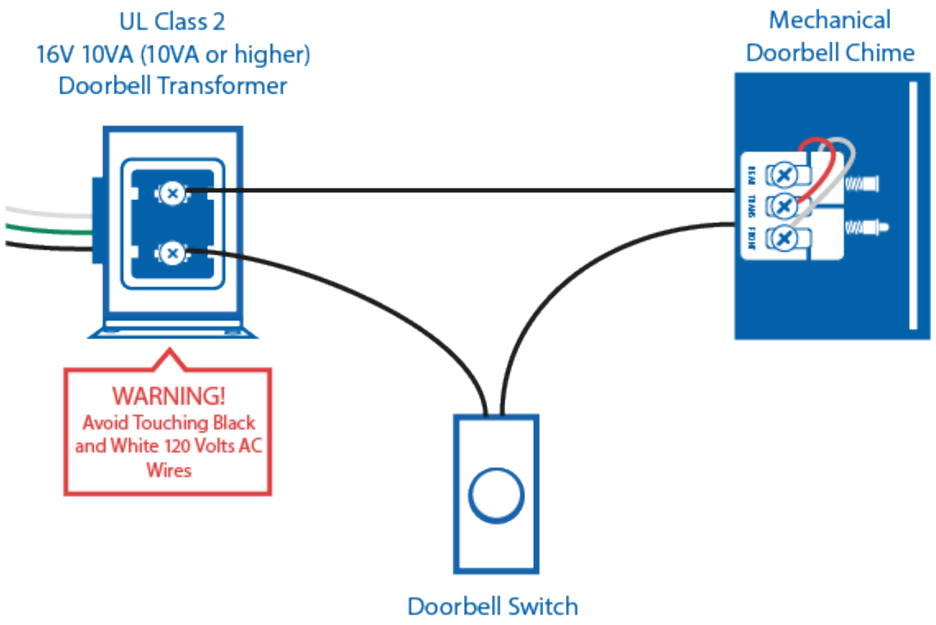
SkyBell HD

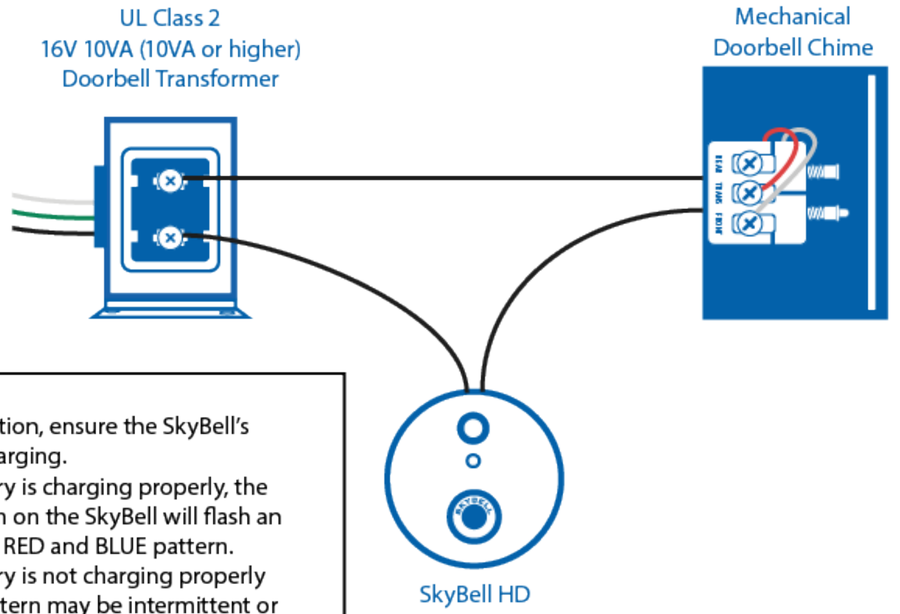
Power

SKYBELL® HD
WI-FI VIDEO DOORBELL

Doorbell wiring before SkyBell installation



Doorbell wiring after SkyBell installation



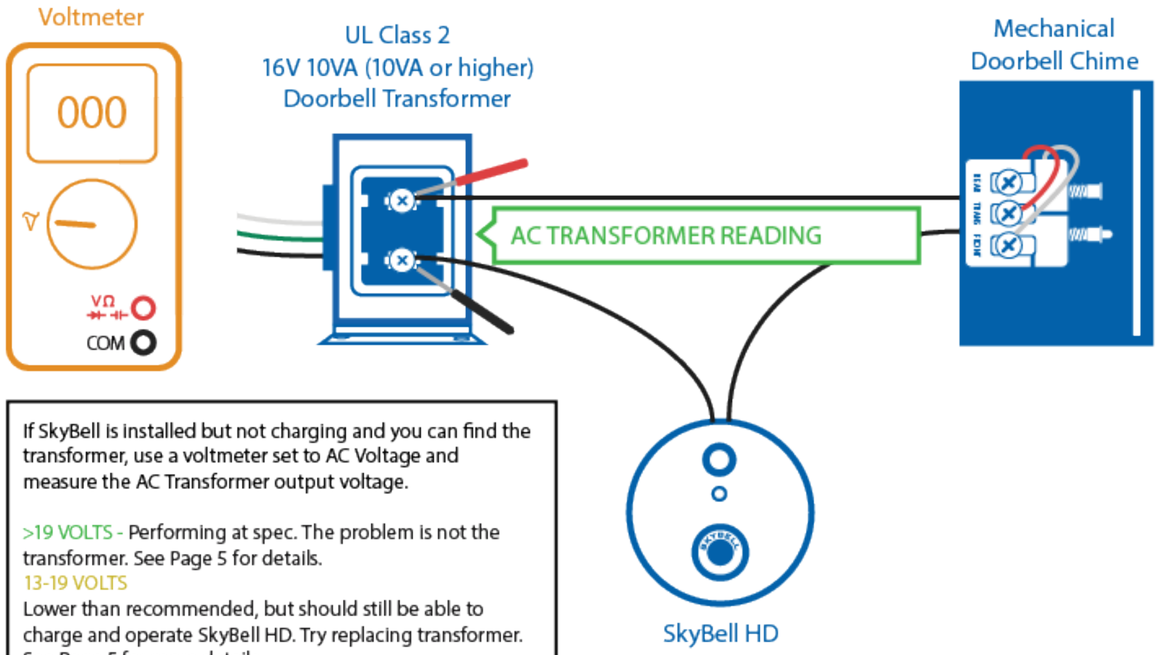
After installation, ensure the SkyBell's battery is charging.
- If the battery is charging properly, the LED pattern on the SkyBell will flash an alternating RED and BLUE pattern.
