

ZOOZ ZEN58 800LR

Zooz Z-Wave Long Range Low Voltage XS Relay ZEN58 800LR User Manual

INTRODUCTION

The Zooz ZEN58 800LR is a compact Z-Wave Long Range Low Voltage XS Relay designed to integrate low-voltage devices into your Z-Wave smart home system. It enables ON/OFF control for loads up to 3 Amps and supports 0-240 Volts, making it suitable for applications such as garage doors, entry gates, or controlling humidifiers. This manual provides detailed instructions for safe installation, operation, and maintenance of your ZEN58 800LR relay.

SAFETY INFORMATION

Please read all safety precautions before installation and operation. Failure to follow these instructions may result in electric shock, fire, or property damage.

- This device is intended for indoor use only.
- Ensure power is disconnected at the circuit breaker before installation or servicing.
- Installation should be performed by a qualified electrician or trained professional.
- Do not exceed the maximum load of 3 Amps at 240V.
- The device is powered by 9-40 V AC/DC only.
- Use dry contact input (NO Voltage) for connected switches or sensors.
- Maximum wire size for terminals is 14 AWG.
- Do not use with dimmers or electronic switches; only simple toggle and momentary switches are supported for analog input.

PRODUCT OVERVIEW

What's in the Box

- Zooz ZEN58 800LR Smart Relay
- User Manual

Key Features

- **Z-Wave Control:** Adds Z-Wave ON/OFF functionality to low-voltage loads up to 3 Amps, 0-240 Volts.
- **Analog Input:** Connects to a wall switch (toggle or momentary) or binary sensors (e.g., open/close, water/no water) with no voltage on input wires.
- **Compact Design:** Extra small size (1.2" tall, 1.0" wide, 0.6" deep) for installation in crowded or shallow electrical boxes.
- **Advanced Security:** Features S2 authenticated security protocol and SmartStart for secure and easy pairing.
- **Long Range:** Z-Wave Long Range enabled for extended communication.
- **Wide Compatibility:** Works with various Z-Wave hubs including Z-Box Hub, Hubitat, Home Assistant (Z-Wave JS), and SmartThings (for basic on/off).

SETUP AND INSTALLATION

Wiring Instructions

Before proceeding, ensure power is OFF at the circuit breaker. The ZEN58 800LR requires a 9-40V AC/DC power source and uses dry contact inputs. Do not apply voltage to the input (IN) terminals.

1. **Power Connection:** Connect your 9-40V AC/DC power supply to the DC+ and DC- terminals on the relay. Observe polarity if using DC.
2. **Load Connection:** Connect the load you wish to control (e.g., garage door opener, solenoid valve) to the OUT terminals. This is a dry contact output, meaning it acts as a switch to complete or break a circuit for your load.
3. **Analog Input (Optional):** If connecting a wall switch or binary sensor, connect it to the IN and S terminals. Ensure the switch provides a dry contact closure (no voltage). This input supports simple toggle or momentary switches.
4. **Secure Wiring:** Ensure all wire connections are secure and within the maximum 14 AWG wire size.



Front view of the ZEN58 800LR relay, illustrating the terminal block for power input (DC+, DC-), dry contact output (OUT), and dry contact analog input (IN, S).



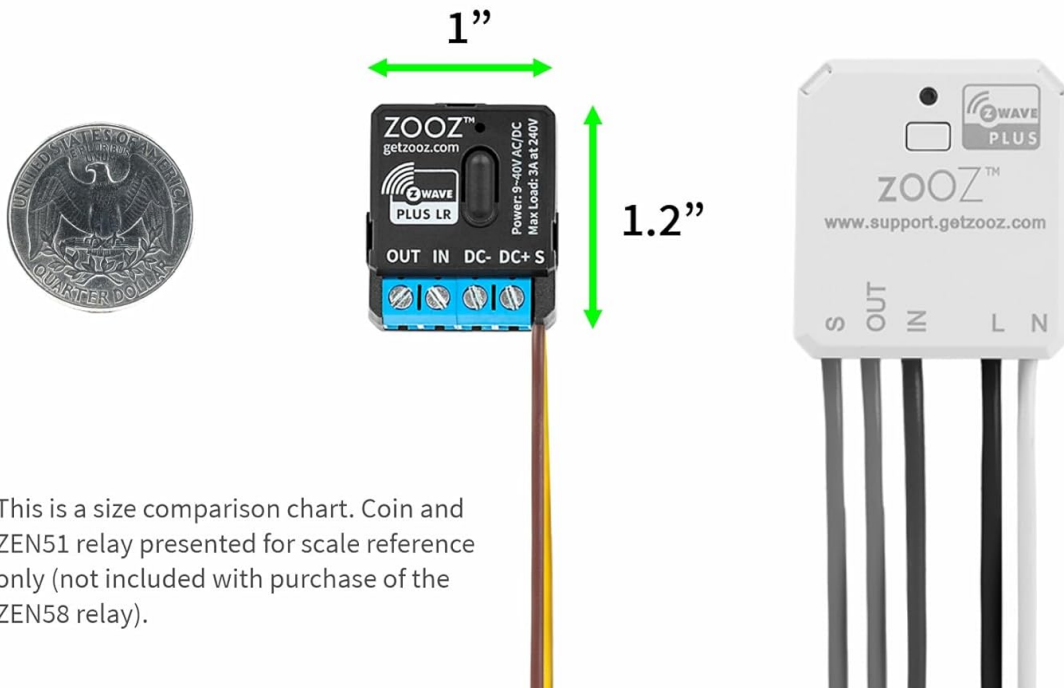
Back view of the ZEN58 800LR relay, displaying regulatory information, Z-Wave region, firmware version, and the SmartStart DSK (Device Specific Key) for secure pairing.

