Today we have a huge amount of various relay on the market with cardinal differences in hardware and driver's part that often used as switches for the home devices. This way we may use relay to control almost every device in our home and jrelay library was created to remove the burden of situations where you have to rewrite your code because of relay replacing, but instead you can simply switch the driver class to different one.

This library allows you to use your relay connected to computer directly from Java. It's designed to abstract commonly used relay's drivers, has very simple API and supported a lot of relay’s devices.

The idea of jrelay became suddenly when I was writing another driver of controlling COM-port relay on Java and at the same time studying sources of amazing webcam-capture project. And, as a result, I actually have stolen its architecture ☺. Thank you, guys!

By the way, I have already some experience of creating low-level relay USB driver, that works on different platforms, but is was dull… you have to follow low-level USB HID API and then bind this code to Java. It was extremely tedious.

That’s why I’ve decided to create library that could support all sorts of drivers and would have simple, thread-safe, non-blocking API and also have trendy features as event-listening if relay was disconnected, for example.

To start working with the library you need:

1. Add Maven repository
2. Add core and driver’s dependencies
3. Set desired relay driver or drivers
4. Get default device
5. Open or close relay

Full ‘HelloWorld’-example is available here.

If you want to watch if a device was closed, opened or disposed follow this manner:

1. Create RelayListener implementation
2. Add listener’s reference to the relay using addRelayListener(…) method

To listen if a new device was found or a relay was gone, use this approach:

1. Create RelayDiscoveryListener implementation
2. Set your RelayDiscoveryListener using method Relay.addDiscoveryListener(…);

Links:

jrelay library- <https://github.com/EasySmartHouse/jrelay>

jrelay ‘HelloWorld’ - <https://github.com/EasySmartHouse/jrelay-hello-world>

jrelay examples - https://github.com/EasySmartHouse/jrelay/tree/master/examples