Final Fantasy VII Remake hands-on: Already feels like the one for jaded JRPG fans



reader comments

39 with 31 posters participating, including story author

Share this story

LOS ANGELES—I have not seen or played enough of *Final Fantasy VII Remake* to confirm exactly how the game will play out when it launches on PlayStation 4 consoles in March 2020. What I can say so far, at least, is that I'm far from a Final Fantasy or JRPG apologist, and yet 1.5 hours with the game's E3 2019 debut has me absolutely excited.

Really, I'm shocked to admit that. Yet familiar elements, new combat, and incredible polish across the presentation and dialogue have me convinced that I'll be a day-one *FFVIIR* player, no matter how good, weird, or poor the final game turns out to be. Thus, I'm here to talk about why I feel that

way—and what remains to be confirmed or explained about this ambitious, murky, “first in an undetermined series” return to Square Enix’s glory days.

Weighing in for a legitimate brawl

- Once more into the belly of Shinra Corporation.
- Here, Cloud activates one of his special attacks in the middle of a battle, which requires pausing the real-time action, picking through a menu, and spending some of his “ATB” points (as explained below).
- Even in the E3 demo’s tutorial-like segments, Barret’s ranged attacks are crucial for players to manage. Keep him focused on drone enemies and hard-to-reach weak points so that Cloud can more effectively wreak melee havoc.
- It’s hard to see in this explosion of fire, but the word “block” is hovering in there. Letting up on attacks is key when you’re simply not going to roll out of the way of an attack in time.
- In comparison to the last screen, this one shows Cloud actually successfully dodge-skating past a barrage of machine-gun fire. It’s not *Devil May Cry*, but the maneuverability in *FFVIIR* is still pretty effective stuff.
- I didn’t get to see Tifa get into battle in any of my behind-closed-doors gameplay presentations, but this week’s trailers hinted to her delivering combo-based martial arts damage.
- The attacks have lots of particle effects.
- Cloud is running.
- Barret doling out some punishment.

Square Enix’s Monday E3 press conference confirmed a few things about *FFVIIR*, from the refreshed visuals to the expanded story and its newly recorded, voice-acted dialogue.

But first things first: how does it feel to play the darned thing?

The press conference made very clear that the game includes a refreshed take on JRPG combat, and the mechanical details we learned sounded fine enough as a sales pitch. But going hands-on with the demo helped confirm how good this feels in action—and how *distinct* it feels from Square Enix's other "action-RPG" fare (*Final Fantasy XV*, *Kingdom Hearts*).

Those other games let players use joysticks to run their characters around enemy-filled battlefields, but effectively, that movement doesn't change their core: turn-based, menu-driven combat that resembles JRPGs of old. In comparison, *FFVIIR* is truly a brawler. Mash a primary "attack" button for a default melee or ranged attack (depending on your chosen character and their equipped weapon). Tap one button to dodge-roll, or hold down the block button to withstand attacks that you're likely not to dodge. And however close or far you are from a foe really does have a risk-reward element, in terms of making you more susceptible to taking hits while also putting you in range to deliver damage (or, conversely, making sure you run your ranged characters away from combat so they can maximize their distant-fire potential).

Instead of offering a *Devil May Cry*-caliber array of attacks and combos, however, *FFVIIR* breaks its more dramatic attacks out to a "pause" menu that slows time to a crawl. Here, you can activate special attacks, magic spells, and items, and these each cost one bar of your characters' "active time battle" (ATB) bar. (This menu also affords a welcome breather during frantic moments to reposition the in-game camera and switch active control to different heroes, or assign tactics and ATB moves to the ones you're not controlling.) ATB bars refill as you pull off more successive attacks—and fill up faster when you're in direct control of a particular hero. Thus, you'll want to use the d-pad to swap your direct control between heroes on a regular basis.

Take a stance (or two)

I personally enjoyed the resulting rhythm. The classic-JRPG half of menu-attack management was paid off with flashier attacks and effects, and I also stayed excited while managing my active strikes, dodges, and battlefield placement on a regular basis. On top of those elements is *FFVIIR*'s secret sauce of "stances." Characters can swap between one of two stances by tapping the PS4 controller's triangle button. Doing this changes the default behavior for your active character's primary attack and dodge.

In Cloud's alternate "punisher" stance, for instance, he starts swinging heavier strikes with a wide, multi-enemy arc but moves much slower. The gun-toting Barret will begin shooting concentrated, shotgun-like blasts in his alternate stance. Thus, for both characters, you are essentially rewarded if you rush forward, hunker down in the alternate stance, lay down some damage, then switch stances once more. (But doing this can reduce your ability to effectively dodge or block, so you'll have to consider when to go stance-crazy.)

After watching Square Enix producers play the game's earliest portion, which mostly revolved around battling grunt soldiers and turret-loaded drones, I took over by fighting similar waves of baddies. This was followed by a bout against the game's first boss: the Scorpion Sentinel, a massive robo-bug who transforms into more defensive and offensive forms at various damage thresholds.

While the basic combat against grunts was engaging enough, this boss battle really demonstrated the importance of positioning, character swapping, ATB pausing, special-attack activation, and generally active combat. (Stances were disabled in my hands-on portion, sadly.) I had to run my characters behind cover when a charged attack was about to land. I had to switch characters in order to free the captive

when another got grabbed by the scorpion’s pincers. Throughout it all, I had to time my blocks and dodges to keep my heroes on their feet.

Listing image by Square Enix

https://arstechnica.com/?p=1521539

We used to be friends: Veronica Mars is back in the first full season 4 trailer



Enlarge / Hulu also distributed this poster for the new season.

reader comments

30 with 16 posters participating

Share this story

As the premiere for a new season of fan-darling-TV-series-brought-back-from-the-dead *Veronica Mars* draws closer, Hulu has released the first full trailer for the show.

Previous clips were just teasers, but this one really fleshes out what viewers can expect. In general, it looks like it will retain the original series' wit and darkness, just without the heavy 2000s-ness of it all. Since Veronica is a grown-up, working private investigator now, it looks a bit edgier in some ways, with guns and the like playing a more prominent role than they did in the original series. (Previously, Veronica usually relied on her dog Backup or her taser to do her dirtiest work.)

[embedded content]
The Veronica Mars season 4 trailer from Hulu
In this reboot, the small seaside town of Neptune, California has seen a rash of bombings of late, and Veronica and her father are hired by the family of one of the victims to figure out what's going on.

Various people in the trailer speculate about what's happening. Could it be a serial killer? Could it be someone trying to destroy the town's community? Hulu's synopsis for the season alludes to a conflict between the wealthy residents of Neptune, who want to end the noisy Spring Break culture, and the working class, mostly Hispanic residents who are dependent on the tourism income.

Given that the tension between those two social circles has often been at the heart of the show, we wouldn't be surprised to see that it's at least somehow related to bombings, too.

It seems longtime Veronica Mars love interest Logan Echolls has returned from some time away, and he's shirtless and smoldering as ever—moreso than ever, really. The trailer also included some glimpses of Eli "Weevil" Navarro, another key

character from the original series, plus there's a plethora of new people. Oh, and Dick is up to all his old bro-y antics, per a couple of moments in this footage.

