

Streaming Almost Anything To Your TV



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Connecting People & Neighborhoods

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If you're paying for cable or satellite television, you might want to consider other options that can save money and give you a richer experience. You can get pretty much everything you want by *streaming* programs into your TV over the Internet--including a great many options that aren't available on cable.

If you currently enjoy Netflix, Hulu, or Amazon Prime Video, you are already streaming video to your TV. But there's so much more available. You only have to pay for the services you want. And some of them are free.

You'll still have to pay your Internet provider (Comcast, Sonic, and so on) to get the Internet, but you won't have to pay for its TV offerings.

If you prefer, you can keep your cable television and still use streaming.

A short history of streaming

Some of the earliest things I've read about the beginnings of media streaming start with a company called Muzak, back in 1930. They developed a technology that enabled them to send data over electrical wires, and that data happened to be music. The music was piped into elevators to help soothe the concerns of people being transported up the heights of skyscrapers, and so the term "elevator music" was coined.

In 1974, teletext was used to enable viewers to see additional information while watching programming on TV's - and the start of interactive television services was born.

Flash forward to the 1990's and the development of the internet. Two companies, Real Networks, and Microsoft, were vying for domination of the fledgling streaming media market, with Microsoft coming out on top with their Window's media player. Internet speeds at that time were still quite slow, you might remember dial up modems, so the business model went unfulfilled. In the mid 2000's, there were a number of companies that were trying to develop viable business models for

streaming media over the internet, but there was no universal protocol, and companies had their own proprietary software. By 2013, the industry fully developed an interoperability standard that spurred the current plethora of streaming services we now enjoy. YouTube, in 2006, Hulu in 2007, and Netflix in 2008, were the early stars of video streaming, and still are the dominant players in today's video streaming market.

Is your Internet connection fast enough?

Streaming video wasn't possible in the days of dialup modems. You'll need at least 2 megabits per second (Mbps) for streaming standard-definition video without skips or reductions in quality, or buffering delays. You'd need at least 5 Mbps for High Definition content.

Luckily, almost every home Internet connection in the Bay Area can handle far more than that.

Streaming Devices: From the Internet to the screen

If your television was made in the last decade, it's almost certainly a *smart TV* that has its own streaming capabilities (that's how you're probably watching Netflix). If you have a Blu-ray player, it too probably has streaming capabilities. But TVs and Blu-ray players often have limited selections of streaming services. It will certainly have Hulu, but it will likely not have Fandor or the DOGTV Channel.

That's why you might want to buy a streaming device. They generally cost from about \$30 to \$200, and plug into your TV and your WiFi network. These all have hundreds of offerings.

Don't be fooled into something expensive that won't help you. For instance, buying a streaming device with 4K capability will mean nothing unless you have a 4K TV. And even if you do, most people can't tell the difference.

Each feels different from the others, but they all have a huge selection of streaming services, most of which are on all of these:

- **Roku:** This is a good option if you like a conventional remote control. Once you get it set up, you know almost exactly how it's used.
- **Chromecast:** You control this one primarily through your smartphone. You find the program you want on the service's phone app, then tap the Chromecast icon to move the video from the phone to the TV. You can also stream any website on the Chrome browser by clicking on "Cast" on Chrome's settings.
- **AppleTV:** Their streaming devices are very easy to use, and support Airplay technology for routing signals from your Apple devices.
- **Amazon Fire:** We have to admit that none of us have ever tried this device. But according to Jared Newman at [TechHive](#), the Fire is very good at

“suggesting what to watch without making you jump in and out of different apps. Keep scrolling past the app list, and you’ll find row upon row of suggested movies and shows to watch.”

Rental Videos¹

Ways to Watch: When you rent a video for on-demand viewing, it will be available to you to stream and, in most cases, download as follows:

Streaming: You may stream rental videos online through your Web browser and compatible Internet-connected TVs, Blu-ray players, set-top-boxes, Fire tablets, and other compatible devices. For a list of devices compatible with Amazon, visit the Compatible Devices page on the website you are using to access Amazon Prime Video at the following links, PrimeVideo.com or Amazon.com. You may stream up to three videos at the same time using the same Amazon account. You may stream the same video to no more than one device at a time.

Viewing Period: For rental videos, you'll typically have 48 hours to finish watching the video once you have commenced streaming or downloading, provided that in any event you must finish watching the video prior to expiration of the applicable expiration window, which is typically 30 days from your payment of the rental fee. The length of this window can be found on the detail page or on a link from the detail page, such as the "Learn more about renting and buying" link on website detail pages. The term "pay per view" is used to describe watching a live event, like a special live sporting event, or Broadway play, where the subscriber to a content delivery service, like Amazon, will pay a premium to watch the live event.

"If you have an Amazon Prime subscription (\$12.99/month), not only you can get Prime shipping and early access to lightning deals, but also stream movies, TV shows, and Amazon Originals on Prime Video. You can also purchase specific pay-per-view events, mostly the UFC, SCB, and MMA ones through Prime Video. Just search for the PPV event you want to watch on Amazon and complete your payment. If you're going to watch archived events, you also have the option to rent the video. Most of the PPV events on Prime Video are priced between \$30-\$70 in the US. It is costly, but you can stream in HD at 60 frames-per-second."

