 2. Insert the DH1201 or DH1202 through the pushbutton hole in the Indoor Speaker.
- Note:** Do not use lighted buttons.

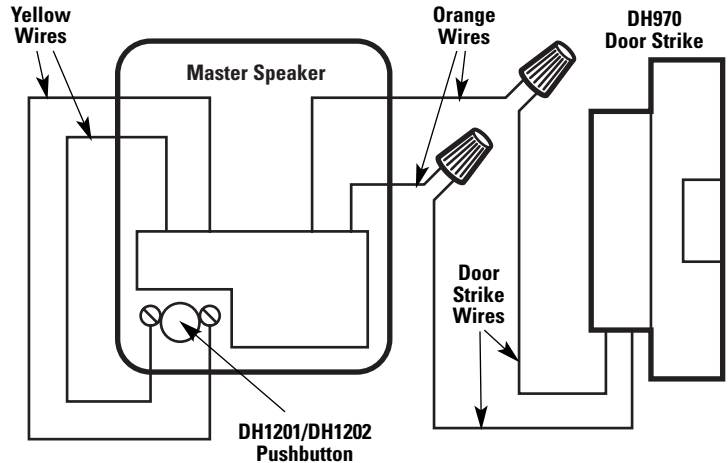
Wiring Connections

1. Run standard bell/chime wire from Door Strike location to Indoor Speaker location. See Figure 8.
2. Connect the two yellow wires from the Indoor Speaker's PC board to the pushbutton terminals.
3. Connect the Door Strike wires to the two orange wires on the Indoor Speaker's PC board.

Electric Door Strike Mounting

1. Mount Door Strike at the door latch according to the instructions included with the Door Strike.

Figure 8



LIMITED WARRANTY

The product you have purchased is guaranteed against defects in workmanship for the period stated on the package. Warranties implied by law are subject to the same time period limitation. Some states do not allow limitations on how long an implied warranty lasts, so this time limitation may not apply to you.

If the product fails due to a manufacturing defect during normal use, return the product and dated sales receipt to the store where purchased for replacement OR send the product and the dated sales receipt to:

Lamson & Sessions
25701 Science Park Drive
Cleveland, OH 44122 USA
Attn: LHP Customer Service

Not Covered - Batteries, light bulbs, and other expendable items are not covered by this warranty. Repair service, adjustment and calibration due to misuse, abuse or negligence are not covered by this warranty. Unauthorized service or modification of the product or of any furnished components will void this warranty in its entirety. This warranty does not include reimbursement for inconvenience, installation, set-up time, loss of use, postage, unauthorized service, or other products used in conjunction with, but are not supplied by, Lamson & Sessions.

All requests for replacement must include a dated sales receipt (copies accepted). LAMSON & SESSIONS IS NOT LIABLE FOR LOST PROFITS, INDIRECT, SPECIAL, EXEMPLARY, INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING WITHOUT LIMITATION ANY SUCH DAMAGES DUE TO IMPROPER WIRING OR MISUSE OF THE PRODUCT. As some states do not allow the exclusion or limitation of incidental or consequential damages, the above limitation and exclusion may not apply to you.