It's too bad we haven't seen much of fan favorites Wallace or Mac so far, but here's hoping they'll return in a big way. Veronica Mars season four will premiere on Hulu on July 26, and the streaming platform will soon add all three original seasons (plus the 2013 movie) to its library in the leadup.

Here's the full synopsis from Hulu:

> *Spring breakers are getting murdered in Neptune, thereby decimating the seaside town's lifeblood tourist industry. After Mars Investigations is hired by the family of one of the victims to find their son's killer, Veronica is drawn into an epic eight-episode mystery that pits the enclave's wealthy elites, who would rather put an end to the month-long bacchanalia, against a working class that relies on the cash influx that comes with being the West Coast's answer to Daytona Beach.*

Many cancelled TV series from the 90s, 2000s, and even early 2010s have been revived by streaming platforms in an effort to win over viewers dissatisfied with cable and over-the-air-programming. *Veronica Mars* is one of the most high-profile ones yet, thanks in no small part to its famously successful Kickstarter push to produce a movie that was released six years ago. Since then, the series has continued with two novels, but not much else.

https://arstechnica.com/?p=1522737

Review: Men in Black: International is a solid addition to the popular franchise



Enlarge / Chris Hemsworth and Tessa Thompson join forces as Agent H and Agent M to ward off an alien attack in *Men in Black: International*.
YouTube/Sony Pictures

reader comments

56 with 47 posters participating

Share this story

A pair of shapeshifting aliens with electrifying powers and mad breakdancing skills threaten the safety of Earth’s

inhabitants in *Men in Black: International*. The fourth installment in the popular franchise hits theaters this weekend, and this iteration is the first not to star Will Smith and Tommy Lee Jones. Fortunately, former *Thor: Ragnorak* co-stars Chris Hemsworth and Tessa Thompson prove themselves worthy successors to that dynamic duo, bringing their own brand of wisecracking buddy-cop chemistry to this standalone sequel.

(Some mild spoilers below.)

The first *Men in Black* film (1997) was an instant classic and pretty much cemented Will Smith's status as a mega-star. Smith's chemistry with co-star Tommy Lee Jones was a sheer delight, and the original was rounded out by an equally terrific cast. Miraculously, the sequel, *Men in Black II* (2002), was almost as good, and a Hollywood franchise was born, reuniting Smith and Jones one last time with *Men in Black III* (admittedly the weakest film of the trilogy) in 2012.

The first trailer for *Men in Black: International* dropped last December, showcasing Thompson in the Will Smith role as the talented rookie and foil to Hemsworth's jaded pro—except instead of being recruited, she seeks out the MiB herself. Somehow she finds the US headquarters of the most secret organization in the world, which, as she points out to uber—posh Agent O (Emma Thompson, reprising her role in *MiB III*), pretty much makes her perfect for the job. Agent M's first assignment: trouble is brewing across the pond, and she joins up with London's MiB International Unit to take on a couple of aliens who like to bust a move at local nightclubs when not causing trouble for the human race. She partners with Agent H (Hemsworth), who is supposedly the best and used to work with Liam Neeson, aka High T, head of the London office. Now he seems primarily occupied with hard partying, napping, and Taco Tuesdays in the cafeteria.

- An aspiring new recruit finally finds the secret headquarters of the Men in Black.
  YouTube/Sony Pictures
- Chris Hemsworth and Liam Neeson unload on alien adversaries.
  YouTube/Sony Pictures
- Emma Thompson rocking the black suit and stylin’ cropped white hairdo.
  YouTube/Sony Pictures
- Buckling up for a wild ride
  YouTube/Sony Pictures
- MiB: International headquarters in London.
  YouTube/Sony Pictures
- Once you go worm…
  YouTube/Sony Pictures
- Pawny pledges his loyalty to Agent M.
  YouTube/Sony Pictures
- This dude bustin’ a move on the dance floor of a London nightclub might be looking for trouble.
  YouTube/Sony Pictures
- Clearly he and his buddy are up to no good.
  YouTube/Sony Pictures
- Would you trust this alien?
  YouTube/Sony Pictures
- Agent M takes on Riza (Rebecca Ferguson), a former alien flame of Agent H.
  YouTube/Sony Pictures
- The film costars the Lexus RC-F.
  YouTube/Sony Pictures
- Does that weapons stash in the side mirror come standard?
  YouTube/Sony Pictures
- No international thriller is complete without a hero’s shot at the helm of a speed boat.
  YouTube/Sony Pictures
- YouTube/Sony Pictures
- Locked and loaded

YouTube/Sony Pictures

- She makes this look good.

YouTube/Sony Pictures

Hemsworth once again displays the comedic chops that made his supporting turn as the beautiful-but-dumb receptionist Kevin in 2016's *Ghostbusters: Answer the Call* such a delight—especially his gift for physical comedy, showcased in key fight scenes. His Agent H is a wise-cracking, rather louche playboy when we meet him. He uses macho bravado to keep the world at bay, and over the course of the film, he must dig deep to become the hero he once was to stave off this latest threat to Earth's survival. He's the perfect complement to Thompson's Agent M. She is whip-smart, ambitious, and not at all cowed by her partner's superficial swagger, with her own thick protective walls hiding behind logic and intellect.

Director F. Gary Gray has assembled an equally strong supporting cast. Emma Thompson steals every brief scene she's in with little more than a skillfully arched eyebrow. Rafe Spall brings depth to what might otherwise have been a one-note role as Agent C, H's would-be rival, whose nebbish demeanor makes him better suited to a desk than active field work (this naturally rankles his pride). I was initially dubious about the cutesy introduction of Pawny (an animated alien chess piece voiced by Kumail Nanjiani), who is befriended by Agents M and H after his queen is killed. But he gets some of the wittiest comebacks, routinely cutting H down to size. Even Pawny ends up being a welcome addition to the team.

As the history of lengthy franchise sequels may lead you to suspect, this is not a perfect film. The plot is predictable and on the thin side, and the final twist is telegraphed far too early on. Luckily, jumping around to various exotic locations keeps things moving at a brisk pace throughout. *MiB: International* at least avoids the dizzying time-travel convolutions that marred the third installment in this

franchise, plus there are a number of amusing callbacks to the prior films. It all makes for a fun, enjoyable summer ride, and fans of the earlier films won't be disappointed.

https://arstechnica.com/?p=1519839

The best games, demos, and tech of E3 2019

reader comments

72 with 43 posters participating, including story author

Share this story



Enlarge / C'mon, how can you deny Keanu?
Xbox / Microsoft

LOS ANGELES—There's no getting around it: Walking through the Los Angeles Convention Center for 2019's Electronic Entertainment Expo felt weird. This year's new Sony-sized hole compounded the fact that Xbox and EA held events elsewhere (and Activision, once again, didn't really show up).

As a result, this year's E3 was the most thinly attended iteration we've seen in years—but that was by no means the fault of the games on offer. We left E3 2019 impressed by a variety of games old and new. While we're still working through a backlog of hands-on impressions, the Ars gaming braintrust is already ready to name its favorite games of the show—all of which were games shown with *real, live gameplay*. Admittedly, narrow preview builds mean devs could still be fooling us with some smoke and mirrors—this is E3, land of unfinished games—but all of the below demos presented well enough at E3 to pass our sniff test for hype and BS.

Here, for your consideration, is our unranked list of the Top 10 games of E3 2019, along with a selection of honorable mentions.

