# How to stream on Facebook



Facebook Live is a great way to reach friends, family, customers, and clients alike. In this post, we'll walk you through how to stream on Facebook through your browser, mobile device, live streaming software, or hardware encoder.

Sheer reach makes Facebook impossible to ignore as a platform for promoting your business or side project. But keep in mind that Facebook is a social media platform first. If your goal is to reach new audiences, live streaming on YouTube is your best bet (or, better yet, streaming to multiple platforms). But Facebook can't be beat when it comes to reaching people you're connected with already: existing customers or clients, your local community, hobby groups, and so on.

A note about 1080p streaming on Facebook Live

Facebook limits most live streams to 720p. Select accounts, and select devices (like our own Webcaster X2), can stream in 1080p. If you're not using an account or a device with 1080p streaming enabled, Facebook Live will downscale any 1080p signal you send to 720p.

This is true at the time of writing (November 2019). It's likely Facebook will roll out 1080p for all users at some point. When? Only Facebook knows. Likewise, the exact criteria an account or device must meet to unlock 1080p streaming is known only to

Facebook. Experiment beforehand to determine your maximum streaming resolution. There's no point in sending a 1080p signal only for Facebook to knock it down to 720p.

Ultimately, if your goal is to put out the highest quality live stream, YouTube is your platform. YouTube allows not only 1080p live streaming but also 4K.

In any case, don't let Facebook's lack of universal 1080p live streaming stop you from considering it as a viable live streaming platform. For Facebook specifically, 1080p live streaming is a nice-to-have rather than a need-to-have. That's because most Facebook users access the platform on their mobile phones. Those who do use a computer will probably watch videos in a tiny window off to the side while scrolling through their news feeds anyway. Under these circumstances, most Facebook users won't care whether your live stream is in 720p, 1080p, or 4K – because the difference is imperceptible.

## Four ways to stream on Facebook

You can live stream on Facebook through a:

Web browser Mobile device Software encoder Hardware encoder

Which avenue makes the most sense depends on your goals. Web, mobile, or streaming software will probably do the trick for the average social streamer, while gamers will want to opt for streaming software or a hardware encoder. Consider a hardware encoder especially if you're live streaming for your business or want to make live streaming your career. (Businesses should also look into subscription-based business live streaming platforms to access advanced features related to monetization, analytics, and lead generation.)

Note that Facebook imposes a live stream time limit of eight hours when you stream through a computer, software encoder, or hardware encoder, and four hours when you live stream through a mobile device.

Streaming encoder caveat: RTMP versus RTMPS

If you're keen on live streaming through a software encoder or hardware encoder, make sure the application or device you have your eye on supports streaming through the secure Real-Time Messaging Protocol (RTMPS). Don't mistake this for the Real-Time Messaging Protocol (RTMP) without the "S". Many encoders are capable of streaming with RTMP, but not all support RTMPS.

This distinction is important if you're looking to stream on Facebook. Facebook Live migrated to RTMPS ingest in mid 2019 to better protect users' live streams from cyber threats. Unlike YouTube, which still allows streaming over RTMP, Facebook is RTMPS only. (Epiphan Webcaster X2, Pearl Mini, and Pearl-2 all support live streaming over RTMP and RTMPS.)

## How to stream on Facebook: Web browser



One of the simplest ways to live stream on Facebook is straight from your web browser using a built-in or external USB webcam. A webcam may be all you need if your only aim is to share your thoughts and engage with your audience in real time. It's also possible to live stream through your browser with a higher-end camera like a digital camcorder or DSLR. To do so, you'll need a USB capture card to bring the video signal into your computer. Then Facebook can recognize the camera as if it were a plug-and-play webcam.