- If the battery is not charging properly the LED pattern may be intermittent or not flash at all.

If this is the case go to Page 3

SkyBell HD

Power Debugging

SkyBell not Charging



If SkyBell is installed but not charging and you can find the transformer, use a voltmeter set to AC Voltage and measure the AC Transformer output voltage.

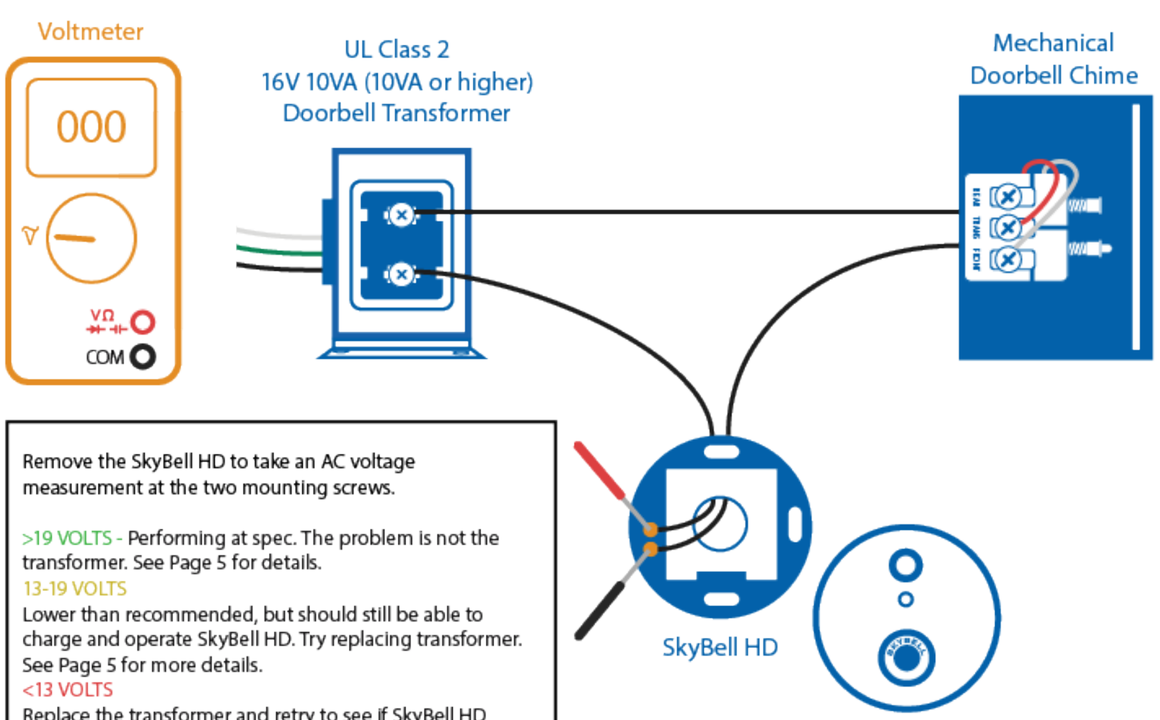
>19 VOLTS - Performing at spec. The problem is not the transformer. See Page 5 for details.

