EcoTubeHQ

EcoTubeHQ Video Player offers high quality video playback for many DRM-free streaming services at minimal bitrates. Data is retrieved in 10 second chunks to minimize data usage if a video is not played in its entirety. Hardware acceleration can also be utilised during playback to optimize video quality and minimize CPU usage.

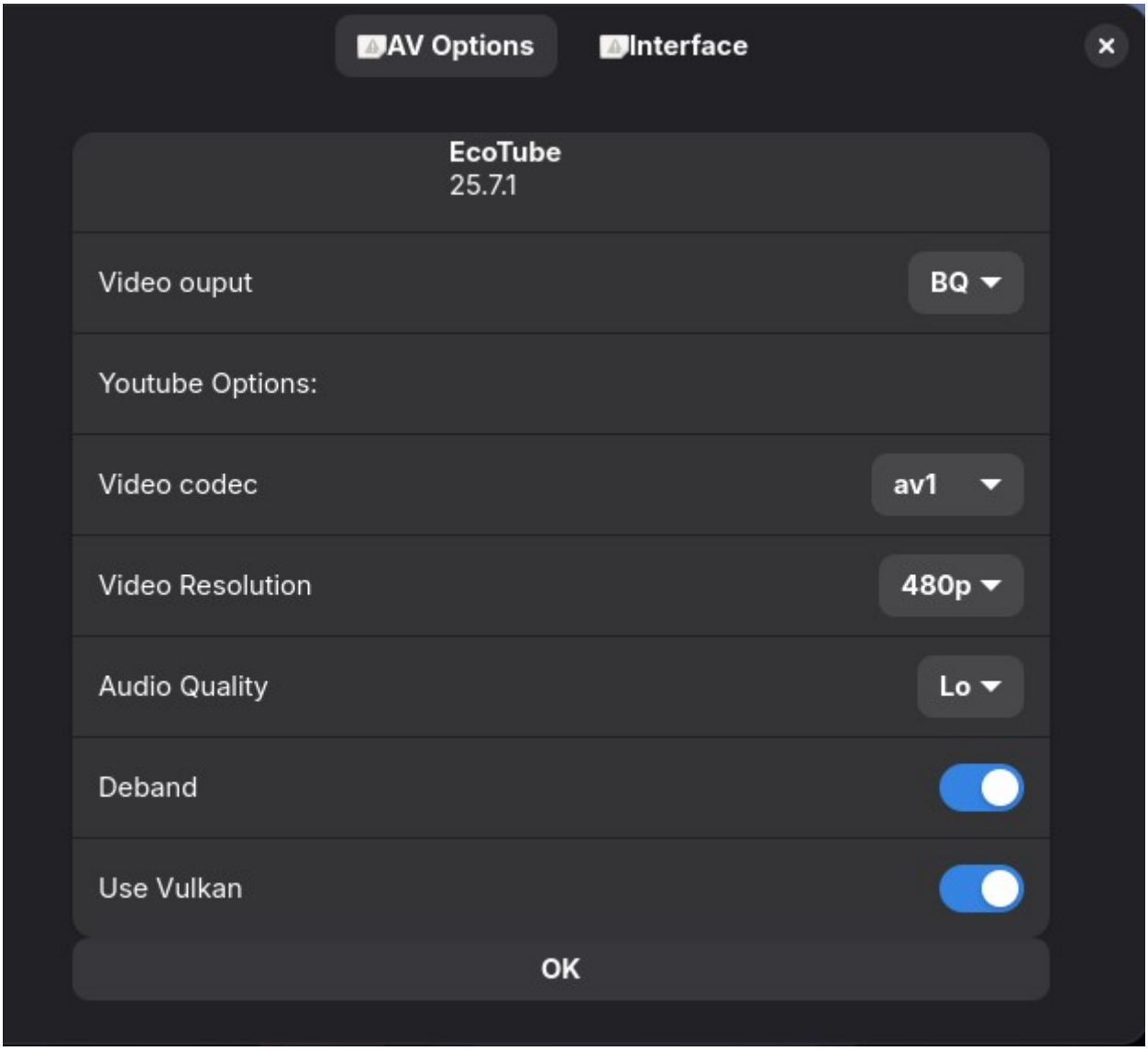
EcoTubeHQ offers AMD FidelityFX Super Resolution to produce high quality video output.

Unlike RTX VSR, AMD FSR works with many GPUs. Below is the official list of graphics cards that support AMD FSR:

- AMD Ryzen desktop CPUs with AMD Radeon graphics
- AMD Radeon 6000 Series
- AMD Radeon 6000M Series
- AMD Radeon 5000 Series
- AMD Radeon 5000M Series
- AMD Radeon VII
- AMD Radeon RX Vega Series
- AMD Ryzen mobile CPUs with Radeon Graphics
- AMD Radeon RX 500 Series
- AMD Radeon RX 480, 470 and 460
- Nvidia GeForce RTX 30 Series
- Nvidia GeForce RTX 20 Series
- Nvidia GeForce 16 Series
- Nvidia GeForce 10 Series

Player Preferences

Click on the hamburger menu next to the minimize button, then select Preferences. This shows the following…



...here's what it all means:

Video Output

BQ - Best Quality - AMD FidelityFX Super Resolution Video Upscaling [Default]

HQ - High Quality - Lanczos Video Upscaling

LE - Low Energy - Bicubic Video Upscaling

YouTube Options

Supported Video Codecs

av1 - Best quality video with lowest bitrate [Default]

vp9 - Good quality video with low bitrate

h.264 - Lowest quality video with the highest bitrate

EcoTubeHQ plays av1 codec YouTube videos by default, if av1 isn't available then vp9 video is output, and if vp9 isn't available then the player outputs h.264 video. This allows the player to output the highest quality / lowest bitrate video available. As an alternative, the player can be set to output vp9 or h.264 if desired.