Once you're all set with a camera, here's how to stream on Facebook through your web browser:

Log into your Facebook account and access Facebook Live from: Your News Feed – Click on the three dots at the far end of the post box and select "Live Video" from the list. A Facebook Page you manage – Click on the "Live" button in the "Create" box below the banner. If prompted, give Facebook and your browser any permissions required for live streaming (i.e., camera, microphone). Ensure "Camera" is selected at the top (it will be by default). Confirm where you'd like to share your live broadcast (on your Timeline, in a Group, within an Event, on a Page you manage). In the "Post" tab, describe your live video, give it a title, add content tags to help users find it, and decide if you'd like to cross-post to any Facebook Groups you're part of (and that allow

members to share live videos). Select your camera and microphone from the drop-down menus (if they aren't your default devices). Enter the "Interactive" tab at the top of the pane and determine if you'd like to use any of the features there (i.e., Tickets & Events, Polls). Hit "Go Live."

That's it. Remember to press "End Live Video" when you're done. Facebook will post a replay to your Timeline soon after. That way, viewers who missed it can play back your live video. You can prevent this by clicking "Delete Video" on the session end screen.

You can see and manage all your current, scheduled, and past live videos by selecting "Publishing Tools" in the top nav and then "Creator Studio" from the menu on the right (under "Tools").

## How to stream on Facebook: Mobile device



Mobile live streaming is ideal for spur-of-the-moment audience engagements and dynamic events where freedom of movement is key to a compelling webcast.

Facebook live streaming on a mobile device is pretty simple:

Download the Facebook app from the App Store (iOS) or Google Play (Android). Open the app, log into your Facebook account, and access Facebook Live from: Your News Feed – Press on "Live" below the text field. A Facebook Page you manage – Press on "Publish" below the banner and select "Live Video" from the list. Grant any permissions Facebook needs for live streaming (camera, microphone). If you accessed Facebook Live from your timeline rather than a page, set your audience (public, friends, certain friends, friends of friends) by clicking on the downward arrow

alongside the "To:" field in the top-left corner of the screen. Tap the text field at the bottom of the screen and add a description, tag a location, etc. Press on "Start Live Video."

Now you're ready for some untethered live streaming. (Do mind the four-hour runtime limit for mobile devices.) There are a bunch of fun options to explore (filters, masks, etc.), which you can access from the icons on either side of the "Start Live Video" button. These are fun to play around with, particularly for social streamers. If you're not looking to add some visual flair (or chaos) to your live stream, double check that you don't have any of these options toggled before going live.

When you're done, hit "Finish" in the bottom-right corner of the screen. Decide whether you'd like to post a replay to your Timeline. Press "Share" in the bottom-right corner of the screen or "Delete" right next to it. If want to edit the details of your live video replays after the fact, the easiest way is via Facebook's Creator Studio through your browser.

## How to stream on Facebook: Software encoder



Use live streaming software if you want to share your screen (e.g., to broadcast gameplay), access extra features like live titling and overlays, or use multiple cameras. Open Broadcaster Software (OBS), XSplit, and Wirecast are just a few of your options.

Any streaming software should automatically detect any USB-based cameras connected to your computer. You can also bring non-USB video signal into your computer through a USB capture card. Your streaming software should then recognize the camera as a USB video class (UVC) device.

The exact process of live streaming on Facebook with a software encoder will depend on the streaming software you're using, but it should look a little something like this:

Download and install your preferred [streaming software](). Log into your Facebook account and access Facebook Live from: Your News Feed – Click on the three dots at the far end of the post box and select "Live Video" from the list. A Facebook Page you manage – Click on the "Live" button in the "Create" box below the banner. Click on "Connect" at the top of the window. Confirm where you'd like to share your live broadcast (on your Timeline, in a Group, within an Event, on a Page you manage). In the "Post" tab, describe your live video, give it a title, add content tags to help users find it, and decide if you'd like to cross-post to any Facebook Groups you're part of (and that allow members to share live videos). Enter the "Settings" tab of the pane on the right side of the screen and configure per your preferences. (Hover your mouse over the icon to the right of any of these options to learn more about it.) Enter the "Interactive" tab and determine if you'd like to use any of the features there (i.e., Tickets & Events, Polls). Decide whether you'd like to stream now or schedule an event for later. To schedule an event for later, click the "Schedule" button at the bottom of the "Settings" pane, choose your live stream start time, upload a custom image, add a description, and click "Schedule" in the bottom-right corner of the window. Copy the "Stream Key" from the Facebook Live main window. (Keep this string of characters private.) Open your streaming software and paste the "Stream Key" and, if required, the "Server URL" from Facebook into the appropriate fields. You'll probably find these in a settings menu; refer to the user documentation for the software you're using if you're not sure where to look. If Server URL is required – On Facebook, click on the "Ingest URLs" button next to the Server URL field in the main window. Let the Facebook Live Ingests tool run to find the fastest direct ingest server URLs for your network. Copy the server URL with the lowest server TCP round-trip-time (in milliseconds) and paste it into the Server URL field in your streaming software.

