

# CYBERDECK Bonnet and HAT for Raspberry Pi 400 Created by Kattni Rembor



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# Overview

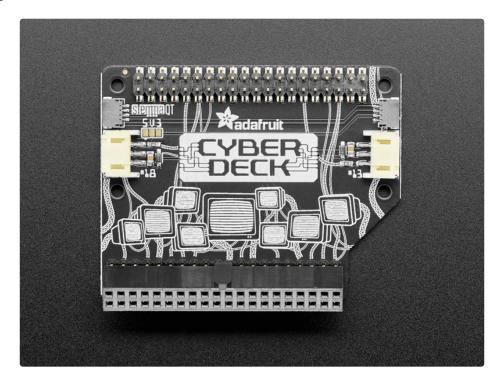


Howdy keyboard cowboys, are you surfing the information superhighway with a Pi 400? Want a cool heads-up display, or maybe you need to wire up some NeoPixel wetware...?

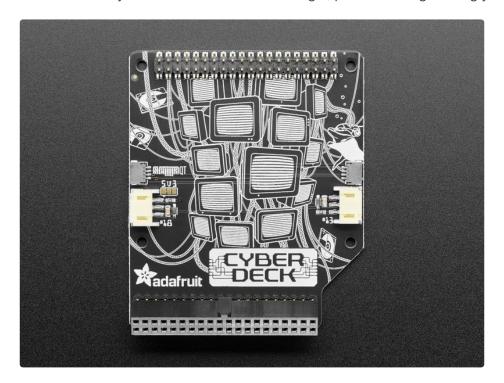


Cyber-warriors, listen up here! We've got with some zero-day unreleased hardware we just dumpster-dived. Now you can crack kodes, and write skripts with style, thanks to the **CYBERDECK HAT and Bonnet** 

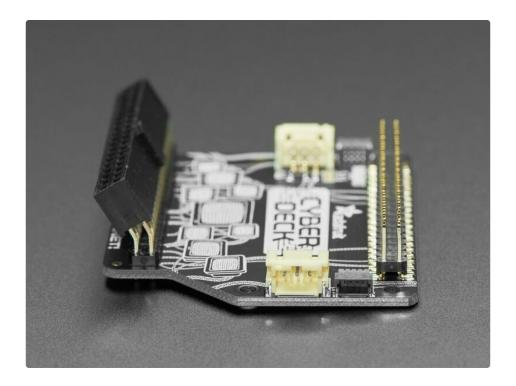
for Raspberry Pi 400 from Adafruit zaibatsu.



Well, we just fenced 12 megabytes of ram and some angled socket header from the underground hacker club next to the chatsubo, and it's a major upgrade to our extender board - now you can jack in any Pi bonnet or HAT into the back of your Pi 400's skull at a cool angle, perfect for augmenting your deck!

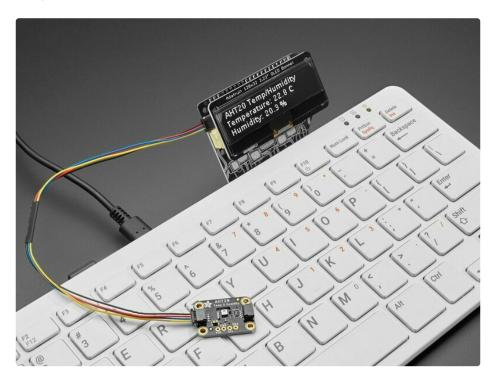


We also give you two STEMMA (JST 3-PH) connectors on GPIO #18 and #13, and twin STEMMA QT I2C port plugs, for additional upgrades (<u>cables sold separately</u> (https://adafru.it/JRA))



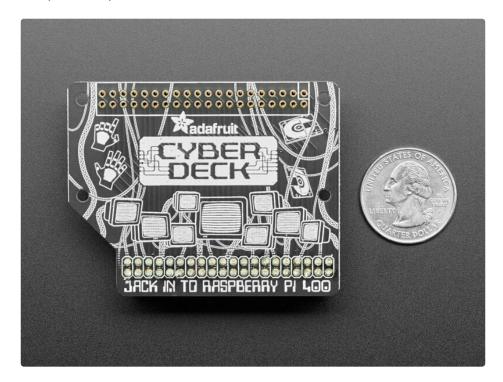
This is the same hardware Kevin Mitnick used when he popped Sidewinder! Ok, maybe not, but it will definitely let you create a stand-alone Kali deck by plugging in one of our many display Bonnets or HATs.

Comes completely pre-assembled and tested so you don't need to do anything but plug it in. Works best with the Pi 400 computer.



