

## PRODUCT OVERVIEW



WebRelay™ is a reliable, web-enabled relay for data capture and signal monitoring over IP. It's powered by the 400 Series firmware for the ultimate custom logic and automation routines. Create contextual tasks based on time, I/O status, or remote device status with the built-in Task Manager.

WebRelay can be used in pump and motor control, security lock systems, remote reboot, lighting control, and many other applications. The built-in relay and optically isolated input can be used to monitor the state of devices, control the relay, or control a remote relay on the same network or through Peer-to-Peer (P2P) networking.

WebRelay can be configured to automatically connect to the ControlByWeb Cloud, an optional cloud service that streamlines data and device

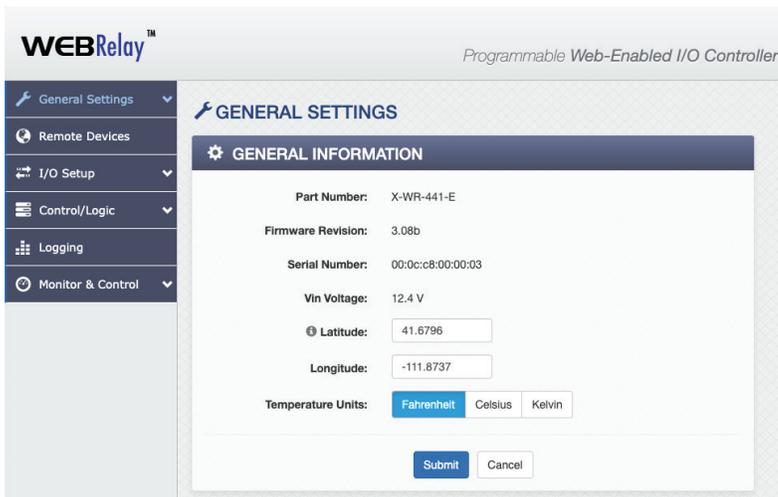
management. The Cloud allows large-scale deployment with child accounts that can be tailored to organizational needs.

## X-WR-441 Features:

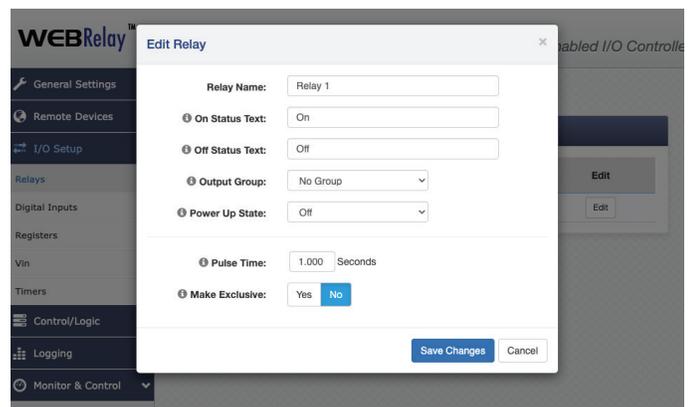
- One Optically-Isolated Input
- One Relay

## 400 Series Features:

- Peer-to-peer network to control, monitor, and log 32 remote modules, or up to 64 I/O
- User Permissions: Admin, Manager, User
- Optional ControlByWeb Cloud service for logging, device data, and reports
- Send email alerts based on user-defined conditions
- Highly configurable - Almost any combination of input/relay control possible
- No software required
- Customizable web-based Control Page
- BASIC script support for advanced flexibility
- Configurable logging
- HTTPS/TLS encrypted
- Modbus, SNMP, Remote Service, IP Filtering
- 5-Year Warranty



