

pHAT Stack



Fully Assembled Kit /PIM322

Solder Yourself Kit /PIM321

PCB Only /PIM320

A preposterous pile of peripherals on your Pi! Mix and match 3 HATs or 5 pHATs into a platter of functionality. Use pHAT Stack for specific setups and projects, or just as a handy way to use several HATs or pHATs at once.

pHAT Stack is the big brother to the Mini Black HAT Hack3r. It has 6 sets of 2x20 pin headers, one for connecting to your Pi with the included ribbon cable, and the other 5 for a mix of HATs and/or pHATs. The kits include rubber feet to hold pHAT Stack steady (and prevent it from scratching your desk), and metal standoffs to mount your HATs and pHATs firmly in a more permanent fashion.

Note that you'll need to ensure that there aren't any pin clashes between the boards that you're using together. To check which pins are used by each board, check them on pinout.xyz, or try the pHAT Stack configurator!

Check out our getting started guide for more tips on using pHAT Stack.

Features

- Five sets of 2x20 pin headers (plus one to connect to your Pi)
- HAT and pHAT mounting holes (M2.5) and labels
- Handy pinout, including BCM numbers and descriptive labels

Kits include

- pHAT Stack PCB
- 6x 2x20 male GPIO pins (pre-soldered in fully assembled kit)
- 5x pairs of black brass standoffs
- 4x rubber non-slip feet
- 40-way black GPIO ribbon cable

Provided there aren't any clashes between the pins used by HATs and pHATs, you can get pretty crazy with the boards that you combine together. Boards like Four Letter pHAT, Scroll pHAT HD, and Unicorn HAT HD are ideal for displaying data in dashboard-type setups, and boards like Touch pHAT, Piano HAT, and Drum HAT let you add input to your projects. There are some suggested setups below.

Suggested setups

Build an **itty-bitty beat box** with Piano HAT, Drum HAT, and Speaker pHAT. Because Piano HAT and Drum HAT use different I2C addresses, they'll work quite happily alongside each other. Speaker pHAT gives your beat box a built-in speaker.

Make an **alarm clock**, or even a **radio alarm clock**, with Four Letter pHAT, Touch pHAT, and Speaker pHAT. Display the time on Four Letter pHAT, use Touch pHAT to cancel or snooze the alarm, and Speaker pHAT to beep when the alarm goes off!

Create a **weather station with built-in dashboard** using Enviro pHAT, Four Letter pHAT, and Scroll pHAT HD. Show the current temperature on Four Letter pHAT, and a graph of recent temperature readings on Scroll pHAT HD.

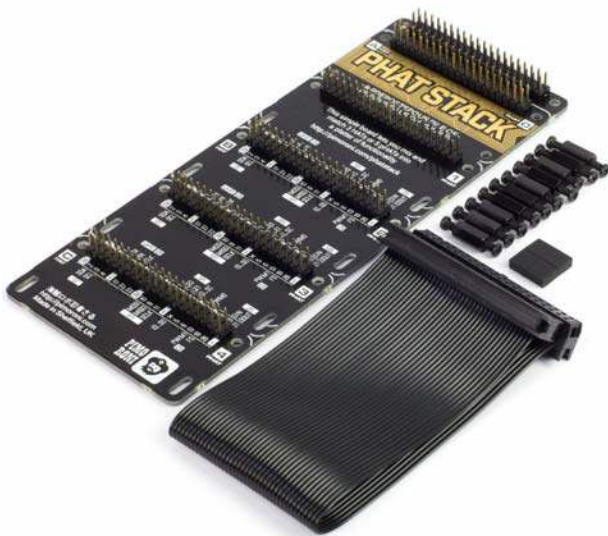
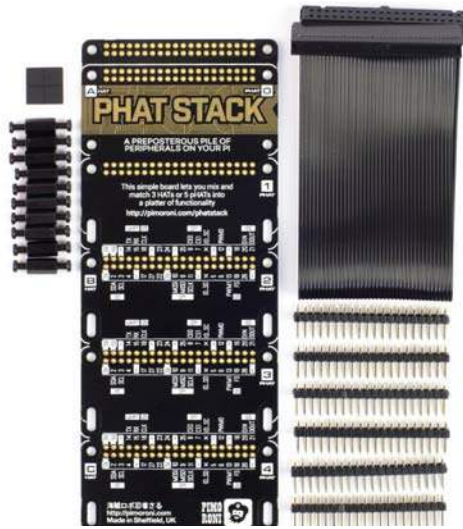
Notes

- Solder yourself and PCB only kits require soldering
- When using HATs, be careful not to short pins on components on the underside of the HATs. A couple of pieces of insulating tape on the underside of the board can protect against this.
- Board dimensions: 162x65x1.75mm(LxWxH)



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