Borderlands 3



Platforms: Windows, Xbox One, PS4, Stadia
Expected release date: Sept. 13, 2019

In a lot of important ways, our E3 2019 demo of *Borderlands 3* simply provided more *Borderlands*. That means more ridiculously frenetic and colorful shooting with an unapologetically self-aware, over-the-top, post-apocalyptic attitude. After a seven-year wait since the last numbered game in the series, that's almost enough on its own. In terms of sheer feel and beat-to-beat gameplay, we're still not convinced anyone has topped existing Borderlands games in the looter-shooter genre, and this one already feels more polished in action than its predecessors.

That's the case before we even take into consideration some important new tweaks to the formula. For one, each character now gets a couple of special abilities, each with their own independent recharge timer. For my character, that meant juggling a portable energy shield and an independent drone that could distract and fire upon enemies. Each ability also now comes with stackable "emblems" that can augment the powers if you pour enough ability points into the applicable field.

Outside the demo, we were also sold on coming social quality-

of-life features. This includes the thankfully standard split-screen co-op for local couch play, but there's also a newfound ability to sell extra guns to friends asynchronously via in-game vending machines or simply send them directly via an in-game mail service. You'll also be able to find a bevy of skins and cosmetic customization options for you and your guns in order to tailor your own look for others to see when playing online.

But that's mostly icing on a cake that we've been jonesing for another slice of for years. *Borderlands 3* provides just the excuse we need to collect a lot of virtual guns to shoot at a lot of oversized beasts. *-Kyle Orland*

Control

Platforms: Windows, Xbox One, PS4
Expected release date: Aug. 27, 2019

- In action, flinging objects via telekinesis into the game's floating, creepy baddies results in a beautiful oil-smear kind of color-and-light explosion.
- A primer on *Control* telekinesis. Step one: target an apparent object of a certain size.
- Step two: expend a small amount of your special-powers meter to pick it up.
- Step three and four: fling and kill. Expired enemies cough up the juice you need to activate more super powers.
- We're not sure if bigger objects can be picked up later, but there was a clear limit as to how big an object could be before Jesse could fling it.
- Boom goes the steel rod.
- Gun ammo is unlimited, but you cannot reload. Instead, your pistol (which can transform into a shotgun) has a limited-sized meter that slowly refills. So you'll want to juggle telekinetic powers and ammunition.

- Ghost-like baddie shoots a sparkler at you.
- You respond with a shotgun blast to the face.
- “Warehouse demo level” always sounds like a bummer, but Remedy’s exquisite set pieces definitely disabused us of any pessimism.
- It gets muddy and sticky down here.
- We do not yet know what the floating bodies are all about.

It’s been nearly a decade since Remedy Entertainment launched a video game I could unequivocally recommend (*Alan Wake*) and three years since the studio’s uneven *Quantum Break* showed that the developer knows how to craft impressive, trippy combat.

In great news for Remedy fans, everything I liked about *Quantum Break*—jaw-dropping visuals, dimension-shifting weirdness, and telekinetic superpowers—has been paid forward to *Control*, a new video game where mystery and plot don’t get in the way of compelling action.

My hands-on time with *Control*‘s E3 demo let me flex the new game’s early superpower muscles, and gosh, did it feel good. Warp-dodging past enemies, aiming the morphing pistol, and using random physical objects as throwable weapons—I quickly hit a nice groove in zipping around like some X-Men character who’d been kicked out of Xavier’s school for being too awesome. And Remedy’s combat arenas are designed to emphasize the game’s strengths by making sure attacks are always coming from above and below, thus forcing her to keep her wits and strategically consider which ability to bust out for each takedown.

The handsome lighting models and per-object motion blur from *Quantum Break* are back for this newer game, as well, only with even more tantalizing distortion and color trickery. These are met by a plot that has clearly broken the “weirdness” dial, and the combined package already has me

excited for what's to come in "summer 2019." *-Sam Machkovech*

Cyberpunk 2077

Platforms: Windows, Xbox One, PS4
Expected release date: April 16, 2020



2019 was the second year in a row that *Cyberpunk* threatened to steal the show. But it was the first year that we could see the skeleton of a complete RPG in a behind-closed-doors presentation.

This year's demonstration focused on Pacifica, a half-finished "luxury" section of future Los Angeles that was abandoned by its developers after a disaster ruined its economic underpinnings. It's now been resigned to the impoverished Haitians who helped build it, gathering together into gangs and makeshift economies that both react to your in-game reputation. The world-building you'd hope for from a developer like CD Projekt Red shines through in the little details, like the way "real meat" has been outlawed by powerful corporate interests pushing synthetic replacements with stories about diseases carried by real animals.

Your character’s extreme customization starts by picking a backstory: did you rise up through the streets or come down through the corporate world? It extends to the myriad choices you get to make, from standard assigning of points to basic character traits to the way you make your way through challenges. A netrunner might hack their way into the security guards’ mind to force them to turn their weapons on themselves, while a stronger character might rip their way through the door and the guards too.

Those choices extend to who you want to trust in the ever-shifting battle between the gangs and the Netwatch agents trying to rein them in. From the demo, it wasn’t immediately apparent there was a single answer to that question that could be assuredly considered “good” or “safe” or “moral” over the other.

While the game’s urban world seems interesting enough, the end of the demo hinted at a much wider story in cyberspace itself, where hackers continue to search for a way to upload their consciousness and free themselves from their physical prisons. And that’s not even digging into the non-cyberspace portion’s promising mix of stealth, hacking, weapon customization, limb-specific damage modeling, handsome lighting effects, and Keanu freakin’ Reeves as your hero’s occasional accomplice.

Crucially, the hour of traversal, conversation, and combat we saw looked like a *real* game this time, as opposed to last year’s shoot-for-the-moon reveal. Yet apparent technical limitations in terms of rendering, crowd sizes, and other technical details didn’t get in the way of us finally buying into the same sales pitch as last year: a gorgeous near-future romp that we might get to play exactly how we want. *-Kyle Orland*

Listing image by Xbox / Microsoft

https://arstechnica.com/?p=1522045

HBO’s Los Espookys will make you want to be a horror technician, too



reader comments

21 with 13 posters participating

Share this story

- At the 2019 ATX TV Festival, HBO premiered new comedy *Los Espookys* then let *Drunk History*‘s Derek Waters ask the cast and head writers questions.
  Nathan Mattise
- Ars had a chance to chat with the group earlier in what’s maybe a wine cave? From L to R: Torres, Armisen, Velasco, Ciangherotti, and Fabrega.
  Nathan Mattise

- Velasco as Renaldo, the ringleader of Los Espookys and a somewhat comedic straightman who lives at home with his mom and loves b-movie horror. Velasco comes from a Spanish-language drama background, but he learned to let the absurdity of this show's situations speak for themselves.
- Torres (also a lead writer) plays Andrés. "I was very into being someone who was half-vampire, half C-3PO. This little robot vampire," he said. (He's not actually a vampire, but the show does embrace a lot of old horror tropes.)
- Like Velasco, Ciangherotti came from a more drama-based acting background primarily in Spanish-language works. She plays Úrsula, seen here working at the dead-end dental assistant job she needs to keep afloat. Torres called the character the witch of the group.
- Fabrega (another lead writer) as Tati, Úrsula's younger sister who is pretty much down for anything—from acting in the productions to taking on any odd-job available in the country.
- Armisen as Uncle Tico, the world's greatest valet driver. He's really the only character on the show doing what he loves full stop, and he inspires the younger Los Espookys to try doing the same. (He may be delivering a severed head here.)
- One of my favorite parts of *Los Espookys* is how our heroes always show their work—someone on staff clearly worked stage crew once or twice in their upbringing.