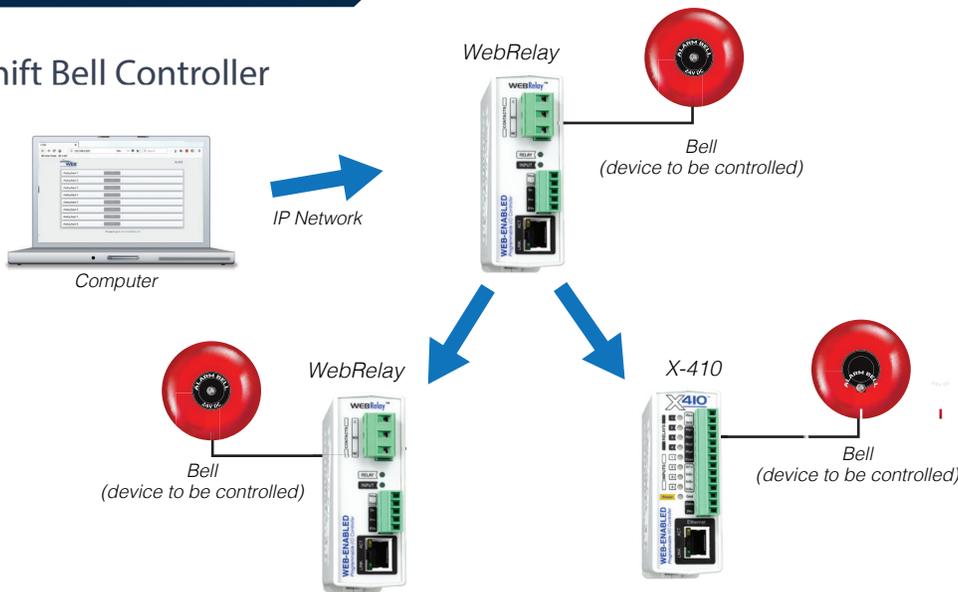
400 Series Firmware Settings



Relay Options

## APPLICATIONS & SPECS

### Shift Bell Controller



## Additional Applications

- ✓ Remote Reboot
- ✓ Pump Control
- ✓ Motor Control
- ✓ Remote Relay
- ✓ Remote PLC Control
- ✓ Industrial Automation
- ✓ More...

### Models:

- X-WR-441-I
- X-WR-441-E
- X-WR-441W-I
- X-WR-441CW-I

### Power Requirements

- **Voltage:**
  - X-WR-441-I: 9-28VDC
  - X-WR-441-E: POE and/or 9-28VDC
  - X-WR-441W-I: 9-28VDC
  - X-WR-441CW-I: 9-28VDC
- **Current:** 350 mA Max

### Relays

- **Number of Relays:** 1
- **Max Voltage:** 240VAC, 30VDC
- **Max Current:** 12A
- **Contact Type:** SPDT (Form 1C)
- **Load Type:** General Purpose
- **Contact Resistance:** < 30 milliohms initial
- **Contact Material:** AgSnO2
- **Electrical Life:** 100K cycles (Typical)
- **Mechanical Life:** 10M cycles (Typical)
- **Environmental Rating:** Over voltage Category II, Pollution Degree 2
- **Relay Modes:** ON/OFF or Pulsed
- **Pulse Timer Duration:** 0.1 to 86,400 Seconds (1-day)

### Digital Inputs

- **Number of Inputs:** 1
- **Type:** Optically-Isolated
- **Voltage Range:**
  - X-WR-441-I: 4-26 VDC
  - X-WR-441-E: 4-26 VDC

### Current:

- X-WR-441-I: 950uA @ 4V, 8.5mA @ 26V
- X-WR-441-E 950uA @ 4V, 8.5mA @ 26V

### Minimum Hold Time:

- 25mS

### Input Isolation:

- 1500Vrms

### Input Functions:

- Monitor, Local Relay Control, Remote Relay Control

### Network

- **Type:** 10/100 Base-T Ethernet Port
- **Setup:** Static IP address assignment. TCP port selectable
- **Wireless:** WiFi Communication (X-WR-441W/CW models only)
- **Cellular:** Cellular Modem (X-WR-441CW model only)

### WiFi

- Network Standards: IEEE 802.11 b/g/n
- Frequency Band: 2.412 – 2.462 GHz
- Wi-Fi Security Standards: WPA2, WPA3
- Network Settings: DHCP or Static

### Connectors

- **Power/Input:** 5-Position Removable
- **Relays/Inputs:** 3-Position Removable
- **Network:** 8-pin RJ-45
- **Cell Antenna:** Male SMA Connector (X-401CW model only)

### LED Indicators

- **Number of LEDs:** 4
  - Digital input voltage applied
  - Relay coil energized
  - Network linked
  - Network activity

### Physical

- **Operating Temperature:** -40°F to 150°F (-40°C to 65.5°C)
- **Size:**
  - 1.41in (35.7mm) wide
  - 3.88in (98.5mm) tall
  - 3.1in (78mm) deep (not including connector)
- **Weight:** 5 oz (142 grams)
- **Enclosure Material:** Lexan 940 Polycarbonate Plastic
- **Enclosure Flame Rating:** UL94 V0

### Protocols

- HTTP, HTTPS, SSL, XML, JSON, Modbus TCP/IP, SNMP, SMTP, Remote Services

### Advanced Features

- Task Builder
- BASIC interpreter
- Remote services

### Password Settings

- **Password protection on setup page:** Yes
- **Password protection on control page:** Optional
- **Password Encoding:** Base 64
- **Max Password Length:** 18 Characters

### Electromagnetic Compliance

- IEC CISPR 22, CISPR 24
- EU EN55024, EN55022
- FCC 47CFR15 (-I Models class B, -E POE Model Class A)