HyperPixel 4.0 Square Touch - Hi-Res Display for Raspberry Pi

PIM470

A uniquely square, high-resolution, high-speed, 4.0" touchscreen display for Raspberry Pi – it's hip to be square!

HyperPixel 4.0 Square has all the great features of our standard HyperPixel 4.0—a crisp, brilliant IPS display, touchscreen, and high-speed DPI interface—it's just more square!

This square version of HyperPixel 4.0 is great for custom interfaces and control panels, and works really well for Pico-8 games. Everything is pre-soldered and ready to go, just pop it onto your Pi, run our installer, and away you go!

Note that the images of the displays on this page have not been Photoshopped. That's the Raspbian desktop with our HyperPixel Square wallpaper on!

Features

- High-speed DPI interface
- 4.0" IPS (wide viewing angle, 160°) display (72x72mm)
- 720x720 pixels (~254 PPI)
- 18-bit colour (262,144 colours)
- 60 FPS frame rate
- Capacitive touch
- 40-pin female header included to boost height for Pi B+, 2, 3, 3B+
- Standoffs included to securely attach to your Pi
- Compatible with all 40-pin header Raspberry Pi models
- One-line installer

HyperPixel 4.0 Square uses a high-speed DPI interface, allowing it to shift 5x more pixel data than the usual SPI interface that these small Pi displays normally use. It has a **60 FPS frame rate** and a resolution of approximately 254 pixels per inch (**720x720px**) on its 4.0" display. The display can show **18-bits of colour** (262,144 colours).

The touchscreen is capacitive touch, that's more sensitive and responsive to touch than a resistive touch display, and it's **capable of multi-touch**!

Please note: when installing HyperPixel 4.0 Square onto your Pi **make sure not to press down on the screen surface**! Hold the board by its edges and wiggle it to mate with the extended header (or GPIO header).

It'll work with any 40-pin version of the Pi, including Pi Zero and Pi Zero W. If you're using it with a larger Pi then use the extra 40-pin header that's included to boost it up to the required height. If you're using a Pi Zero or Pi Zero W then just pop it straight onto the GPIO.

The included standoff kit allows you to mount your HyperPixel 4.0 Square safely and securely to your Pi. Just screw them into the posts on the underside of the HyperPixel 4.0 Square PCB and then secure with screws through the mounting holes on your Pi.

Software

We've put together a one-line-installer to configure your Pi properly for HyperPixel 4.0 Square and to enable the touchscreen. Note that you'll need another display, keyboard, and mouse to install the software, or you could do it remotely over SSH if you follow our guide on how to set your Pi up headlessly.

Open a terminal, and type `curl https://get.pimoroni.com/hyperpixel4 | bash` to run the one-line installer and set your HyperPixel 4.0 up.

 Find the GitHub repository here: **https://github.com/pimoroni/hyperpixel4**

Notes

▪ The HyperPixel 4.0 Square in the main photo here is on its side, and that the slightly narrower and slightly wider bezels are usually at the bottom and top respectively, although there's very little difference in size (5.5mm for the left and right sides, 4.5 for the top, and 6.5mm for the bottom).
▪ Dimensions: 84x84x9.5mm (WxHxD, depth includes header and display).

https://shop.pimoroni.com/products/hyperpixel-4-square/8-5-19