

Article Overview

Protection relays can be connected to a PC via USB using dedicated USB cables or USB-to-serial adapters, enabling configuration, monitoring, and control through specialized software.

Methods of Connection

1. Direct USB Cable for Protection Relays Some relays, such as Schneider Electric Sepam 20, 40, 60, 80, and Easergy P1/P5, support direct USB connections using a dedicated PC USB cable (e.g., Schneider Electric 59700). This cable allows the relay to interface with configuration software on a PC for parameter setting, testing, and monitoring . 2. USB-to-Serial Adapter Many protection relays, like the SEL-421, use a serial communication port (Port F) for configuration. To connect these relays to a modern PC without a serial port, a USB-to-Serial adapter is used. The steps include:

- o Connect the relay's serial port to the USB-to-Serial adapter.
- o Plug the adapter into the PC's USB port.
- o Use the relay's configuration software (e.g., SEL AcSELeRator QuickSet) to establish communication, configure parameters, and perform testing . 3. USB Relay Boards for Automation For general relay control (not necessarily protection relays), USB relay boards can be used. These boards allow multiple relays to be controlled via USB using software or command-line tools. Examples include Denkovi USB 8-Relay boards, which support scheduling, pulses, and state control through DRM software or Java applications . These are more suitable for automation or lab setups rather than field protection relays.

Software Requirements

- o Manufacturer-specific software: For protection relays, use the vendor's configuration software (e.g., SEL QuickSet, Schneider's software).
- o Drivers: USB-to-Serial adapters often require FTDI or similar drivers to enable communication.
- o Programming options: Some USB relay boards provide APIs or command-line tools for custom control scripts.

Practical Tips

- o Always verify the relay model and supported interface before purchasing cables or adapters.
- o Use shielded cables for serial connections to reduce noise in substation environments.
- o Follow the manufacturer's connection diagrams to avoid miswiring or communication errors.
- o For multiple relays, consider using a USB hub if supported by the software. By following these methods, a protection relay can be safely connected to a PC via USB for configuration, monitoring, or automated control, depending on the relay type and intended application .

Relay protector connected to USB

NOYITO 1-Channel 5V Computer USB Control Switch Relay Module Drive-Free Relay Module Plug and Play Suitable for PC Smart

I need to switch on a relay when PC turns on. I made a simple scheme on the run, but I'm afraid it isn't good enough not to damage

LCUS-4 USB Relay Module 4 Channel with Overcurrent Protection for Home Automation, Serial Control, Intelligent USB Switch Add

Get reliable USB relay modules for smart home automation. Browse options with different channel counts and specifications.

Find your usb protection relay easily amongst the 24 products from the leading brands (Littelfuse, ABB, SIEMENS, ...) on

Alternatively, if there are other USB devices, there are USB switches that are relatively cheap. Back to your specific case, switching

Re: USB powered relay for mains voltage? Very easy. U will need a 5v relay that is suitable to switch mains, a diode, a

USB Type-C™ (or USB-C™) interface and Power Delivery (USB PD) are a response to consumer, industrial, and medical markets

I want to make a power strip that has outlets controlled by relays (some solid state and some mechanical) and I need

2Pcs LCUS-1 USB Relay Control Module, Single Channel 5V Serial Command Switch Board with Overcurrent Protection and Status

The connection is made directly via serial communication, which is very common for field

When I connect the ends of the two cables directly to each other, the phones connect to each other. However, when I

USB supports high-integrity, low-latency communication across a virtual COM port. When communicating

This project provides open-source API for low-cost USB HID relays (search on eBay for "5V USB



Relay protector connected to USB

Relay Programmable Computer

I learned from painful experience that you cannot just use a simple relay switch (or even an integrated circuit based

Each application can control up to 10 USB relay boards so you will need of course FTDI VCP drivers. We provide single installation

Web: <https://www.morwarreconst.co.za>

