

ADC-VDB781B wiring guide

Notice:

- For optimal wired charging, a transformer with a properly functioning 12–24 VAC and 5–40 VA rating is recommended. The doorbell will still charge at a reduced rate if it is connected to a degraded transformer or one with a lower power rating as long as it receives more than 6 VAC.
- When using a tri-volt AC transformer, it is recommended to use either 16 VAC, 20 VA or 16 VAC, 30 VA configurations when available.
- The polarity of the ADC-VDB781B's wires does not matter for wiring.

ADC-VDB781B wiring guide

Choose the number of ADC-VDB781Bs, chime type, number of chimes, and power source connected to the same circuit to view a wiring guide for that configuration.

Reset selections

Select the number of VDB781Bs

- ☐ One VDB781B
☐ Two VDB781Bs

Select the type of chime

- ☐ Mechanical
☐ Digital
☐ Alarm.com Chime

Select the number of chimes

- ☐ One chime
☐ Two chimes
☐ No chimes

Select the power source

- ☐ AC Transformer
☐ DC Adapter

The combination selected is not a supported wiring setup for the VDB781B.

Wire one VDB781B to one mechanical chime and an AC Transformer

Transformer	12–24 VAC, 5–40 VA
Power Module	Not Required

Resistor Not Required

Chime Type Mechanical

1. Attach the *TRANS* terminal on the chime to one of the terminals on the transformer.
2. Attach one of the wires from the ADC-VDB781B to the *FRONT* or *REAR* terminal of the chime.
3. Attach the remaining wire from the ADC-VDB781B to the remaining open terminal on the transformer.

Wire one VDB781B to one mechanical chime and a DC Adapter

Power Supply 12–24 VDC

Power Module Not Required

Resistor Not Required

Chime Type Mechanical

1. Attach one wire from the DC adapter to the ADC-VDB781B.
2. Attach the other wire from the DC adapter to the *TRANS* terminal of the chime.
3. Attach the remaining wire from the ADC-VDB781B to the *FRONT* or *REAR* terminal on the chime.

Wire one VDB781B to one digital chime and an AC Transformer

Transformer 12–24 VAC, 5–40 VA

Power Module Not Required

Resistor Not Required

Chime Type Digital

1. Attach the *TRANS* terminal on the chime to one of the terminals on the transformer.
2. Attach one of the wires from the ADC-VDB781B to the remaining open terminal on the transformer.
3. Attach the remaining wire from the ADC-VDB781B to the *REAR* or *FRONT* terminal on the digital chime.

Wire one VDB781B to two mechanical chimes with an AC Transformer

Transformer 16–24 VAC, 5–40 VA

Power Module Not Required

Resistor Not Required

Chime Type Mechanical

1. Attach one terminal of the transformer to the *TRANS* terminal of each chime. A wire connector may be used to simplify the wiring at the transformer terminal.
2. Attach the ADC-VDB781B to the *FRONT* or *REAR* terminal of each chime. A wire connector may be used to simplify the wiring at the doorbell backplate.
3. Attach the remaining terminal of the transformer to the ADC-VDB781B backplate.

Wire one VDB781B to two digital chimes with an AC Transformer

Transformer 16–24 VAC, 5–40 VA

Power Module Not Required

Resistor Not Required

Chime Type Digital

1. Attach one terminal of the transformer to the *TRANS* terminal of each chime. A wire connector may be used to simplify the wiring at the transformer terminal.
2. Attach the ADC-VDB781B to the *FRONT* or *REAR* terminal of each chime. A wire connector may be used to simplify the wiring at the doorbell backplate.
3. Attach the remaining terminal of the transformer to the ADC-VDB781B backplate.

Wire one VDB781B with no chime and an AC Transformer

Transformer 12–24 VAC, 5–40 VA

Power Module Not Required

Resistor Not Required

Chime Type No wired chime

Attach both wires from the AC transformer to the terminals on the back of the ADC-VDB781B.

Wire one VDB781B with no chime and a DC Adapter

Power Supply 12–24 VDC

Power Module Not Required

Resistor	Not Required
Chime Type	No wired chime

Attach both wires from the DC adapter to the terminals on the back of the ADC-VDB781B.

Wire two VDB781Bs with no chime and an AC Transformer

Transformer	12–24 VAC, 5–40 VA
Power Module	Not Required
Resistor	Not Required
Chime Type	No wired chime

Attach both wires from the AC transformer to the terminals on the back of the ADC-VDB781B.

Wire two VDB781Bs with one digital chime and an AC Transformer

Transformer	12–24 VAC, 10–40 VA
Power Module	Not Required
Resistor	Not Required
Chime Type	No wired chime

1. Attach one terminal from each ADC-VDB781B to the transformer.
2. Attach the other terminal from the first ADC-VDB781B to the *FRONT* terminal on the chime.
3. Attach the other terminal from the second ADC-VDB781B to the *REAR* terminal on the chime.
4. Attach one terminal of the transformer to the *TRANS* terminal on the chime.

Wire two VDB781Bs to one mechanical chime and an AC Transformer

Transformer	12–24 VAC, 10–40 VA
Power Module	Not Required
Resistor	Not Required
Chime Type	Mechanical

1. Attach one terminal from each ADC-VDB781B to the transformer.

2. Attach the other terminal from the first ADC-VDB781B to the *FRONT* terminal on the chime.
3. Attach the other terminal from the second ADC-VDB781B to the *REAR* terminal on the chime.
4. Attach one terminal of the transformer to the *TRANS* terminal on the chime.

Frequently asked questions

What is the supported wire gauge/AWG for a video doorbell camera?

What is the supported wire gauge/AWG for a video doorbell camera?

18-20 gauge wire (AWG) is supported for all video doorbell camera installations. 18-20 AWG provides the correct amount of resistance needed to power a video doorbell camera.

Gauges outside of these recommendations affect the resistance of the wire and may deliver incorrect power to the device.

Can I use the ADC-VDB770's Power Module (ADC-VDBA-PM) or ADC-VDB775's Power Module (ADC-VDBA-775-PM) with the ADC-VDB781B?

Can I use the ADC-VDB770 or ADC-VDB775 Power Module with the ADC-VDB781B?

No. Neither the ADC-VDB770's Power Module (ADC-VDBA-PM) nor the ADC-VDB775's Power Module (ADC-VDBA-775-PM) are intended for use with the ADC-VDB781B.