AUSTIN, Texas—"When was the last time you ever saw a show like that?" *Drunk History*'s Derek Waters asked the crowd after a world premiere screening at last week's ATX TV Festival. "I'm honored to moderate this panel because what you just saw is groundbreaking."

To be clear, "never" might be the answer to Waters' question. And this panel did *not* center on *Drunk History*; it didn't even

feature another Comedy Central show. Instead, the host sat onstage alongside an all-Latinx main cast and head-writers group from what might be HBO's next great comedy: a half-hour, Spanish-language, horror-adjacent series debuting tonight (11pm ET) called *Los Espookys.*

Horror how-to

At the most basic level, *Los Espookys* follows four friends who form a business in an undisclosed Latin-American country where occasional supernatural occurrences are an unacknowledged, normal part of daily life. After the friends successfully execute a spooky-themed Quinceañera for one of their younger sisters, wise Uncle Tico (Fred Armisen of *SNL, Portlandia*) offhandedly says their work looks so good, so full of passion that they should pursue it as a side hustle. (Wise Uncle Tico would know; he works as a valet.)

"All I ever wanted to do is park cars—now I do it full-time," the valet legend tells Renaldo, the burgeoning group's ringleader. "Horror is your parking cars."

Our heroes Renaldo (Bernardo Velasco), his friends Andrés (*SNL*-writer Julio Torres) and Úrsula (Cassandra Ciangherotti), and her sister Tati (*Chris Gethard Show* writer Ana Fabrega) eventually take Tico's advice and start a production company focused on creating horror scenarios for others. Need an exorcism at your church in order to take the shine off the hot, young priest, for instance? Who you gonna call? Los Espookys. From there, the show blends classic TV's of-the-week adventures with the season-long evolutions of these friends, their business, and their understanding of life in their area. Amid all the beautiful bits, *Los Espookys* might somehow be most poignant as a show about pursuing your creative passions or trying to find your professional footing as a young adult. (*American Vandal*, with its ability to combine genitalia jokes with observations on grappling with identity in high school,

might be a good reference point.)

Simply labeling *Los Espookys* "horror comedy" feels inaccurate, however. Though the show's observations on the increasingly beloved genre couldn't be better timed for this renaissance moment built on *Get Out*, *Hereditary*, and a Blumhouse empire, the show has more in common with high-absurdity sketch than it does with *Tremors* or *Ghostbusters.* It feels closer to Tim Robinson's new series (*I Think You Should Leave*) than Peele's (*Twilight Zone*), and these writers make no qualms about it.

"The trend right now is horror as a vehicle for scary social critique, like Jordan Peele's work," Torres tells Ars. "This is sillier than that—it has a *very* silly sensibility."

In this aspect, *Los Espookys* has a tone and comedic sensibility unlike much else on TV—it can at times evoke the naivety and obsession of *Community*, the awkwardness of *Nathan For You,* or the core group rapport of *Broad City*. Characters have families with fortunes in chocolate-making but might also be formerly cursed orphans ("I like when the chocolate prince gets angry," character Úrsula says in the premiere—you'll soon feel similar). Laughs come equally often from extremely glossy lips as they do quips on the bleh-ness of Boingo Wi-Fi.

But again, this degree of silly doesn't mean unclever. Torres' character Andrés has a perfectionist-tinge when it comes to details of the various Los Espookys gigs, for instance. And his throwaway one-liners about how an heiress introduces a haunted night in a mansion or the accents used by creepy butlers will be "OMG, they see it, too!" moments for horror devotees. Most of those pitch-perfect observations grew out of Torres and co.'s personality and comedic style more so than any encyclopedic research of B-movie history.

"I love horror a lot, but [those moments] speak to Julio as a real person, too," Armisen tells Ars. "He's very detail-oriented. What you see in the scene is what he does on the

show, too. It’s…”

“Small critiques,” Torres interjects.

“Which is good—it helped the show tremendously,” Armisen admits. Even within just the first three episodes Ars screened for this review, *Los Espookys* has too many too-perfect-it-hurts touches to shout ‘em all out: platform combat boots worn by the group leader with a goth fashion sense; a town wanting to boost tourism through dark urban legend; motivations for revenge being as petty as ignored chain emails.

[embedded content]
The trailer for *Los Espookys.*

It’s not TV—it’s HBO

From *The Gary Shandling Show* to *Curb Your Enthusiasm* to *Veep*, HBO has a rich history of comedies that run counter from contemporary sitcom peers on other networks. So even though the industry shift post-streaming has opened up the playing field for foreign-language shows (*The Americans* had regular bits of Russian on FX, Spanish-heavy *Narcos* has been a big draw for Netflix, and go watch the German *Deutschland ’83* right now), perhaps *Los Espookys* ultimately found the most fitting home for this show after Armisen and co. pitched the idea around in 2017. HBO stood out to the writers at least partially because they never questioned the show’s setting or choice to be primarily in Spanish (only scenes in LA with Uncle Tico feature English, and everything gets subtitled). That setting and sensibility remains core to *Los Espookys.*

“I always wanted to do something spooky and in Spanish, and I always wanted to play a valet guy—they seem so fast and focused,” Armisen said during the show’s 2019 ATX TV Festival panel. “I love horror movies, but I also love people’s love of horror movies—it’s like its own genre. So I did this trip to Mexico City and saw firsthand there’s a real scene, not just

horror but goth, and I wanted to capture that." Armisen also told Ars the horror scene in Mexico felt distinct and unaffected from those fan communities in the US, and *Los Espookys* tries to reflect that.

"[The show is] horror in a warm, cartoony sort of way," as Torres put it during the ATX TV panel. "My mom used to watch Brazilian telenovelas, which are different than Mexican ones in that there's a lot of magical realism. I remember one where there's one character that's in love with the Moon, and the whole nation was like, 'Ooo, will he meet the Moon?' He'd tie a chain around his waist, because he'd float towards the moon during full moons. I love that."

The first *Los Espookys* season lasts just six episodes, with each one we previewed being quite tight. Similar to something like *Fleabag* S2 or *Chernobyl*, that time commitment feels refreshing after years of slogging through 90-plus minute *Westworld* or *Game of Thrones* sessions.

And the show's look and feel only add to its overall enjoyment. *Los Espookys* is shot in Chile in collaboration with the Oscar-winning production house, Fabula, and it has a meticulousness to set design and shot framing that might evoke Wes Anderson. As opposed to a traditional horror score with sweeping orchestrations and a bit of theremin, this show's music relies instead on minimalistic electronic arrangements to further lean into its offbeat ethos.