EXTRA SMALL RELAY: FITS ANY BOX

US QUARTER
DOLLAR

ZOOZ ZEN58
LV XS RELAY

ZOOZ ZEN51
RELAY



This is a size comparison chart. Coin and ZEN51 relay presented for scale reference only (not included with purchase of the ZEN58 relay).

Size comparison of the ZEN58 800LR relay, highlighting its compact dimensions (1.0" wide, 1.2" tall) relative to a US quarter and another Zooz relay model, demonstrating its suitability for tight spaces.

Z-Wave Pairing

The ZEN58 800LR supports S2 authenticated security and SmartStart for easy and secure inclusion into your Z-Wave network. A compatible Z-Wave hub is required (sold separately).

1. **Power On:** After wiring, restore power to the circuit. The relay will power on.
2. **SmartStart Inclusion:** If your Z-Wave hub supports SmartStart, scan the QR code on the back of the relay (or on the packaging) using your hub's app. The device will automatically include into your network.
3. **Manual Inclusion:** If your hub does not support SmartStart, initiate "Add Device" or "Z-Wave Inclusion" mode on your Z-Wave hub. Then, quickly press the Z-Wave button on the ZEN58 800LR three times. The LED indicator will confirm successful pairing.
4. **S2 Security:** During inclusion, your hub may prompt you to enter the 5-digit Device Specific Key (DSK) found on the QR code label for S2 authenticated security.

Compatible Z-Wave Hubs:

- Z-Box Hub (fully compatible)
- Hubitat

- Home Assistant (Z-Wave JS)
- HomeSeer
- SmartThings (for basic on/off functionality)

OPERATING INSTRUCTIONS

Once successfully paired with your Z-Wave hub, the ZEN58 800LR can be controlled remotely via your Z-Wave network or locally via the connected analog input.

- **Z-Wave Control:** Use your Z-Wave hub's interface or associated smart home app to turn the connected load ON or OFF. The relay will respond to commands sent over the Z-Wave network.
- **Analog Input Control:** If a physical switch is connected to the IN and S terminals, operating this switch will toggle the state of the relay. For example, pressing a momentary switch connected to a garage door opener will activate the opener.
- **Status Indication:** The LED indicator on the relay provides visual feedback on its status (e.g., pairing mode, ON/OFF state). Refer to your hub's documentation for specific LED behavior during pairing.

MAINTENANCE

The Zooz ZEN58 800LR is designed for reliable, long-term operation with minimal maintenance.

- Keep the device free from dust and moisture.
- Do not attempt to open or repair the device yourself. Refer to qualified personnel for any service needs.
- Periodically check wire connections to ensure they remain secure.

TROUBLESHOOTING

Common Issues and Solutions

- **Device not pairing:**
 - Ensure the device is powered correctly (9-40V AC/DC).
 - Verify your Z-Wave hub is in inclusion mode.
 - Try pressing the Z-Wave button on the relay 3 times quickly.
 - Move the relay closer to the hub during the pairing process.
 - Perform a Z-Wave exclusion first (see your hub's manual) and then try inclusion again.
- **Relay not responding to commands:**
 - Check the power supply to the relay.
 - Verify the Z-Wave network connection and signal strength.
 - Ensure the connected load is within the 3 Amp limit.
 - Check the wiring to the load.
- **Analog input switch not working:**
 - Confirm the switch is a dry contact type (no voltage output).
 - Ensure the switch is properly connected to the IN and S terminals.
 - Verify the switch type is toggle or momentary, not a dimmer or electronic switch.

- **Poor Z-Wave Long Range performance:**

- Ensure your Z-Wave hub supports Z-Wave Long Range.
- Minimize physical obstructions (concrete walls, large metal objects) between the relay and the hub.
- Consider adding Z-Wave repeaters if range is consistently an issue.

SPECIFICATIONS

Model Number	ZEN58 800LR
Z-Wave Region	US/CA/MX
Power	9-40 V AC/DC
Maximum Load	3 Amps at 240V
Max Wire Size	14 AWG
Z-Wave Range	Up to 300 feet line of sight (1300 feet with Z-Wave Long Range enabled)
Dimensions (L x W x H)	1.2" x 1.0" x 0.6" (30.5 x 25.4 x 15.2 mm)
Operating Temperature	32-104° F (0-40° C)
Installation and Use	Indoor only
Connectivity Protocol	Z-Wave
Security	S2 Authenticated
Certification	FCC
GTIN / UPC	853478006582

WARRANTY AND SUPPORT

The Zooz ZEN58 800LR comes with a standard warranty. You can extend this to a **5-year warranty** by registering your device within 30 days of purchase. Zooz also provides **lifetime tech support** for its products.

For warranty registration, technical assistance, or further inquiries, please visit the official Zooz website or contact their customer support.