

YouTube 3D Local Copy and Active Glasses

With a suitable browser, such as Mozilla Firefox 6, the HTML 5 YouTube mode is compatible with NVIDIA 3D Vision active shutter glasses. As 3D is always more enjoyable in high definition, the most suitable method is to proceed in two steps: First, download the file in the highest possible resolution onto a local hard drive, and then watch it with Stereoscopic Player. All existing display modes will then be available, even those that are not managed directly by YouTube.

Downloading a file from YouTube can be done by cutting and pasting the video URL to a specific download page (e.g., www.keepvid.com). A slightly more comfortable method is to add a download script offering the “Download to a YouTube page” option to your browser. Unfortunately, YouTube is engaged in a constant fight against such scripts, which makes them difficult to locate. The safest way to find them is still to search for the “YouTube download script” keywords on the web. The script is easy to install; a simple click is usually enough. Once the script is installed in the browser, a new Download menu appears under all videos, whether in 3D or not. It lets you choose which version you want to download. With few exceptions, one should always choose the highest available quality.

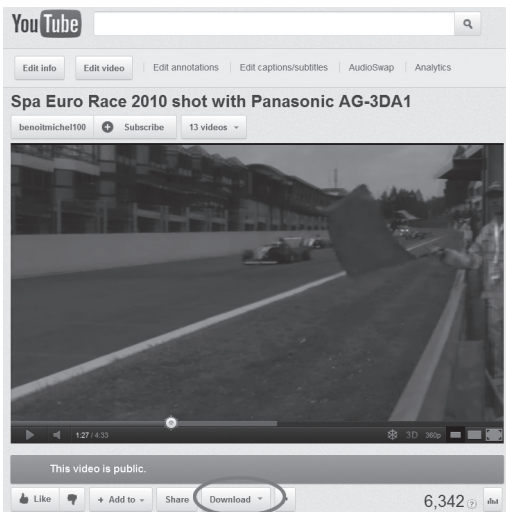


Image © B. Michel

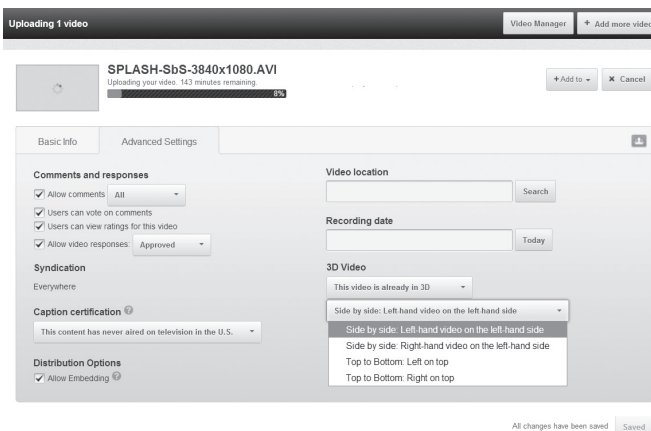
The new Download menu appears in the YouTube page as soon as the download script has been installed in the browser.

Uploading a 3D Video onto YouTube

Creating a 3D video and broadcasting it on YouTube are simple to do. Here are the steps:

1. Use your favorite editing software to create a video where the left and right images are side by side (possibly compressed in width, but that is not mandatory). YouTube recommends positioning the left image on the right and the right image on the left so that the 3D image can be viewed by crossing the eyes, but the reverse is also possible. Use the maximum available resolution; there is no need to reduce the image quality artificially. If the running time exceeds 15 minutes, you will need to split the video into several episodes.
2. Compress the movie in one of the following formats: AVI (.avi), QuickTime (.mov), MPEG-4 (.mp4), Windows Media (.wmv), or HTML5 (.webm). Take care to limit the file size to no more than 2 GB, and then upload it to YouTube.
3. Log in to YouTube and go to your dashboard/upload page at www.youtube.com/my_videos_upload. Drag and drop your 3D video file anywhere on the page to start the upload process.
4. The upload interface lets you select a category and add a title, a description, and several key words called tags. You may also choose a category, a distribution license, and privacy settings. Adding “YT3D” in the tags list is recommended but not mandatory. Specific tags may help you fine tune the aspect of your 3D movie; the details are given below.
5. Click on the “Advanced Settings” tab, where you may give details such as the recording’s location and date and the very important “3D Video” settings. Select “This video is already in 3D” from the

four proposed settings. A second dropdown appears with four 3D presentation alternatives. Select the appropriate one (usually: “Side by side: Left-hand video on the left-hand side”).