13-19 VOLTS

Lower than recommended, but should still be able to charge and operate SkyBell HD. Try replacing transformer. See Page 5 for more details.

<13 VOLTS

Replace the transformer and retry to see if SkyBell HD charges.



Remove the SkyBell HD to take an AC voltage measurement at the two mounting screws.

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13-19 VOLTS

Lower than recommended, but should still be able to charge and operate SkyBell HD. Try replacing transformer. See Page 5 for more details.

<13 VOLTS

Replace the transformer and retry to see if SkyBell HD charges.

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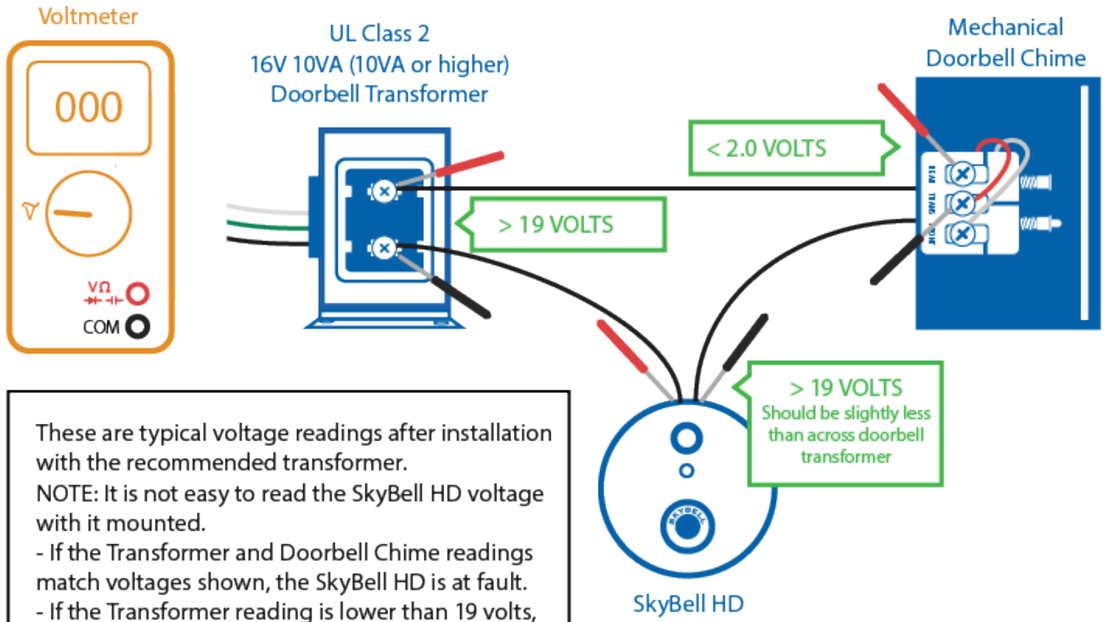
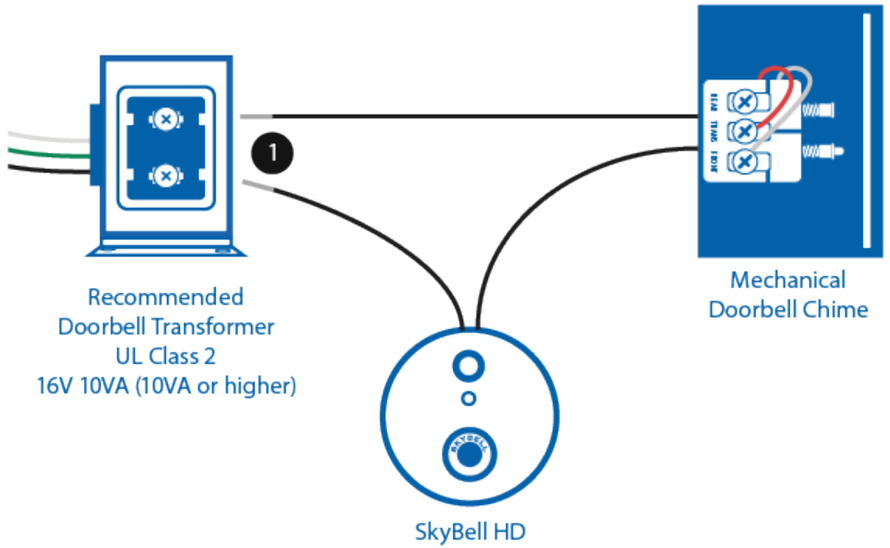
How to take voltage measurements