If you're ready to go live now, start the stream via your streaming software. Back on Facebook, make sure the live video preview looks good and then hit the "Go Live" button in the bottom-right corner. If you scheduled your Facebook live stream for later, open your streaming software before the set time and turn on streaming.

End your stream through your streaming software once the show's over. A replay will appear on your Timeline soon after so anyone who missed your live stream can tune in. You can review and manage all your live video replays through Facebook's Creator Studio.

## How to stream on Facebook: Hardware encoder



What's a hardware encoder?

A hardware encoder is an appliance purpose-built for video streaming, capturing, recording – or all three.

Running your Facebook live stream through a hardware encoder offers a number of advantages over using a web browser or mobile device. These benefits make hardware encoders the best option for businesses shooting high-stakes events (e.g., concerts, sports matchups) and anyone who wants to elevate the look of their live streams. Live streaming on Facebook through a hardware encoder might seem complex, but the benefits of using one more than make up for the time it takes to learn how.

Essentially, hardware encoders make it easier to produce polished, multi-camera live streams that are sure to impress and engage your audience. How? Flexibility is one of the major benefits. A lot of hardware encoders include multiple inputs for video and professional audio, letting you connect and stream HDMI and SDI cameras, laptops, tablets, XLR or TRS microphones, and more. And as dedicated devices, hardware encoders often perform better than software encoders. That's because software encoders have to share resources with your computer's operating system and any active processes.

There's a wide range of live streaming hardware on the market, which makes it impossible to write a definitive guide to making hardware encoders work with Facebook. For that reason, we'll walk through how to stream on Facebook using our Pearl and Webcaster X2 encoder hardware. If you're not using a Pearl system or a Webcaster X2, we encourage you to review the user documentation for your appliance or reach out to the manufacturer.
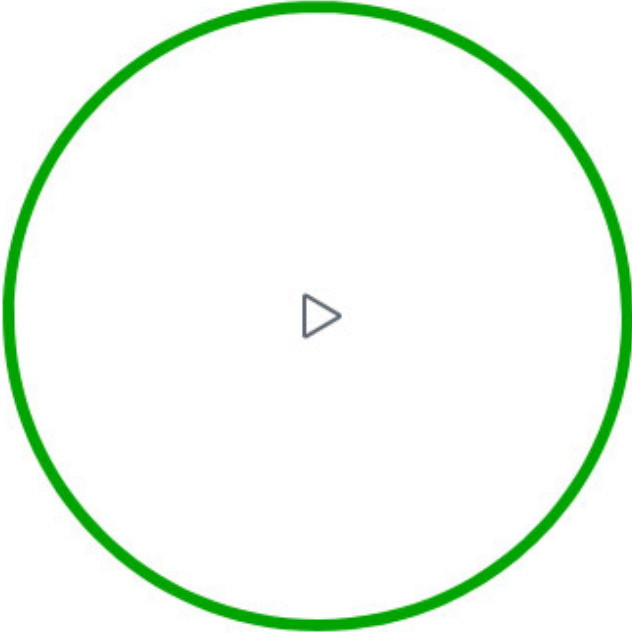
Pearl Mini or Pearl-2

For an in-depth look at how to configure Pearl Mini or Pearl-2 for optimal live streaming, check out our [live stream beginner's survival guide](). Also see Facebook's [video format guidelines for live streaming]().