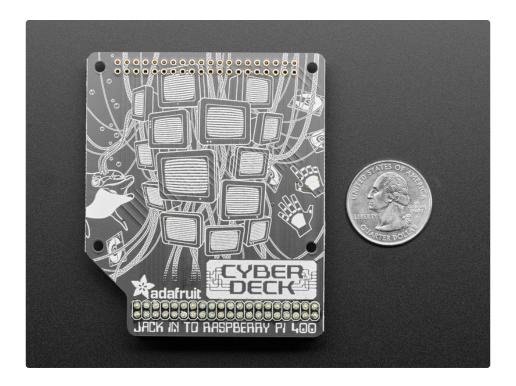
The demo images show the Bonnet with <u>one of our 128x32 OLED bonnets plugged</u> in (https://adafru.it/RfQ). Any bonnet/mini-HAT/pHAT etc should work just fine with the Bonnet as every pin

#### is duplicated from input to output.



#### Here are some of our favorite displays we recommend for the Bonnet:

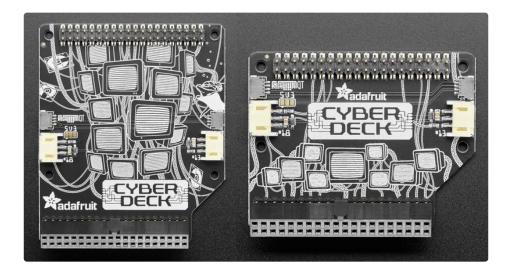
- Adafruit 2.23" Monochrome OLED Bonnet for Raspberry Pi (https://adafru.it/RfQ)
- Adafruit 2.13" Monochrome E-Ink Bonnet for Raspberry Pi THINK INK (https://adafru.it/RfR)
- Adafruit 128x64 OLED Bonnet for Raspberry Pi (https://adafru.it/RfS)
- Adafruit Mini PiTFT 1.3" 240x240 TFT Add-on for Raspberry Pi (https://adafru.it/RfT)
- Adafruit Mini PiTFT 135x240 Color TFT Add-on for Raspberry Pi (https://adafru.it/RfT)
- Adafruit 1.3" Color TFT Bonnet for Raspberry Pi 240x240 TFT + Joystick Addon (https://adafru.it/NFh)
- Adafruit PiOLED 128x32 Monochrome OLED Add-on for Raspberry Pi (https://adafru.it/NFh)
- Pimoroni Inky pHAT for Raspberry Pi 3 Color elnk Display (https://adafru.it/RfU)
- Pimoroni Inky pHAT 3 Color elnk Display Yellow/Black/White (https://adafru.it/RfV)
- Pimoroni Inky pHAT elnk Display Black/White (https://adafru.it/RfW)



#### Here are some of our favorite displays we recommend for the HAT:

- Adafruit PiTFT 2.2" HAT Mini Kit 320x240 2.2" TFT No Touch (https://adafru.it/RfX)
- Adafruit PiTFT 2.4" HAT Mini Kit 320x240 TFT Touchscreen (https://adafru.it/RfY)
- PiTFT Plus Assembled 320x240 2.8" TFT + Resistive Touchscreen (https://adafru.it/eZS)
- PiTFT 2.8" TFT 320x240 + Capacitive Touchscreen for Raspberry Pi\_(https://adafru.it/e9Y)
- Adafruit PiTFT Plus 320x240 2.8" TFT + Capacitive Touchscreen (https://adafru.it/CFo)
- Adafruit PiTFT 320x240 2.8" TFT+Touchscreen for Raspberry Pi. (https://adafru.it/dDE)
- PiTFT Plus 320x240 3.2" TFT + Resistive Touchscreen (https://adafru.it/RfZ)
- PiTFT Assembled 480x320 3.5" TFT+Touchscreen for Raspberry Pi (https://adafru.it/e27)
- PiTFT Plus 480x320 3.5" TFT+Touchscreen for Raspberry Pi (https://adafru.it/Rf-)
- Pimoroni HyperPixel 4.0" Hi-Res Display for Raspberry Pi (https://adafru.it/Rga)
- Pimoroni HyperPixel 4.0" Hi-Res Display for Raspberry Pi Non-Touch (https://adafru.it/Rqb)
- Pimoroni Inky wHAT (ePaper/eInk/EPD) Red/Black/White (https://adafru.it/Rgc)
- <u>Pimoroni Inky wHAT (ePaper/eInk/EPD) Black/White</u> (https://adafru.it/Rgd)
- <u>Pimoroni HyperPixel 4.0 Square Touch Display for Raspberry Pi Capacitive Touch PIM470</u> (https://adafru.it/Rge)

## **Pinouts**



#### **I2C Connectors**

- STEMMA QT These are the smaller connectors on either side of the HAT and Bonnet. You can use <u>STEMMA QT cables</u> (https://adafru.it/GfR) to connect up <u>a bunch of different sensors and</u> <u>breakouts</u> (https://adafru.it/HMF) with no soldering or breadboard needed! (Cables sold separately.)
- These two connectors are connected together in parallel. You can daisy-chain sensors and breakouts connected to them.

#### STEMMA QT / Qwiic JST SH 4-pin to Premium Male Headers Cable

This 4-wire cable is a little over  $150 \, \text{mm} / 6$ " long and fitted with JST-SH female 4-pin connectors on one end and premium Dupont male headers on the other. Compared with the...