These are typical voltage readings after installation with the recommended transformer.
NOTE: It is not easy to read the SkyBell HD voltage with it mounted.
- If the Transformer and Doorbell Chime readings match voltages shown, the SkyBell HD is at fault.
- If the Transformer reading is lower than 19 volts, the voltage at the SkyBell will be similarly lower. The Doorbell Chime voltage may go slightly higher than 2 Volts AC.

STEP 1 Unscrew transformer screws to disconnect both wires from transformer



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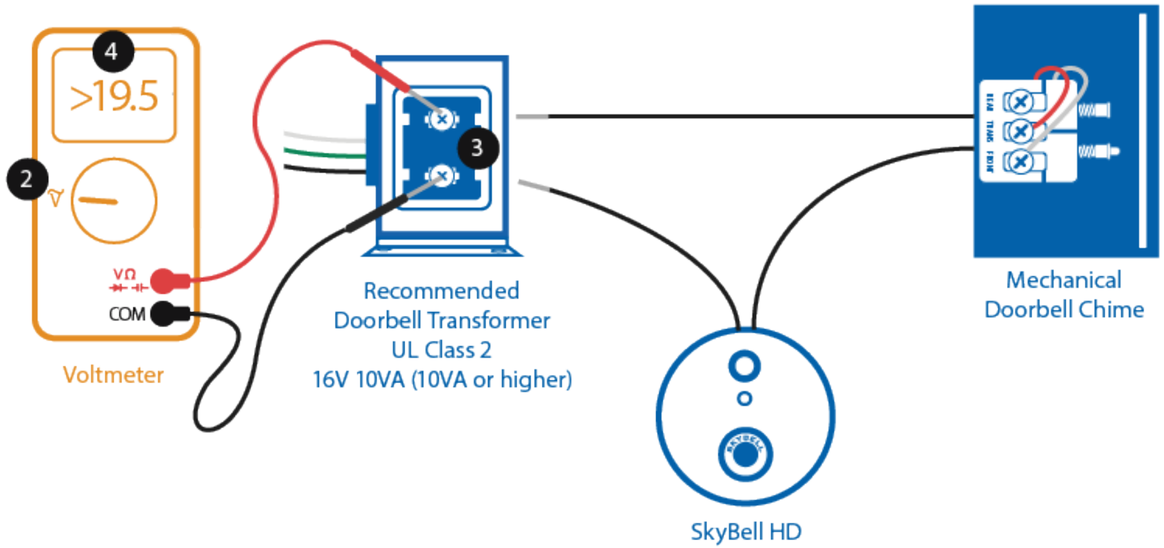
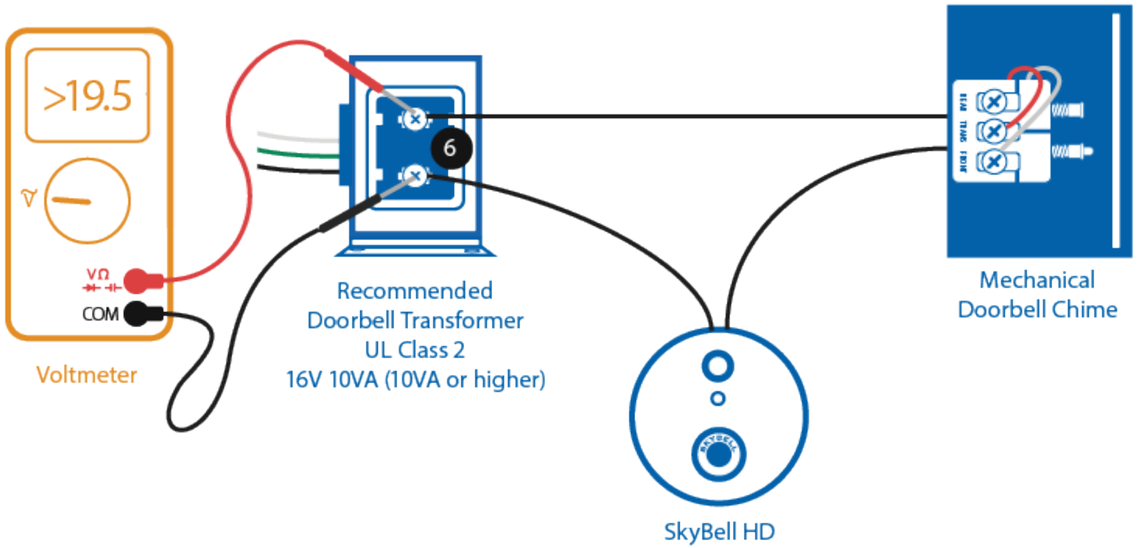
Power Debugging

