

Check out these emulated calculators at the Internet Archive

The Internet Archive calls this new collection the Calculator Drawer. There are 14 calculators to choose from, including the HP 48GX, TI-82, TI-83 Plus, and even the Electronic Number Muncher, which is an 80s-era toy calculator. The Internet Archive doesn't just emulate the interface of each device, either; it incorporates their physical design and buttons, making it feel like you have the actual device right in front of you.

a:hover]:text-gray-63 text-gray-63 dark:[&a:hover]:text-gray-bd dark:text-gray-bd dark:[&a]:text-gray-bd [&a]:shadow-underline-gray-63 [&a:hover]:shadow-underline-black dark:[&a]:shadow-underline-gray dark:[&a:hover]:shadow-underline-gray">Screenshot: Emma Roth / The Verge

The Internet Archive gets into more detail about how this all works in a post on its blog. It uses the MAME Artwork System to power its calculators – a branch of the open-source framework that recreates classic arcade games on various systems – which is how the Internet Archive managed to incorporate actual images of the calculators in the emulations.

As noted by the Internet Archive, MAME “has two different ways it can render an emulated device that needs ‘additional’ drawing to augment the part of itself that’s reflecting the screen or lights of the device.” While the MAME system can create a vector-based drawing of the buttons and screen, the MAME Artwork System replaces these drawings with an actual

image.

With these emulations, you can click on the buttons to input numbers and functions, just like you would if you were to physically press a button on the calculator with your finger. While you can also use your keyboard to type in numbers, it's a bit more limiting since it doesn't look like you can input any functions. Some of the devices, like the HP 48G+, even have sound, which is a nice touch. And if you need a refresher on how to use these calculators, the Internet Archive even uploaded a collection of original user manuals.

While I don't have a personal history with any of these devices, it's still cool to get the chance to try them out without physically touching them. I have great memories with my TI-84 Plus in high school and college, which allowed me to avoid learning how to factor since I just programmed it to do the equations for me.

<https://www.theverge.com/2023/1/29/23576677/emulated-calculators-internet-archive-mame>