When we use "Just Watch" <www.justwatch.com> to locate where to find a specific film or TV show, you are given a choice as to stream, rent or buy. When you rent, you pay for the rental, and have a period in which to view the movie. Pay per view, is usually associated with a subscription service as an add-on to their normal content.

Note on Virtual Cinema:

There's another type of streaming movies going on because of the pandemic, called **virtual cinema**.

¹ Adapted from amazon.com

Here's how it works: You go to a movie theater's website. The theater itself, of course, is closed. You rent a film for streaming. It usually costs \$10 or \$12; much higher than most streaming rentals. But it's usually a new film, and half of the money goes to the theater. That way, the theater can maybe survive until things are safe again.

The big studios aren't doing this; only small distributors. The movies are mostly dramas and documentaries.

East Bay theaters doing virtual cinema are

- BAMPFA
- Cerrito
- [Elmwood](#)

Video Services We Like

Here are a few of our favorite streaming services. Some may charge to eliminate ads.

General Videos:

Netflix, Hulu, HBO Max, Peacock, AcornTV, and YouTube, some of which have many full length movies, concerts, and operas.

Movies:

- [Amazon](#): With or without Amazon Prime
- [Criterion Channel](#): *subscription*. A great and constantly changing selection of classic motion pictures, international and American, from the silent era to the near present, some with commentary tracks and other extras.
- [Kanopy](#): *free with a Berkeley/Oakland/Alameda library card*. Another massive selection of films, this time for free (although there are monthly limits (5-10) to how much you can use it). More focused on recent independent films.
- [Hoopla](#) is another service that's free from the libraries.
- [Vudu](#): *pay per view*. You can find just about any film here for a few dollars.
- [Disney+](#): *subscription*. Watch *Hamilton*!
- [JustWatch](#): [This isn't really a streaming service. It's a website where you can find the movies and TV shows you want to watch.](#)

TV Program Streaming Services:

- [Youtube TV](#): *subscription*. Providing streaming services of local and network programming as well as a variety of cable program providers.
- [HuluPlus Live TV](#): *subscription*. Providing streaming services of local and network programming as well as a variety of cable program providers.
- [Sling TV](#): *subscription*. Providing streaming services of local and network programming as well as a variety of cable program providers.

- **AT&T TV Now** : *subscription*. for providing streaming services of local and network programming as well as a variety of cable program providers.
- **Xfinity Instant TV**: *subscription*. Providing streaming services of local and network programming as well as a variety of cable program providers.
- **LoCast TV**: *Free*. Replaces the need of an external TV antenna. Provides streaming of local and network programming with a nice user interface. Suggested donation of \$5/mo
- **PBS Passport**: *Free or subscription*. Public television

Sports: All subscription, and we don't know when they'll be up again

- **MLB TV**: Major League Baseball
- **NHL TV**: National Hockey League
- **Major League Soccer TV**
- **NBA League Pass**: National Basketball Association
- **Tennis Channel Plus**
- **NFL Sunday Ticket**: National Football league
- **ESPN+**: Variety of sports programming
- **NBC Sports Gold**: Variety of sports programming

News: Network and Local News programs come with your TV Program Streaming Services as described above. There are Cable News channels, plus separate standalone News channels.

- **MSNBC Cable News**
- **CNN Cable News**
- **Fox News (Cable)**
- **BBC News (Cable)**
- **NBC News Now**
- **CBSN (CBS News)**
- **PBS News**

A few articles worth noting:

<https://www.nytimes.com/2019/11/01/arts/television/apple-tv-plus-disney-plus.html>

<https://www.latimes.com/entertainment-arts/tv/story/2019-10-10/streaming-wars-pier-month-total-shocking-apple-hbo-disney-netflix>

<https://www.pocket-lint.com/apps/news/151726-how-to-get-zoom-on-your-tv.amph.html>

[https://www.cloudflare.com/learning/performance/what-is-streaming/ \(description of streaming\)](https://www.cloudflare.com/learning/performance/what-is-streaming/)

[https://marketrealist.com/2019/09/an-overview-of-the-streaming-services-industry/\(overviewed/history\)](https://marketrealist.com/2019/09/an-overview-of-the-streaming-services-industry/(overviewed/history))

<https://www.amazon.com/gp/help/customer/display.html?nodeId=GZCHXL8CUW3VWJQP> (Amazon Prime vs plain Amazon)

<https://www.nytimes.com/interactive/2019/11/10/arts/television/what-to-stream.html> (what to stream survey)

<https://www.computerhope.com/jargon/s/streamin.htm> (streaming advantages/disadvantages)

<https://www.pcmag.com/picks/the-best-free-video-streaming-services> (best free. . . this article made our heads spin)

<https://www.moneyunder30.com/are-streaming-service-worth-it> (comparison costs; more pros/cons of streaming)

<https://www.usnews.com/360-reviews/streaming-services/best-streaming-service> (comparisons)

<https://www.wired.com/gallery/best-4k-streaming-devices/> (easy read, better solutions than Smart TV)

Useful YouTube videos:

<https://youtu.be/dicmoUhUCyQ> (streaming media devices)

<https://youtu.be/QRrfXDeSluc> (cutting the cord)