If *Los Espookys* proves to be as "groundbreaking" to a wider audience as it was for Waters—and to state it plainly, this show is definitely good and refreshing—HBO couldn't have found it at a better time. Both television comedy and HBO overall may be entering a state of flux as summer 2019 rolls around. Some of the most reliably funny and beloved comedies of recent years (*Veep*, *The Good Place*, *Broad City*, heck, even *Modern Family*) will end or have ended in the next year. And the same goes for tentpole HBO shows like *Game of Thrones* and *Silicon*

Valley. With the real world continuing to be scary enough, most of us need an escape and/or a laugh semi-regularly. Luckily, these self-proclaimed horror technicians seem up to the task.

Listing image by HBO

https://arstechnica.com/?p=1521437

Little Danny Torrance is all grown up and still shining in Doctor Sleep trailer



reader comments

39 with 32 posters participating

Share this story

[embedded content]
Ewan McGregor stars as adult Danny Torrance in the film adaptation of Stephen King's novel *Doctor Sleep*, a follow-up to *The Shining*.
A hospice worker with psychic abilities must confront the horrors of his past to protect a young girl from a murderous cult in the first trailer for *Doctor Sleep*, the big-screen adaptation of horror master Stephen King's novel. It's a sequel of sorts, since both the novel and film explore what happened to young Danny Torrance as he grew into adulthood after the horrifying events of *The Shining*.

(Spoilers for *The Shining* novel and film; mild spoilers for *Doctor Sleep* the novel.)

King published *The Shining* in 1977. It became his first hardback bestseller and was adapted into a film by Stanley Kubrick in 1980, starring Jack Nicholson as struggling alcoholic and aspiring writer Jack Torrance. Initial reviews weren't particularly favorable—King himself is not a fan of the film—but it's now considered a horror classic.

For those not familiar with the story, Jack Torrance takes a position as the winter caretaker of the remote Overlook Hotel in the Colorado Rockies, bringing his wife, Wendy (Shelley Duvall) and young son Danny (Danny Lloyd). Danny has a psychic gift, called "the shining," which lets him communicate telepathically with the hotel cook, Dick Halloran (Scatman Crothers). The hotel is haunted, and the previous caretaker went mad and murdered his family. Jack ultimately succumbs to the same madness, although Wendy and Danny manage to escape with their lives.

In the follow-up novel, *Doctor Sleep*, King sought to continue Danny's story as the boy grows up and struggles to recover from the psychological trauma he experienced at the Overlook Hotel. He has learned to contain the ghosts in a mental

“lockbox” but still spends years as an alcoholic—the drinking suppresses the shining—wandering from town to town. Now in his 40s, Dan finally gets sober and settles in a New Hampshire town called Frazier. He gets a job at a hospice, where he uses his newly re-emerged psychic gift to comfort patients who are terminal, earning him the moniker Doctor Sleep. (He’s aided in this by a cat, inspired by a real-life therapy cat named Oscar who some claimed could predict the deaths of the terminally ill.)

Dan also forms a psychic connection with a young girl, Abra Stone, whose psychic powers are as strong as his own. When she witnesses the murder of a boy by members of a local cult called the True Knot, she turns to Dan for help. The True Knot members feed off “steam,” a psychic essence that comes from people with the shining who die in pain—although they can also contract illnesses, like measles, from their victims. The True Knot targets Abra, believing they can torture her indefinitely to give them a steady supply of “steam.” It’s up to Dan to protect her.

- A grown-up Danny Torrance (Ewan McGregor) is still haunted by what happened in his childhood.
- A greeting. But from whom?
  YouTube/Warner Bros.
- He’s not the only one with the gift of “the shining.”
  YouTube/Warner Bros.
- Activating the sight?
  YouTube/Warner Bros.
- This little girl might also have the sight.
  YouTube/Warner Bros.
- Not really a nice lady.
  YouTube/Warner Bros.
- Rose the Hat (Rebecca Ferguson) heads up a cult called the True Knot.
  YouTube/Warner Bros.
- The True Knot members feed on kids with psychic powers.

YouTube/Warner Bros.

- Beachside bonfire
  YouTube/Warner Bros.
- Flashback to the classic Kubrick film.
  YouTube/Warner Bros.
- “Come play with us.”
  YouTube/Warner Bros.
- Another callback to a famous scene.
  YouTube/Warner Bros.
- Here’s Danny!
- Falling into the past
  YouTube/Warner Bros.

This first trailer for the film opens with an ominous “Hello” written on a blackboard in a grown Dan Torrance’s home. We also see Danny writing on the board himself, so he seems to be communicating with someone. Eventually, he connects with Abra (Kyliegh Curran), who tells him, “You’re magic. Like me,” when they finally meet. Dan tells her he always called it the shining but warns, “The world’s a hungry place. A dark place.” The True Knot makes an ominous appearance, headed by Rose the Hat (Rebecca Ferguson), and we see her sucking the “steam” from one victim and targeting a little girl as her next.

Mike Flanagan, who wrote and directed last year’s stunning adaptation of *The Haunting of Hill House*, also wrote and directed this film. Flanagan has said the film will be a direct adaptation of the novel, augmented with a few obligatory nods to *The Shining*, since it takes place in the same cinematic universe. We get several direct callbacks to Kubrick’s film in the trailer: a young Danny riding his tricycle through the Overlook Hotel’s maze-like hallways, the creepy twins (“Come play with us”), the ghost in the bathtub, and of course, the torrents of blood pouring out of the hotel elevators.

I’m cautiously optimistic; Flanagan has proven he can handle

the psychological complexities of classic horror with *The Haunting of Hill House*, and King's work is very much in the same vein. That's what drew Flanagan to the project in the first place. "It touches on themes that are the most attractive to me, which are childhood trauma leading into adulthood, addiction, the breakdown of a family, and the after effects, decades later," he told Collider last fall.

Doctor Sleep hits theaters November 8, 2019.

Listing image by YouTube/Warner Bros.

https://arstechnica.com/?p=1521973

Atari doesn't want you to call its new VCS a "console"



reader comments

39 with 34 posters participating

Share this story

- The $250 base system (with 4GB of RAM) doesn't include either of these two controllers.
- The "one button" joystick has an extra button on the shoulder.
- Note the red highlights that call back to the old Atari one-button joystick.
- The version with black walnut paneling on the front is exclusive to AtariVCS.com.
- This black and red design is a GameStop exclusive.
- The "Kevlar Gold" design can only be found at Walmart.

LOS ANGELES—At E3 meetings this week, Atari finally showed off playable, near-final prototypes of its long-delayed, heavily crowdfunded VCS, the company's modernized homage to the original Atari Video Computer System (aka the 2600). Obviously, there was a lot of discussion of what the system—which starts at $250 in a package without controllers—actually *is* at this point. But there was just as much focus on what it is *not*.

First off, representatives wanted to stress that despite outward appearances, this is not just a retro "mini" console along the lines of the NES Classic Edition or the recently announced TurboGrafx-16 Mini (or even the long-running Atari Flashback line). Yes, the VCS will come with a collection of classic games in the "Atari Vault," and Atari will also sell classic 2600 ROMs that work through a built-in emulator. And yes, players can buy a $50 wireless, rumbling, four-direction, "single-button" digital joystick modeled after Atari's classic design. That joystick comes complete with modern touches like menu buttons, an LED light ring that responds to directional input, and a stick that rotates on its axis for "paddle" controls.

