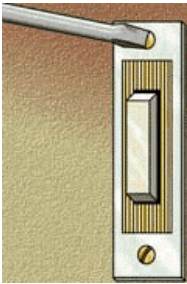


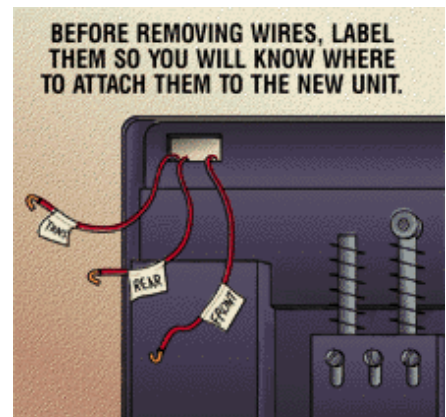
Handy Hints for Installing Doorbells

- You can buy pushbuttons and chime boxes together in a kit or separately, depending on your needs.
- When running wire for the doorbell, take a measurement of the length from your pushbutton location to the transformer, and then add about 15 feet to the measurement. This additional cable length will help provide you with some leeway as you route your cable through twists and turns.
- Installing two or more doorbell pushbuttons? Calculate the measurement of the distance from each of your pushbutton locations back to the transformer, and then add the extra 15 feet to that total.
- Pushbuttons are the most convenient when installed at doorknob level about four to five inches from the edge of the door.
- To ensure an unobtrusive chime box, mount your interior box unit six feet from the floor, at a minimum.
- Run cables inside walls or ceilings so they are safely out of sight.

HOW TO REPLACE A DOORBELL



1. Turn off the breaker that supplies power to the doorbell.
2. Carefully remove the doorbell switch from beside the door. Remove the mounting screws and gently pull the switch and wires away from the hole through which the wires exit the house. Use a circuit tester to ensure the power is off.
3. Secure the wires so they cannot accidentally slide back into the hole and disappear.
4. Disconnect the wires from the switch.
5. Connect the wires to the screw terminals on the new switch. You don't have to concern yourself about which wire goes to which terminal—it doesn't matter.
6. Remove the tape from the wires, and feed them back into the wall so the new switch sits against the area from which you removed the old one.
7. Mount the switch using the screws provided.
8. Locate the old chime unit inside the house and remove it by taking out the mounting screws. Again, pull the unit away from the wall and secure the wires to prevent them from sliding through and disappearing behind the wall.
9. Remove the wires one at a time. Apply a small piece of tape to each and label the screw terminal location from which it was removed. The terminals should already be labeled on the unit itself. Discard the old unit.
10. Remove the cover from the new chime unit. Thread the wires through the base of the unit and install the base against the wall using the mounting screws provided.
11. Connect the wires to the appropriate terminals using the labels as a guide.
12. Attach the cover to the chime unit and restore power to the circuit.



Installing 2 or More Chimes

- It is possible to install up to 3 standard door chimes that are activated by front, back, or side door buttons. This is handy for people who find themselves working in a basement or up on a second floor area away from the primary door chime.
- You will probably have to install a new transformer. Single door chimes work best with 16 volt 10 watt transformers. To power your additional chime, you will need to install a 16 volt 30 watt transformer. The voltage and wattage of transformers is stamped or printed on the body of the transformer. When you install the 30 watt transformer, it can go in the same location as your existing transformer.
- use the proper wire. Purchase 18 or 20 gauge wire that is UL approved. Make sure the wire is the solid type, not stranded. Purchase a large spool containing several hundred feet. You will be surprised at how much wire you will use. The existing wires in your walls do not require upgrading.
- Before you begin, you need to disconnect the high voltage power to the transformer. If you don't do this you can easily cause an electrical short that will harm the transformer, the door chimes, and/or yourself.
- remove the covers from your door chimes. You will probably see four screws. Three of these screws are used to connect to the door buttons. They are usually clearly marked: Front, Rear, and Side. The other screw is marked Transformer. Your challenge will be to run 4 separate wires between the two door chimes. All you have to do is hook each individual wire to the same screw on each chime. For example, the first wire you run should attach to the screw marked Transformer on each chime. Be sure to leave the existing wires in place on the original door chime.
- Once you have made all of the connections, re-energize the new transformer. As long as you installed a standard 2 note chime (Ding – Dong) to match your existing chime, both chimes should activate when someone pushes the front door button. Don't make the mistake of trying to install a fancy 4 or 8 note chime if you have a traditional 2 note door chime. These fancy door chimes require a fifth wire to be run between the door chime and the door buttons. That can get complicated.
- This process will create additional door button you will have at each door. In order to activate your old door chime and the new one, a visitor will have to push both buttons. You may want to make a little sign that tells visitors to push both buttons.
- Solve your wiring problem by installing a new separate wireless door chime. These are very clever devices. They require no wires at all. The door chimes themselves are very attractive. Many have up to a 100 foot operating range. You can even get one that has a fancy 8 note chime.
 - Because the wireless models come with over 50 different codes, your TV remote and garage door operators will not cause the door chime to activate. You can also buy a wireless door chime that uses your existing door buttons and wall chime. The new slave chime installs in just minutes using your existing household electric current and the low voltage system already in place.