How to take voltage measurements

STEP 2 Set the Voltmeter to $\tilde{V}$ (Volts AC)
STEP 3 With the wires disconnected from the transformer, use the probes to measure the voltage at the transformer's two screws
STEP 4 If using recommended transformer, you should measure greater than 19 Volts AC at the transformer screws. You will compare this reading with reading from next page.



STEP 5 Reconnect the 2 wires.
STEP 6 With the wires reconnected to the transformer, use the probes to measure the voltage at the transformer's two screws. This reading should be the same as the reading from Step 4. It should be no less than 0.3 Volts. Ex: 19.9 volts and >19.6 volts.
STEP 7 If it is >0.3 Volts, replace the Transformer with a recommended Transformer.



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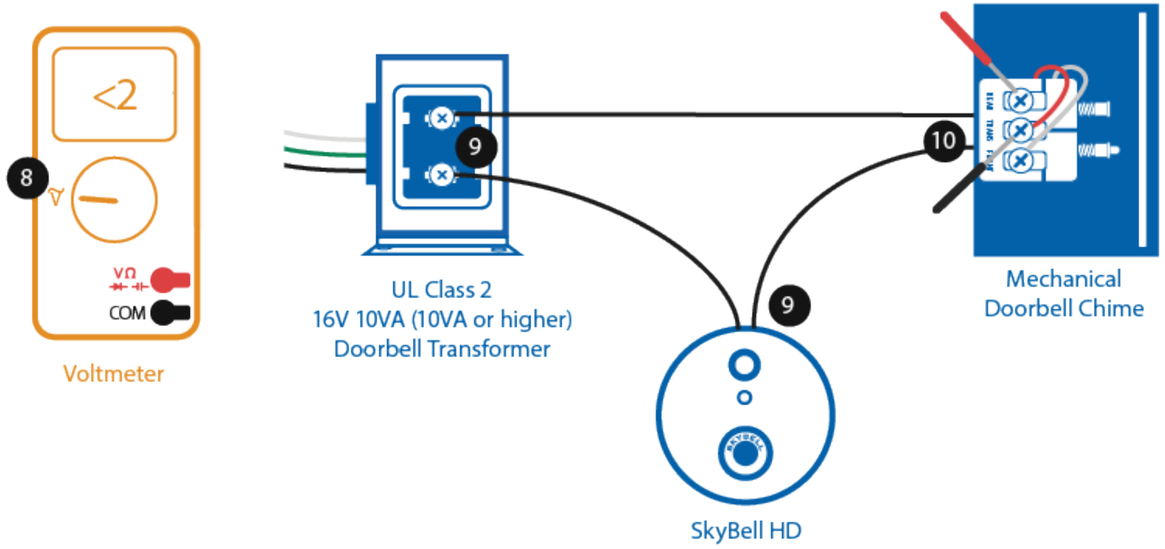
How to take voltage measurements

