

# RS-3240/RS-3241 Doorbell Camera Power Supply Technical Note

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This Technical Note is to advise you that the UltraSync Doorbell Camera Installation Guide has been revised to further assist installation personnel in selecting, installing and troubleshooting the UltraSync Doorbell Camera wiring. Please instruct your installation personnel to read the revised installation guide attached/online (revision 466-2950 C) and incorporate into future installations. If you have any questions or concerns about installations already completed, please contact a qualified electrician to verify proper wiring of the doorbell camera according to national and local wiring code. In addition, it is important to ensure there are no shorts in the wires or the resistor could overheat. A qualified electrician can also test to ensure no shorts exist.

## **Voltage Requirements:**

The UltraSync doorbell camera supports input voltages between 16 and 24 VAC, with a maximum power consumption of 14.4 VA (W). We recommend using a 24 VAC 20 VA or a 16 VAC 20 VA transformer when installing the camera. The doorbell wire needs to be 20 AWG (0.811 mm) in diameter to 18 AWG (1.02 mm) in diameter for power transmission up to 100 ft. (30 m). Do not use a wire size less than 20 AWG (0.811 mm) in diameter. Contact a qualified electrician to properly wire the doorbell camera according to national and local wiring code.

**Note:** Connect the included resistor to the doorbell if no electrical or mechanical chime is connected. We recommend soldering the resistor to the wire, using electrical tape or sleeve to prevent short circuits, and placing the transformer and resistor in an electrical box. Consult a licensed electrician to properly wire the circuit.

## **Troubleshooting:**

1. Ensure that there are no other devices (such as an address light box) connected to the transformer.
2. Measure the transformer AC voltage without the doorbell camera connected. A typical 16 VAC doorbell transformer generates between 18 and 21 VAC when measured in an open circuit with the doorbell button removed or not pressed. Make sure there is at least 20 VAC at the doorbell wires. If not, change the doorbell transformer to 24 VAC 20 VA.
3. After installing the doorbell camera, measure the AC voltage across the two terminal screws. It should read at least 19 VAC when it is fully powered on.

- a. Measure the voltage after turning on night vision mode, motion detection recording, and starting two-way audio. It should read at least 17 VAC when all the functions are enabled.
- b. With night vision mode and motion detection recording on, press the doorbell button on the camera to measure the voltage. The doorbell should operate without interruption. If the doorbell camera experiences an interruption or significant voltage drop, change the transformer to 24 VAC 20 VA.

Refer to the *UltraSync Doorbell Camera Installation Guide* for a wiring diagram and details.

**Contact information and Customer Support:**

For contact information and customer support go to the web site of your region.

Americas: [www.interlogix.com](http://www.interlogix.com)

EMEA: [www.firesecurityproducts.com](http://www.firesecurityproducts.com)