But Atari representatives stressed that the VCS is a modern platform, powered by a Ryzen R1606G Raven 2 APU (roughly the

equivalent of a Zen 2 4-core CPU and a Vega GPU). That can handle 4K video streams, which means it's ready for services like Google Stadia or Microsoft's Xcloud. Getting 4K resolution on a locally run game with a decent level of 3D detail and acceptable frame rate seems nearly impossible, though. Atari's provided example of a "modern" game running on the system was a Linux version of *Borderlands 2*, a 2012 title that frankly chugged along at a pretty choppy frame rate in our hotel-suite demonstration.

Atari also doesn't like it when people call the VCS a "console." That word implies a closed system, often sold at a loss, where the platform-holder has full control over the hardware and the apps and games that can be sold and run on it. On this score, the VCS does at first look a lot like a console, with a slick interface allowing users to buy and play downloaded titles (what titles will be available, beyond Atari classics, will not be known until announcements later this summer).

A console for tinkerers?

What Atari says differentiates the VCS from the current console competition (aside from selling the hardware at a profit) is its friendliness to tinkering and homebrewing. While hackers won't be able to replace the system's central APU chip, the internal SSD and RAM can be easily accessed and replaced with standard parts, providing at least a modicum of "future-proofing," representatives said.

More than that, the built-in "sandbox mode" will let VCS users load up any bootable operating system contained on an external hard drive. That means you can boot into a full copy of Windows and run your Steam games through the VCS if you want. The relative failure of Steam's own TV-based console initiative suggests this may be a niche use case, but it's there if you want it.

- The Atari VCS controller looks a lot like an Xbox pad. The system will work with generic USB and bluetooth controllers, too.
- The stick on the joystick controller twists to support paddle-controlled games.
- Early prototypes of the casing and controllers.
- Rear ports.
- An engineering prototype of the Atari VCS, used to test for sizing and heat dissipation.

Sandbox mode will also let VCS users access the system's Linux 5.0 kernel directly and, with a mouse and keyboard plugged in to two front USB ports, even develop their own games to submit to Atari's platform. Any game designed to run on Ubuntu should be playable on the VCS, representatives said, though developers may have to make slight changes to work with the VCS' full-screen display buffer.

There weren't many details on the app and game submission process, but Atari suggested it would be akin to Apple's iOS App Store. That means apps will have to go through a quick approval process before being sold, somewhere between the nearly-anything-goes Android store and the curated, requirement-heavy approach of a console platform.

"I want it to be a box where you can develop an app for the living room," Atari Systems Architect Rob Wyatt told Ars. "We want to be the Raspberry Pi of the living room."

When I pointed out that this sounded very similar to the pitch for Ouya's failed microconsole model, Wyatt said that "Ouya's problem was they went down the Android path, and with it they brought a lot of crap. This is far more curated than that, and it's exactly why we don't want the Android store model… It's not just 'Android in your living room' [as Ouya was]."

There's one final thing Atari insisted that the VCS is not: vaporware. Though we're now well past the initially promised

“spring 2018” release, GameStop and Walmart are now taking preorders for a system that they expect to be on store shelves next March (IndieGogo backers should receive units in December). Whatever happens after that, Atari’s road back to making TV-based gaming hardware has certainly been a long and interesting one.

https://arstechnica.com/?p=1521831

I Am Mother envisions a dark future world where AI is almost human



reader comments

58 with 44 posters participating

Share this story

[embedded content]
A young girl is raised underground by a robot mother (Rose Byrne) following an extinction event on Earth in *I Am Mother*.
A humanoid sentient robot raises a young woman from an embryo in an underground bunker, after an unspecified cataclysmic event wipes out the human population of Earth. That's the basic premise of *I Am Mother*, a thoughtful and chilling new sci-fi feature on Netflix that explores questions of contextual morality—and what it means to be human.

(Some spoilers below.)

The AI robot, Mother (voiced by Rose Byrne), has a whole room full of embryos in its underground bunker, with the objective of eventually repopulating the Earth. But first she has to prove she can be a good Mother by raising the perfect daughter (Clara Rugaard), who grows into a smart, fit, and highly capable young woman. But Daughter is also naive, a bit lonely, and frankly approaching puberty with no prospective human partners on the horizon. Then their peaceful existence is shattered by the arrival of Wounded Woman (Hilary Swank), who somehow survived the cataclysm. Her hostile presence drives a wedge between Mother and Daughter.

I Am Mother is very much in the tradition of small-scale features with big ideas, like 2009's *Moon*—not surprisingly, a favorite of Director Grant Sapore. There's a limited cast of characters and locations, relying on strong writing and performances from the actors to flesh out and illuminate the broader themes and ideas. Films like *I Am Mother* remind us that sci-fi has always been multi-leveled in terms of its storytelling, and you don't always need a huge studio budget to make something deep and meaningful. Ars sat down with Sapore to learn more about the underlying philosophy and thought process that drove the development of his film.

Ars: Let's talk about why you decided to make this film. What

drew you to explore these particular themes and ideas?

Sapore: Michael [Lloyd Green], who wrote the screenplay, and I set out specifically to make a sensible first film, with three characters, one location. We wanted to bring something new to that and make it really personal. So we had a long conversation about what was going on in our own lives, and what's going on in the world around us that we found most thought-provoking. What topped both lists was whether or not we were ready to be parents, in tandem with the question of whether or not humanity was ready to be the parent to artificial intelligence. That coalesced into this image of a robot holding a baby. What is it like to be raised by a robot? Who is that young girl, and what's her story? That became the movie *I Am Mother*.

- Mother is voiced by Rose Byrne.
  YouTube/Netflix
- Choosing just the right embryo.
  YouTube/Netflix
- "Baby of mine…."
  YouTube/Netflix
- Overseeing ballet lessons.
  YouTube/Netflix
- Solitary playtime.
  YouTube/Netflix
- It takes time to learn how to be a good Mother.
  YouTube/Netflix
- Mother and Daughter, in a tender moment.
  YouTube/Netflix
- Daughter as a teenager can't help but test a few boundaries.
  YouTube/Netflix
- It's important to keep fit in an underground bunker.
  YouTube/Netflix
- Choosing the next member of their fledgling family.
  YouTube/Netflix

- Hilary Swank as Wounded Woman intrudes on their peaceful existence.
  YouTube/Netflix
- Wounded Woman has a book filled with sketches of other possible survivors.
  YouTube/Netflix

Ars: Early on, Mother is teaching Daughter about ethics using a version of the famous Trolley Problem called the Transplant Surgeon's Dilemma. How does this ethical quandary play into the film's developing story?

Sapore: One of the big questions is, do the ends justify the means? Is Mother good, or is Mother bad? It's really a matter of perspective, which links into a related question: how do you ever know what's right and what's wrong? The first instance of the trolley problem is, "Absolutely, I'd pull the lever to divert the trolley, to save people and kill the one." But the natural next part of the trolley problem is the "fat person dilemma," where you push a fat person into the tracks to stop the train, sacrificing one to save five. Most people have a problem with that.

Pulling a lever to sacrifice one, save five—people are okay with that. But pushing somebody to save five and sacrifice one—people have a problem with that. That's how flexible, variable, and contextual our morality is. The film becomes a giant exploration on that, and hopefully sends people away thinking, "Am I cool with this? Was that right? Was that wrong?" So many people have come away saying they're okay with some of the more heinous aspects of how the story ends, because the outcome, in their point of view, is worth it.