STEP 8 Set the Voltmeter to V (~Volts AC)
STEP 9 Make sure the wires are connected to Doorbell Transformer and SkyBell is installed.
STEP 10 Measure the voltage at the 2 screws on the Doorbell Chime. It should measure less than 2 Volts AC.

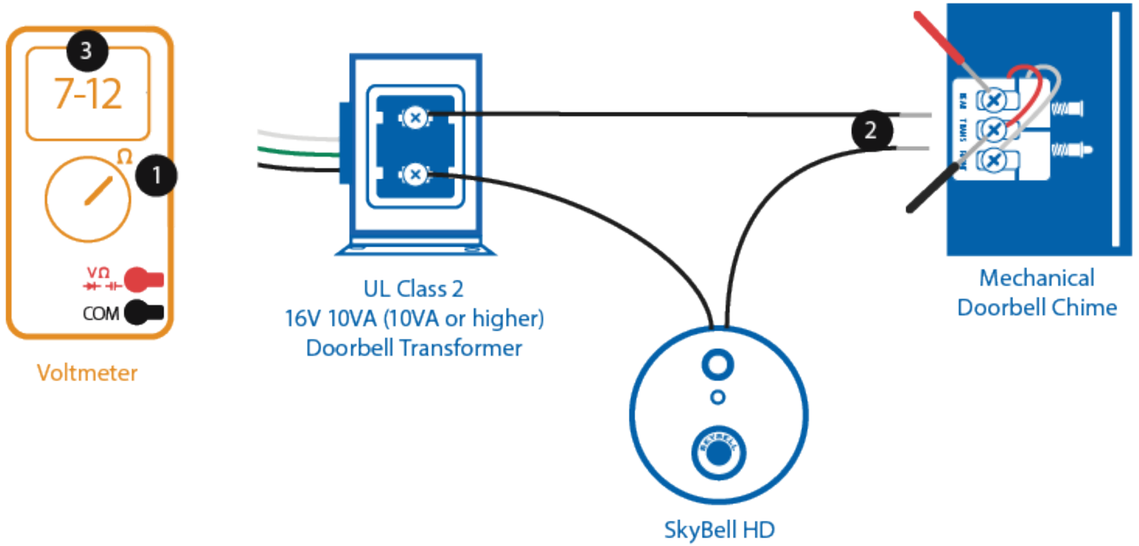


SkyBell HD

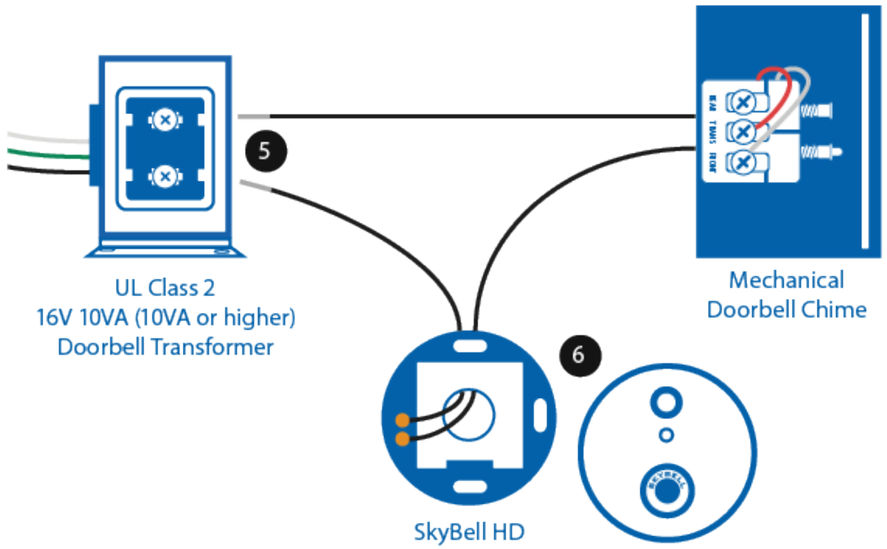
Power Debugging

Additional Measurements

STEP 1 Change the Voltmeter setting to Ω (Ohms - measurement of resistance)
STEP 2 Disconnect the 2 wires from the Doorbell Chime
STEP 3 Measure the resistance, it should be between 6-12 Ohms. If not, replace the Chime.
STEP 4 Make sure to return the Voltmeter to Off or V before making any voltage measurements



STEP 5 Unscrew Transformer screws to disconnect both wires from Transformer.
STEP 6 Remove the SkyBell



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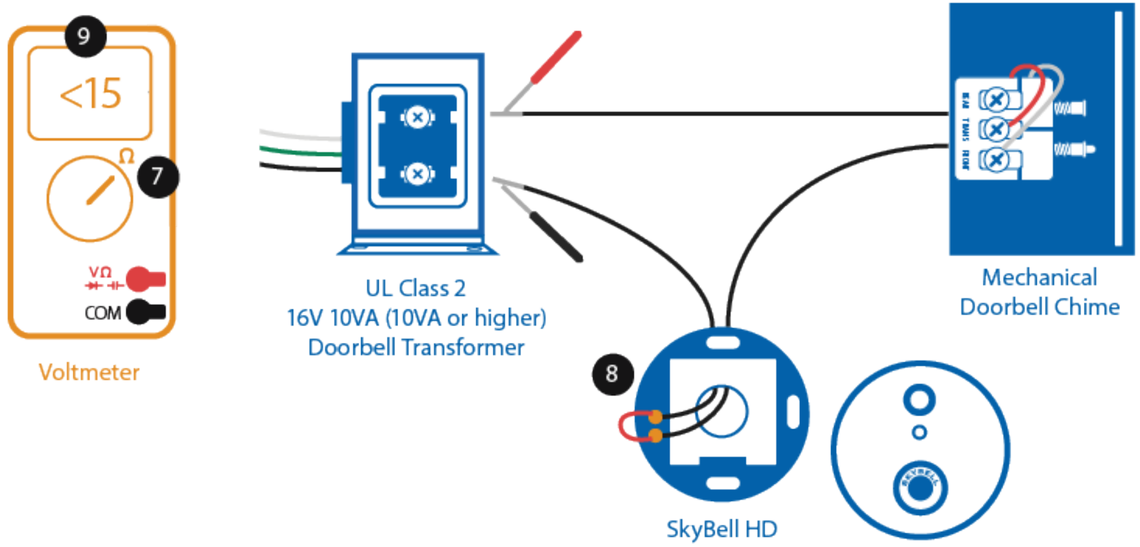
Additional Measurements

STEP 7 Change the Voltmeter setting to Ω (Ohms - measurement of resistance)
STEP 8 With the wires disconnected from the Transformer, short the 2 Screws on the Mounting Plate with the wires that go into the wall. Alternatively, remove the wires from the mount and short together.
STEP 9 Measure the resistance across the wires. It should be less than 15 Ohms.



RUNNING WITHOUT INLINE RESISTOR (NO CHIME CONNECTED):

- Set the device to Silent Mode (where it does not ring the indoor chime).
- When ringing, the chime will act like the original doorbell switch, passing the energy through its circuit. It will work, but it is not recommended for use without turning off the ringing chime.

WHEN UNIT IS RUNNING 12V/1A (12W) AND APPEARS FUNCTIONAL:

- DC 12 volt 1 AMP regulated in numbers isn't related to device's AC transformer specification. The RMS value would be equivalent to a 17 VAC transformer, but it is more complicated than that. It is recommended to use 15 volt 0.5 AMP power supplies, but 12 volts will work.

NOTE: this arrangement should also be put in silent mode if no inline resistor is used.

POWER CYCLING VS. HARD RESET:

- Since there is an internal battery running the ultra low power processor, there is virtually no difference between removing the power and a switch-generated reset.