

IMAX emulates PalmPilot software to power Oppenheimer's 70 mm release

Enlarge / Cillian Murphy in *Oppenheimer*.

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It's a big week for IMAX, which has been promoting today's release of *Oppenheimer*. It's a particularly big deal for IMAX because the film is the first to get a 70 mm IMAX release since 2020's *Tenet*. So, you could understand why the company took to social media to boast of the size and magnitude of running the film, which is said to be 11 miles long and 600 pounds. But in addition to the blockbuster IMAX release is something that hasn't been a showstopper in ages: a PDA.

And you can't discuss personal digital assistants (PDAs) without mentioning PalmPilots. The Palm computing devices were once the epitome of handheld technological organization. But Palm Computing, which endured a series of acquisitions before HP sunset the brand in 2011, made other devices besides PalmPilots. One of those is the Palm m130, which is apparently IMAX projectionists' ideal controller for running 70 mm film.

As shown in IMAX's TikTok video below, the 70 mm print for *Oppenheimer* is so large that they had to extend their film platter. That's fascinating and all, but so is the emulated 2002 PDA apparently running things:

@imax Constantly pushing the boundaries of film .

#Oppenheimer #ChristopherNolan #IMAX ♪ original sound – IMAX

The m130 wasn't even top of the line when it came out in 2002. It did, however, bring color (12-bit, to be exact) to Palm's M-series of handhelds. It debuted at \$279 with a 2-inch, 160×160 screen and a 33 Motorola Dragonball VZ processor. But that was just the magic needed for IMAX's purposes, and so it hasn't changed a thing. The only difference is that it's using emulations in at least some cases. According to The Verge, the TikTok video shows the PDA emulated on a 10.1-inch Windows tablet for businesses, the Winmate W10IB3S-PCH2AC-P0E Panel PC. It's easy to find Palm OS emulators online, as noted by Vice's Motherboard.

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The PDA emulation controls the theater's Quick Turn Reel Units (where workers load the physical film reels), which can also have integrated controllers instead.

Motherboard contacted IMAX about the antiquity and a company spokesperson said, "The original Quick Turn Reel Units operated on PalmPilots. In advance of the release of *Oppenheimer*, IMAX Engineering designed and manufactured an emulator that mimics the look and feel of a PalmPilot to keep it simple and familiar for IMAX film projectionists."

It's possible that some IMAX theaters still have physical PDAs. Ars Technica reached out to IMAX for clarification and will update this story if we hear back. As The Verge noted, a YouTuber named Yves Leibowitz, who shares video from an IMAX theater at an aquarium with 70 mm support, has physical Palm devices in his videos.

Enlarge / A closer look at the emulated PDA.

So what does the timeless emulator do? An IMAX rep told The Verge that it includes controls for the left and right sides of a 3D projector, which is “from the days of the 45-minute 3D documentaries, where there was a right eye print and a left eye print which both ran through the projector at the same time.” Workers can use the emulator to set which platter is ready for film or for feeding the projector film. The emulator can also tell a worker when the platters are available to run.

If it ain't broke...

Twenty-one-year-old emulated PDAs may not be what you'd expect to power one of the year's most publicized movie releases, but if you look at the converse speeds at which technology and business processes tend to evolve, it feels less surprising.

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Earlier this year, we got a sneak peek at a Chuck E. Cheese that was *finally* moving its animatronics off floppy disks and into the modern age of ... DVDs. The company's not alone in using dated technologies that mainstream consumers have largely forgotten. Businesses with long-standing procedures and systems often rely on technologies prominent when those systems were created. It's common for machines for things like medical equipment, aircraft, embroidery machines, and plastic molding to rely on floppy disks.

Similarly, IMAX is seemingly working with technology it's familiar with and, thus, doesn't require new or advanced training or big purchases and upgrades.

Meanwhile, 70 mm IMAX film releases like *Oppenheimer* don't come often, and when they do, only 30 theaters in the world can support them, CNBC reported, and not necessarily all of them will (*Tenet's* 70 mm release, for example, was limited to 11 theaters due to pandemic restrictions, CNBC said). That makes any need for upgrades and overhauls less urgent.

"If 70mm IMAX had a resurgence then I'd expect that they'd update the [Quick Turn Reel Unit] controllers. Until then, it's best to ride it until the wheels fall off," an IMAX rep told The Verge.

For anyone still wondering what the big deal is about 70 mm film (besides the size), the movie's website says *Oppenheimer* was "shot using a combination of 5-perf 65 mm and 15 perf IMAX film." The site claims that "when presented on 70 mm IMAX, the sequences shot on 15 perf IMAX are printed full quality in their native format—the highest quality imaging format ever devised, offering 10 times the resolution of standard formats, and filling the giant IMAX screens from top to bottom."

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