Here's how to live stream on Facebook through Pearl Mini or Pearl-2:

Log into your Facebook account and access Facebook Live from: Your News Feed – Click on the three dots at the far end of the post box and select "Live Video" from the list. A Facebook Page you manage – Click on the "Live" button in the "Create" box below the banner. Click on "Connect" at the top of the window. Confirm where you'd like to share your live broadcast (on your Timeline, in a Group, within an Event, on a Page you manage). In the "Post" tab, describe your live video, give it a title, add content tags to help users find it, and decide if you'd like to cross-post to any Facebook Groups you're part of (and that allow members to share live videos). Enter the "Settings" tab of the pane on the right side of the screen and configure per your preferences. (Hover your mouse over the icon to the right of any of these options to learn more about it.) Decide whether you'd like to stream now or schedule an event for later. To schedule an event for later, click the "Schedule" button at the bottom of the "Settings" pane, choose your live stream start time, upload a custom image, add a description, and click "Schedule" in the bottom-right corner. Copy the "Stream Key" from the Facebook Live main window. (Keep this string of characters private.) Log into the Pearl web UI. In the side nav, select "Streaming" under the channel you want to live stream. Paste your "Stream Key" from Facebook into the "Stream name" field. Click "Apply."

Back on Facebook, click "Ingest URLs" next to the Server URL field in the main window. Let the Facebook Live Ingests tool run to find the fastest direct ingest server URLs for your network. Copy the server URL with the lowest server TCP round-trip-time (in milliseconds) and paste it into the URL field in the Pearl UI.
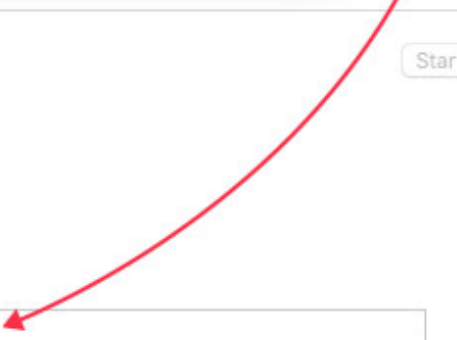
If you're ready to go live now, press "Start" in the top-right corner of the Pearl web UI Streaming menu. If you've scheduled your Facebook live stream for later, press "Start" in the top-right corner of the Pearl web UI at the set time. Flip back to Facebook; you should see a stream preview window. You'll go live at the time you scheduled

You're live on Facebook! Select "Stop" on the Pearl web UI when your stream is over.

The Live @ Epiphan hosts show you how to stream on Facebook through a Pearl hardware encoder.

Webcaster X2



For detailed instructions on how stream live on Facebook with the Webcaster X2, see our step-by-step user guide. Here's an abridged version:

Double-click the power button on the side of the Webcaster X2 until you see the Facebook logo on the unit's front screen. In a web browser, visit facebook.com/device. Log into your Facebook account if you're not logged in already. Enter the code that appears on the Webcaster X2 front screen and hit "Continue." In the pop-up window, hit "OK" to allow Webcaster X2 to access your name and profile picture. Choose a privacy setting for Webcaster X2 live video posts to your Timeline. Hit "OK." Authorize posting to Pages and Groups you manage. Click "OK." Press the Webcaster X2's power

button to go live.

It's that simple. If you'd like to set a title, description, tags, etc., for your live video, you can do so through Webcaster X2's built-in user interface. You'll need an HDMI display and a [USB mouse and keyboard](#) to access it. Connect these to the Webcaster X2 and, on the user interface, click "Preferences" in the bottom-right corner. Here you can change your publishing destination, give your live stream a title and description, and more.

Press the Webcaster X2's power button to go offline when you're ready to stop streaming.

## Live stream on Facebook like a pro

Learn more about how Epiphan [Pearl Mini](#), [Pearl-2](#), and [Webcaster X2](#) hardware encoders can help you take your live streaming to the next level. Questions? [Contact our product specialists](#) for answers.