

## HT0740 40V / 10A Switch Breakout

PIM455

Oh boy, this is a Big. Damn. Switch. Program it to switch loads up to 40V / 10A connected to the HT0740 breakout's sturdy screw terminals, and use up to four breakouts at the same time using the configurable I2C addresses. Great for home automation.

This fully-isolated, I2C-controllable switch can switch big loads up to 40V at 10A. There are sturdy screw terminals to connect your switched load to, and a handy little white status LED to give you visual feedback. Because we've used an I2C expander, you can use up to four of these at once, by configuring the addresses with the cuttable traces on the back of the board.

The HT0740 breakout has an I2C interface and is 3.3V or 5V compatible. Like our other **Pimoroni breakouts**, we've designed it so that you can solder a piece of right-angle header onto it and then pop it straight onto the bottom left 5 pins on your Raspberry Pi's GPIO header (pins 1, 3, 5, 6, 9).

It's also compatible with our fancy **Breakout Garden**, where using breakouts is as easy as just popping it into one of the six slots and starting to grow your project, create, and code.

## Features

- HT0740 MOSFET driver chip ([datasheet](#))
- TCA9554A I2C expander chip ([datasheet](#))
- TPN2R304PL MOSFET ([datasheet](#))
- Bright white status LED
- Can switch up to 40V / 10A (DC only)
- Fully-isolated
- Screw terminals
- 3.3V or 5V compatible
- I2C interface (four addresses: 0x38-0x3B)
- Reverse polarity protection (on the Breakout Garden side only)
- Raspberry Pi-compatible pinout (pins 1, 3, 5, 7, 9)
- Compatible with all 40-pin Raspberry Pi models
- Compatible with Arduino
- **Python library**

## Kit includes

- HT0740 Breakout
- 1x5 male header
- 1x5 female right angle header

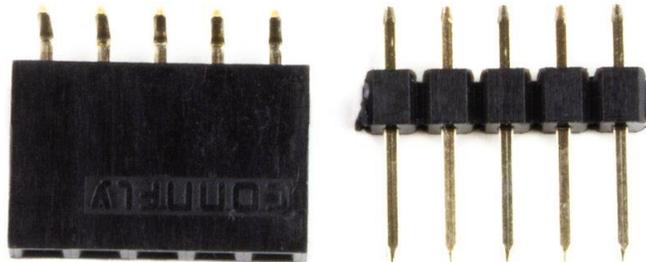
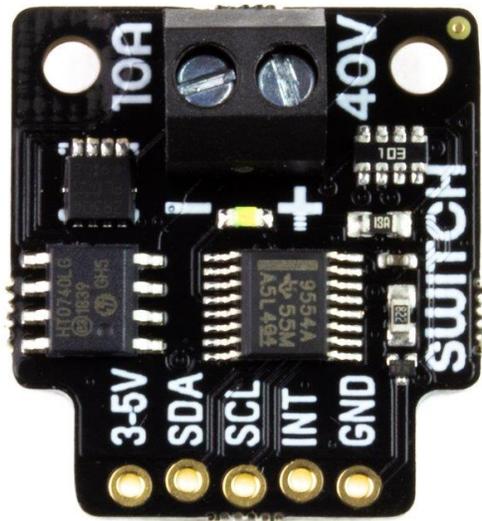
## Software

We've put together a **Python library** that you can use with your HT0740 Breakout.

Our HT0740 Python library allows you to switch and toggle the switch on and off, check the state of the switch, and control the status LED, as well as controlling several switches at once, each with a different I2C address.

## Notes

- DC voltage only. **Do not use to switch loads higher than 40V / 10A.** Despite the MOSFET part being rated for higher voltages, the screw terminals are not suitable for this.
- Not PWM-able
- Dimensions: 23x21x12mm



<https://shop.pimoroni.com/products/ht0740-breakout/10-10-19>