

# The Analogue Mega Sg answers why anyone would pay \$190 for a new Sega Genesis

Enlarge / The Analogue Mega Sg comes with none of these attached things. But if you can bring your own games and controllers to its blast processing party, you're in for a very, very good time.

Sam Machkovech

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To start any conversation about the Analogue Mega Sg—a new, \$190 take on the original Sega Genesis (née Mega Drive in Europe and Japan) that's available for “pre-order” but has already begun shipping—let's identify a few classic gamer niches. This impressive device simply isn't for everyone.

Are you a classic Sega devotee—as in, starting with the SG-1000, continuing through the Master System, Genesis, and Game Gear, ending with the Sega CD, and going no further? That's the territory this classic-gaming box covers.

Are you the kind of Sega Genesis freak who abides by the gospel of pure, original gameplay, as opposed to emulation? The Analogue Mega Sg has you covered. It delivers the most authentic Genesis visuals, colors, control, and sound I've ever seen via an HDMI connection.

Are you already the proud owner of a pile of classic Sega

games in their original cartridge form? Do you just want a way to get their pristine, lag-free action on a modern screen? The Analogue Mega Sg is *also* for you, because unlike a “classic” Nintendo console—or the disappointing, mini-sized AT Games Genesis—this new hardware doesn’t come with a dozens-strong library of classic hits pre-installed.

And finally, do you have any old controllers sitting a closet somewhere? With the Mega Sg, you get bonus points if you have old Genesis controllers, because the starting price of \$190 here includes *zero* gamepads.

- The Analogue Mega Sg.  
Sam Machkovech
- Another angle of the top. Not seen here: how annoying it can be to perfectly line up cartridges to insert.
- All regions supported, as per a tiny, etched font.
- HDMI goes here.
- SD card goes here (but only to update the system’s firmware, as of press time).
- A hard-to-see etching of the company’s name on the front.
- That sweet, sweet 3.5mm headphone jack.
- A Nintendo Switch, for a more modern size comparison. Meaning: if someone were to install a screen add-on to the Mega Sg and make it an all-in-one portable, it’d be pretty beefy.
- Rubber pad on the bottom, which is crucial for making it easier to shove cartridges in.

I start with that list not to bum anyone out but to make clear that Analogue is a singular kind of retro-gaming company. The Mega Sg is the company’s third “FPGA” (field-programmable gate array) product designed to deliver near-perfect replication of an old gaming console experience. This one happens to be tailored to the HDMI video standard (scaling up to 1080p resolution, 60 frames per second).

Once again, Analogue has shipped an FPGA motherboard, tuned to replicate a piece of hardware that is no longer manufactured. We've spoken at length about this matter in the past, but let's briefly recap: an FPGA board simulates the exact speeds and processes of original hardware as opposed to emulating old software on newer chipsets. And Analogue does this as an independent console producer in spite of, not because of, official support from any '80s and '90s console maker.

Thus, Analogue is not signing any deals to license your favorite games (or being weirdly selective in that "Why is my fave game missing?" way). The company is not contracting with Sega to build exact replicas of old controllers. And it's not adding USB ports to support modern controllers or add-ons. If you're buying an Analogue Mega Sg, you're starting with a base expectation of a "pure" Sega Genesis experience.

But if you come to the Mega Sg with expectations accordingly, almost everything it adds to the classic Sega experience feels like a bright, red, Knuckles the Echidna-shaped cherry on top.

## **A Mega good time, by default**

If you simply want to set-and-forget the Analogue Mega Sg to play old Genesis games, that's easy enough. Plug in a power source via Micro-USB. Plug in a screen via HDMI. Plug in a cartridge and controller. Hit the power button. The hardware's simple, clean design makes all of this clear. The more handsome elements include smooth, curved edges and a circle-on-top motif. But the Genesis always stood out with its bulgy, "aggro" design in the early '90s, and I would've liked more shine, bulges, or hints of attitude here.

I still think the device looks cool—particularly with a cartridge stuck into the top. But I can't help but feel like its relatively simple shape and plain, matte finish make the system look a little too much like the Analogue Super Nt.

After a brief splash screen plays with the Analogue logo, you can choose to boot your cartridge, go into a settings menu, or play one pre-installed game (we'll get to that). By default, Mega Sg renders old Genesis and Mega Drive games at a "4.5x" upscale (not quite reaching the top and bottom edges of a 1080p screen) at a 4:3 ratio.

(If you're curious: this is a region-free system, so any cartridge from any nation will work. What's more, games will be automatically recognized, no option-changes necessary.)

- All captures in this gallery are at the Mega Sg's default settings, including a "4.5x" resize to 1080p resolution.
- *Sonic 2* is a great showcase for color accuracy. These images, grabbed using an ElGato HD60 capture device, are tasty.
- *Sonic 2* also ships with a weird two-player mode, which runs at an interlaced 320×448 resolution, and it's a great test of system accuracy. The result: it runs with identical performance, and slowdown, as an original Genesis, and it renders cleanly (other than having native sprite flicker, which, again, you'd find on the standard Genesis).
- All I want to do is play *Gunstar Heroes*, and Mega Sg lets me do so with incredible color accuracy and speed timing. It controls quickly and smoothly while still replicating the original game's slight hitches.
- Pro tip: managing screen captures while playing *Gunstar Heroes* is always a bad idea.
- Time to roll the dice.
- In addition to testing a litany of cartridges, we also used an Everdrive cartridge to load demoscene ROMs like the hardware-pushing "BadApple!!", and its mix of full-motion video and high-fidelity audio is something to behold.
- Mega Sg doesn't flinch on the demands of "BadApple!!",

which was released by modders in 2012.

- While working on this review, we received a ROM for a brand-new song made by a Genesis-obsessed musician who goes by the name Remute. The ROM doesn't just play music. It also includes a lengthy, 30fps FMV sequence...
- ...followed by a fully 3D car-race sequence that looks as good as the PS1's WipEout games. The Mega Sg runs this without breaking a sweat.
- The high-speed chase moves into outdoor environs.
- It ends with a robot surprise.

And at default settings, the Mega Sg nails many of the basics you'd hope for in a \$190 Sega Genesis. Colors are bright, bold, and authentic—nothing is overblown, nothing is washed out. Sprites render crisply as opposed to being bathed in filters. And music and sound effects are utterly faithful—every analog noise and quirk of the original Yamaha sound chip being translated so sharply that Genesis diehards may recoil at the shimmer. These aren't distorted sound effects. They're quite the opposite.

But Analogue assumes you're not paying \$190 to settle on default settings. And there are a *lot* of settings to pick through.

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