Ars: Artificial intelligence is developing rapidly, and one thing Mother demonstrates is that an AI might not interpret these kinds of moral quandaries the same way the average human would.

Sapore: I think humans have a hard time grappling with what's right and what's wrong, too. But a miscalculation in the values of a machine can have ramifications beyond what any individual person might be able to do, so the stakes are that much higher if an AI makes the wrong choice.

The film functions on two levels. On one level, it's a very legitimate examination of the era of machines that is imminent, that we'd all do well to talk more about. On another, it's just the story of a young girl working out who she is, independent of the beliefs of her parents, like any teenager—that pushing and pulling on the boundaries. One level hits you more in the heart, one hits you more in the head. It was a conscious goal. We wanted to make a story [that] was an emotionally satisfying experience while you were watching it, but then send you away with stuff to talk to your friends about after.

Ars: At one point, Wounded Woman lashes out at Daughter, telling her that Mother is just a thing that feels nothing for her. But I think there's evidence at the end that she might indeed "feel" something akin to love for Daughter.

Sapore: I think machine learning as the basis for artificial intelligence software creation opens up a whole new set of questions. Historically, we've been fascinated by the question of how different are machines from us? At what point does their sentience make them human? How different are they really? *Blade Runner* is a great example of a film in that mold.

> *"Everything that we cherish about being human is really an emergent property that's popped up through the process of evolution."*

But what machine learning does for me is put the mirror back on humanity. I don't think that ultimately they'll be all that different from us. The process of machine learning is not really that different from the way that we as humans

learn. Daughter being taught ethics in the opening is not that different from us teaching ethics to a machine in the form of programming. What's the difference between programming and education? They're not radically different. A machine learning algorithm could give a bit of software access to every film that's ever been made, come to understand what a film is, what does and doesn't work well in a film, and then go and make a movie.

You talked about Mother having emotion for Daughter; is that real love? Well, what is love? And what value does love have to humans? Everything that we cherish about being human is really an emergent property that's popped up through the process of evolution. Similar things happen to machines that are created through machine learning. There are tics and quirks that come up through the process. I think some of the stuff that we most cherish about being human is really just a quirk that evolved through evolution. We love our children, because that's the best way for them to flourish in the world and go on to have kids of their own. It's interesting when you look at these things through a different lens.

Ars: Hilary Swank as the nameless Wounded Woman brought a very nuanced moral ambiguity to her character, because she's not necessarily the good guy. Or the bad guy.

Sapore: No, and there's no reason to expect that humans are perfect, in contrast to machines that aren't. Humans can and do express the full spectrum of good and bad traits, and it's hard to judge Wounded Woman's behavior outside of circumstances. She made what was the right choice for her at every turn. That's something that Hilary's character grapples with. "Did I make the right choices to get me to where I am now?" We wanted her to stand in contrast to Daughter, who's all brain. She's very much up in her head, whereas Wounded Woman is far more primal and is actually operating from her gut. It becomes a further opportunity to explore how we navigate this world. The decisions that we make, do they come

from our head, or from our heart, or from our gut? They're all different aspects of what makes us human and leads us to make different choices.

I Am Mother *is currently streaming on Netflix.*

Listing image by YouTube/Netflix

https://arstechnica.com/?p=1521417

Stadia's E3 Doom Eternal demo made me a cloud gaming believer



reader comments

126 with 85 posters participating, including story author

Share this story

- These images were taken from an earlier, local *Doom Eternal* demo, but give you an idea of the kind of fast-paced action that looks and plays just fine on Stadia.
- The Doomslayer lands.
- Most of this gallery is taken from real first-person gameplay, which is why the screen is smothered in a HUD. Milliseconds after this “glory kill” moment, your hero punches this demon’s head so hard that it explodes.
- Another glory kill. It was hard to capture clear images of these violent, health-refilling attacks; they’re all pretty quick in action.
- The trick with the super shotgun is to make sure to shoot before you get all the way to your target. The momentum will still drive your blast directly into the foe, and the recoil of your shot will conveniently bounce you away from its limp body toward your next target.
- There’s also the *DOOM* 2016 standby of running a chainsaw through an enemy to turn its body into useful ammunition. (Don’t ask us how that science works.)
- Decisions, decisions: do I go in for the glory kill, since the enemy on the left is staggered and glowing?
- Nah, let’s focus explosive ballista fire on the bigger, scarier-looking one.
- Pretty terrifying sight, right? Hold on, lemme crank this one up a smidge…
- …there. You can practically smell its cow-carcass breath from here.
- Dash forward to close distance on your foe.
- Then set it on fire, because, why not.
- We should kill this one.

LOS ANGELES—Since Google’s Project Stream beta test in October and the company’s March announcement of the full Stadia platform, one question has loomed large over the service: will

it actually work well enough for fast-paced, reflex-intensive games? After playing a demo of *Doom Eternal* for about half an hour Wednesday, I'm ready to say that the answer to that question seems to be yes—at least in Google's controlled testing conditions.

Google invited me out to its downtown LA YouTube Gaming creator's space—away from the Internet-congested E3 show floor—to try out the latest build of Stadia. My demo was running locally on a Pixelbook with the Chrome browser, connected to a TV via HDMI, and remotely to data centers more than 300 miles away in San Francisco. The Pixelbook had a wired Internet connection that I was told was running at "about 25 Mbps" (Google wouldn't let me run a speed test to confirm the connection quality). I controlled the demo with a Stadia controller connected to the Pixelbook via USB, but keyboard and trackpad controls also worked.

Over thirty minutes of *Doom Eternal* play, I'd have been hard pressed to point out any differences between the Stadia version and one running on a local PC. The 60fps animation didn't noticeably stutter for the entire demo, and the apparent resolution didn't dip below 1080p either (though a Google representative said Stadia will sometimes lower that resolution briefly to maintain a smooth frame rate if and when bandwidth dips). There were no signs of video compression artifacts or the color gradients you might see in a low-res YouTube video.

While I couldn't swear the control latency was *identical* to a game running locally, I will say that aiming, shooting, jumping, and dodging the game's various demons *felt* identical to playing the 2016 version of *Doom*. Perhaps a pro-level player might feel the difference in the precisely timed muscle memory needed for precision maneuvers, but Stadia certainly felt up to the game's twitch-heavy design from my point of view. On this score, *Doom Eternal* served as a much better example than earlier Stadia tests of *Assassin's Creed Odyssey*,

a game that has extremely loose, latency-heavy controls even under local play conditions.

I wasn't able to run any sort of slow-mo video tests on Stadia to estimate total control latency, as I had earlier in the week with Microsoft's Project Xcloud demo. Real-world play conditions, with Wi-Fi routers and local network congestion, also might not be as performant as Google's idealized demo setup. And I'd need a double-blind comparison with a locally run version of the game to determine whether the Stadia version was *truly* indistinguishable from a local version.