\$0.95

In Stock

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#### STEMMA QT / Qwiic JST SH 4-pin Cable - 100mm Long

This 4-wire cable is a little over 100 mm / 4" long and fitted with JST-SH female 4-pin connectors on both ends. Compared with the chunkier JST-PH these are 1mm pitch instead of...

\$0.95

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## STEMMA (3-pin JST PH) Connectors

• These are the larger connectors on either side of the HAT and Bonnet. You can use these to connect up NeoPixels and more with no soldering or breadboard required! (Cables sold separately.)

They are labeled with their pin numbers: 18 and 13.

Here are some accessories we recommend using with your STEMMA JST PH connectors!

#### STEMMA JST PH 3-Pin to Male Header Cable - 200mm

This cable will let you turn a JST PH 3-pin cable port into 3 individual wires with high-quality 0.1" male header plugs on the end. We're carrying these to match up with our...

\$1.25

In Stock

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#### STEMMA JST PH 3-Pin to Female Socket Cable - 200mm

This cable will let you turn a JST PH 3-pin cable port into 3 individual wires with high-quality 0.1" female header sockets on the end. We're carrying these to match up with...

\$1.25

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#### JST PH 3-pin Plug to Color Coded Alligator Clips Cable

This cable will let you turn a JST PH 3-pin cable port into 3 individual wires with grippy mini alligator clips. We're carrying these to match up with any of our boards or...

\$1.95

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#### Adafruit NeoPixel LED Strip with 3-pin JST PH Connector

Plug in and glow, this Adafruit NeoPixel LED Strip with JST PH Connector has 30 total LEDs in a "60 LED per meter" spacing,... \$12.50

In Stock

Add to Cart

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#### Adafruit STEMMA Non-Latching Mini Relay

STEMMA plug-and-play parts make your next project soldering-free! This is the STEMMA Non-Latching Mini Relay. It gives you power to control, and control over...

\$5.95

In Stock

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## Raspberry Pi Headers

On the top and bottom of the HAT and Bonnet are the Raspberry Pi headers.

- The bottom is meant to plug into a Pi (works best with Pi 400!). They are at an angle to facilitate the P 400.
- The top headers are to allow you to plug in a HAT or Bonnet. The pinouts are identical just plug in any HAT or Bonnet!

#### Adafruit 2.23" Monochrome OLED Bonnet for Raspberry Pi

If you're looking for a bright, readable OLED display for a Raspberry Pi (most likely a \$22.50

In Stock

Add to Cart

#### PiTFT Plus 480x320 3.5" TFT+Touchscreen for Raspberry Pi

Is this not the cutest, little display for the Raspberry Pi? It features a 3.5" display with 480x320 16-bit color pixels and a resistive touch overlay

Out of Stock

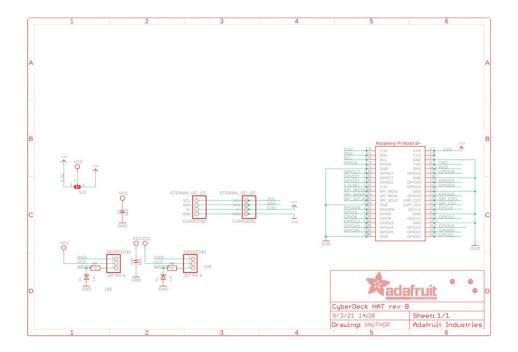
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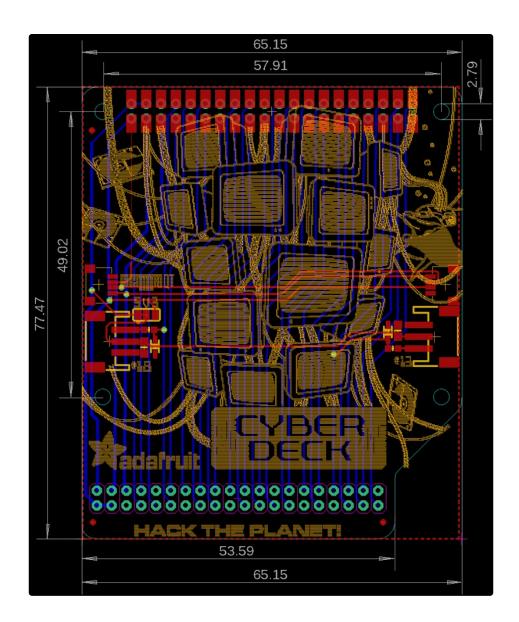
# Downloads

### Files:

- Fritzing object for HAT in Adafruit Fritzing Library (https://adafru.it/Rgf)
- Fritzing object for Bonnet in Adafruit Fritzing Library (https://adafru.it/RgA)
- EagleCAD PCB files on GitHub (https://adafru.it/RgB)
- 3D Model for HAT on GitHub (https://adafru.it/RkA)
- 3D Model for Bonnet on GitHub (https://adafru.it/Rsb)

# Schematic and Fab Print for CYBERDECK HAT





Schematic and Fab Print for CYBERDECK Bonnet