Videos longer than 15 minutes

Videos longer than 15 minutes are allowed for YouTube users whose accounts are in good standing (as per YouTube Community Guidelines) and if this has been verified over a mobile phone. In this case, videos can be up to 12 hours long. To enable this, click on the "Increase your limit" link at the bottom of the "www.youtube.com/my_videos_upload" page.

- Now all you have to do is to give your audience the URL of the newly loaded video. Still, take the precaution beforehand to check that the online file is complete, the 3D menu is visible, the aspect ratio and sound are correct and, most important, the stereoscopy is not reversed!

In previous versions of the YouTube upload interface, specific tags had to be used to specify the exact 3D appearance of uploaded videos. Such tags are still allowed and are useful when something looks wrong, such as the aspect ratio of the image. If a 3D video doesn't appear in 3D even if the above settings were selected, you may try to add the "yt3d:enable=true" tag in the tags list.

YouTube 3D Tags

3D Tags are less important than before but may nevertheless save the day when something goes wrong with your uploaded 3D video. Tags are simply lists of key words allowing search engines to find videos on YouTube, but they also act as parameters for the YouTube broadcast engine. You can add multiple tags separated by spaces. Inserting the following tags will force YouTube to take specific actions:

yt3d:enable=true	Declares the video as already in 3D, in side-by-side format and with the right-hand video on the left-hand side by default.
yt3d:swap=true	Swaps the left and right images and declares that the left-hand video is on the left-hand side.
yt3d:aspect=16:9	Declares that the aspect ratio of the video is 16:9. Another typical value is "4:3".
yt3d:aspect=4:3	Declares that the aspect ratio of the video is 4:3.

Be careful

Using a copyrighted soundtrack in a YouTube movie causes advertisements to be overlaid on the image, with the side effect of preventing the 3D menu from appearing and thus creating a *de facto* ban on viewing the film in 3D.

Remark

Detailed explanations of the upload procedure are given through a “Help” button on the “youtube.com/my_videos_upload” web page. The button is usually in the bottom right-hand corner of the page.

Advanced Uploading with YouTube

For a safer upload, including the ability to resume when the transmission of a file is interrupted by mistake, YouTube offers the option of uploading larger files, as long as you are using the latest version of Google Chrome, Firefox 5 or higher, or a recent version of Internet Explorer with Silverlight enabled. This option is free, so use it! In this case, YouTube allows users to upload up to 20-gigabyte files. A Java program is integrated into the “my_videos_upload” web page on YouTube and transfers the file in pieces, ensuring that each piece of the file is received before sending the next one. In this way, if the network connection is lost during the transfer, it automatically resumes at the current part instead of restarting from scratch. Note that to use this advanced transfer, you need to install Java (version 1.5 or later) on your computer. You can download the latest version of Java at: www.java.com.

YouTube detects copyrighted sound content that has been used without permission and overlays a banner on your video. This banner is currently incompatible with the 3D menu. In conclusion, to upload 3D videos, you must make sure to use an original soundtrack that is not copyrighted. A typical example was recently detected in a wedding video: The surround sound in the background was coming from the reception room amplifiers and the CD played a well-known song. The YouTube robot detected recent commercial music with a level loud enough to trigger the ad banner and the 3D menu disappeared at once.

Searching 3D Videos on YouTube

If you go to www.youtube.com to search for videos with a specific keyword, such as «trailer», you will see in the address bar something like this:

www.youtube.com/results?search_query=trailer

To search for 3D videos, add the magic string “&thread=1” at the end of your query and the results will be filtered so that only 3D videos appear in the results list:

www.youtube.com/results?search_query=trailer&thread=1