All that said, this extended demo convinced me that Stadia at least has the potential to deliver the solid, responsive, as-good-as-local gaming experience that Google promises, even for an extremely reflex-heavy game. I could easily see myself playing through the entirety of *Doom Eternal* on this version of Stadia without complaint and without the need for a high-end console or gaming rig, either.

https://arstechnica.com/?p=1521669

Google Stadia in 4K might push you past your home-Internet data cap



Enlarge / A Google Stadia controller and a Google Chromecast Ultra.

reader comments

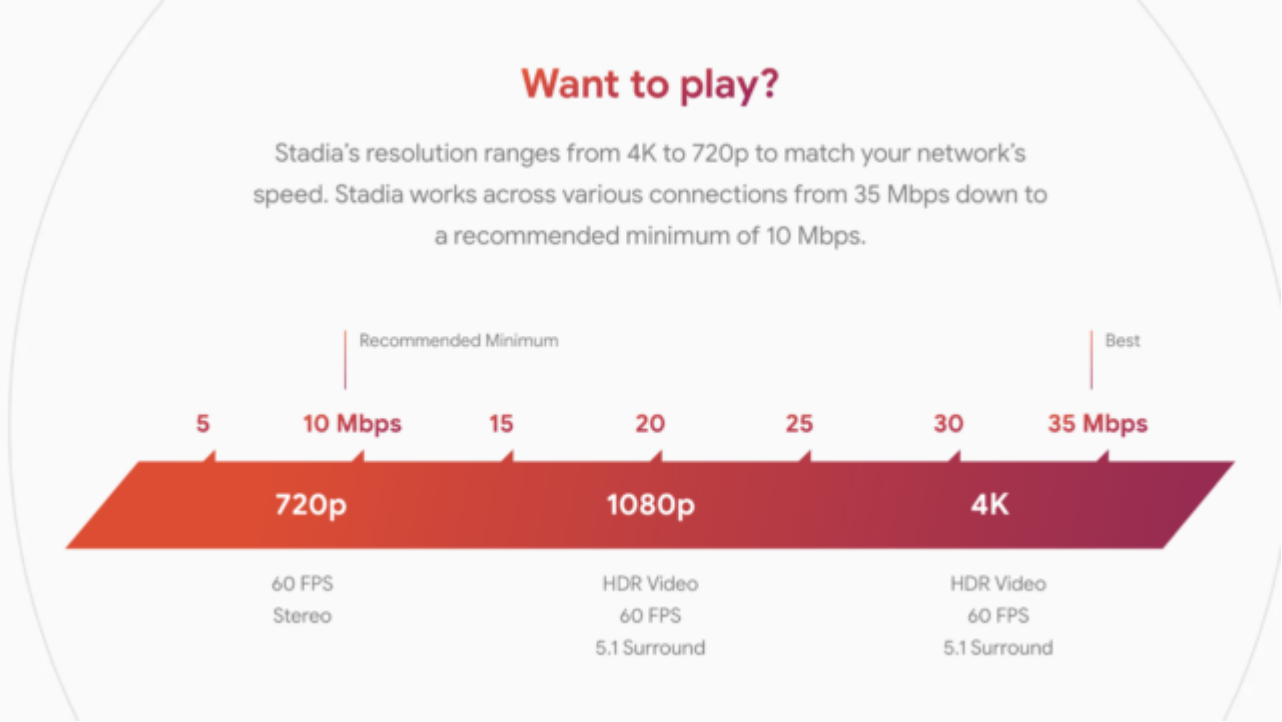
87 with 55 posters participating

Share this story

Google Stadia will bring 4K game streaming to customers in November, but the new service could be costly for users who face home-Internet data caps and want to play games at the highest possible settings.

Google says you'll need 35Mbps to play at maximum settings—that's 4K resolution, high dynamic range (HDR), and 60 frames per second (fps) with 5.1 surround sound. As PC Gamer noted last week, that adds up to 15.75GB per hour, which would use up an entire 1TB monthly data allotment in 65 hours of game time.

Stadia will work at lower resolutions, with Google recommending 20Mbps for 1080p/60fps with 5.1 surround sound, and 10Mbps for 720p/60fps with stereo sound. That's 9GB and 4.5GB per hour, respectively, potentially using up a 1TB data cap in 114 or 228 hours.



Enlarge / Google Stadia's bandwidth recommendations.

But Stadia's actual data usage may end up being lower on average than the Google-supplied numbers. Netflix, for example, recommends a 25Mbps connection for 4K video even though its videos generally stream at about 15Mbps. Netflix's recommendation accounts for the actual 4K stream plus a cushion to take care of your other Internet needs. Movies and TV are generally 24fps or 30fps instead of the 60fps that Google aims to deliver with Stadia game streaming.

We asked Google if 35Mbps is the actual amount that will be used by Stadia for 4K games or if that includes some extra bandwidth, but the company did not give us a clear answer. "They are recommended speeds" is all Google would tell us.

We also asked Google if it will provide options for disabling 4K to reduce data use, but we didn't get an answer.

Stadia data needs

At its November launch, Stadia will cost $129.99 up front and $9.99 a month, in addition to individual game purchase costs. Later on, there will a paid subscription tier that doesn’t require the upfront purchase and a free tier that’s limited to 1080p.

There are reasons think that Stadia’s bandwidth requirements could vary quite a bit. For example, if a player’s character and objects on the screen move at extremely fast speeds, a game will use more data than it would at calmer moments when elements on the screen are mostly unchanging.

Video games might also have bigger data-usage spikes than movies or TV. For games, it will be more difficult to buffer content than it is with TV and movies because the game player’s actions determine what’s shown on screen next. It’s possible that 35Mbps will be what’s needed for peak data rates, with typical rates being less than that. Advances in streaming technology could also help control game-streaming data usage.

Watch out for data caps

Still, Stadia’s listed bandwidth requirements suggest it will require more data than 4K video, and this is something Internet users should consider if they face data caps. Karl Bode’s Vice story, “Google Stadia will reveal how stupid Internet data caps are,” is worth reading on this topic.

Comcast enforces a 1TB monthly cap throughout much of its US territory, and it charges an extra $10 for each additional block of 50GB, or $50 extra a month for unlimited data. AT&T, Cox, and other home Internet providers impose similar limits, though some major ISPs such as Verizon FiOS and Charter don’t charge data overage fees.

Comcast says its customers use a median of over 200GB a month, and industry research suggests that more than 4 percent of US cable customers use at least 1TB.

Monthly data caps accomplish little to nothing when it comes to managing network congestion, because what matters most with network congestion is heavy usage by many customers at specific, peak times, not each person's total monthly usage. Still, limiting overall use may help ISPs delay capital upgrades, and the artificial scarcity created by data caps can be used by ISPs to their own financial advantage.

Most obviously, ISPs get more money when customers have to pay data overage charges or pay extra for unlimited data. But ISPs could also create their own game streaming services and exempt them from data caps while enforcing the caps when customers use rival gaming services. That would give customers a financial incentive to buy streaming services directly from their Internet providers instead of from different companies, even if the other companies' services are better.

ISPs could also charge game-streaming companies for data-cap exemptions as part of zero-rating programs. The Obama-era Federal Communications Commission found that this kind of scheme violated the FCC's net neutrality rules when AT&T and Verizon exempted their own video services from mobile data caps while charging other companies for the same data-cap exemptions.

But the Trump-era FCC quickly reversed this finding and later eliminated the net neutrality rules entirely. If ISPs throw up any roadblocks to game-streaming services, the current FCC leadership isn't likely to do anything about it.

https://arstechnica.com/?p=1521065