Supported Video Resolutions

720p

480p [Default]

360p

240p

144p

EcoTubeHQ restricts the maximum video resolution to 720p@30fps to minimize data usage. There is minimal difference when comparing 720p with AMD FSR upscaling to 1080p browser output quality, but there is a significant reduction in data usage.

Note1: If 720p is selected then the player will only output the selected video at this resolution. **The resolution of the next video output will be 480p unless 720p is reselected via Preferences.*

**Note2: Some h.264 videos only have resolutions of 144p, 360p & 720p. If this is the case and the player's output resolution is set to 240p then the video output defaults to 360p, and if its output resolution is set to 480p then the video output defaults to 720p.*

Audio Quality
YouTube av1 and vp9 only

Hi - 160Kbps

Lo - 70Kbps [Default]

EcoTube offers two different Opus audio bitrates when playing av1 and vp9 YouTube videos - 70kbps (Lo) and 160kbps (Hi).

Deband

Default **On**

Similar colors can appear in distinct bands on-screen instead of smooth gradients, and this is defined as banding. Deband helps to remove these unwanted artifacts.

Vulkan

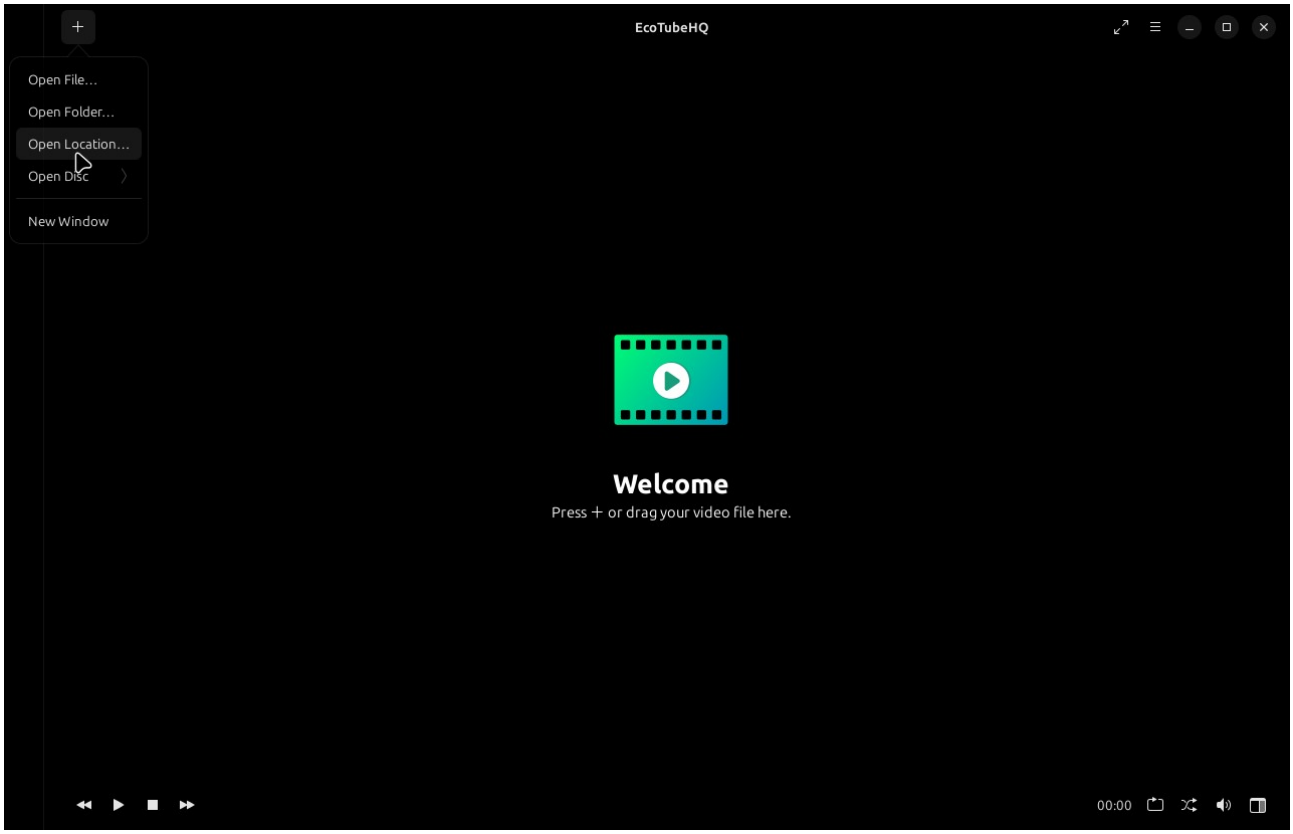
Default **Off**

Vulkan GPU Compute Acceleration provides hardware accelerated decode for av1, vp9 and H.264 playback.

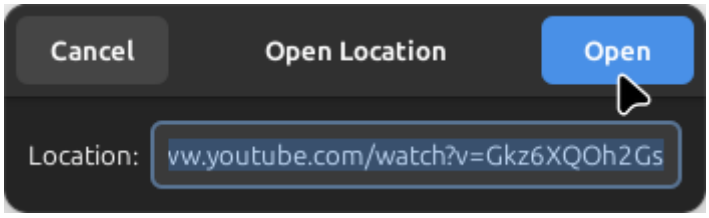
If your distro doesn’t include Vulkan this website shows how to install and test it.

How to use

To play a video from an online streaming service simply copy the video URL from the browser, click '+' at the top left of the player and select 'Open Location'…



...the player automatically places the copied video location into the 'Location' entry box…



...click the 'Open' button to initiate playback.

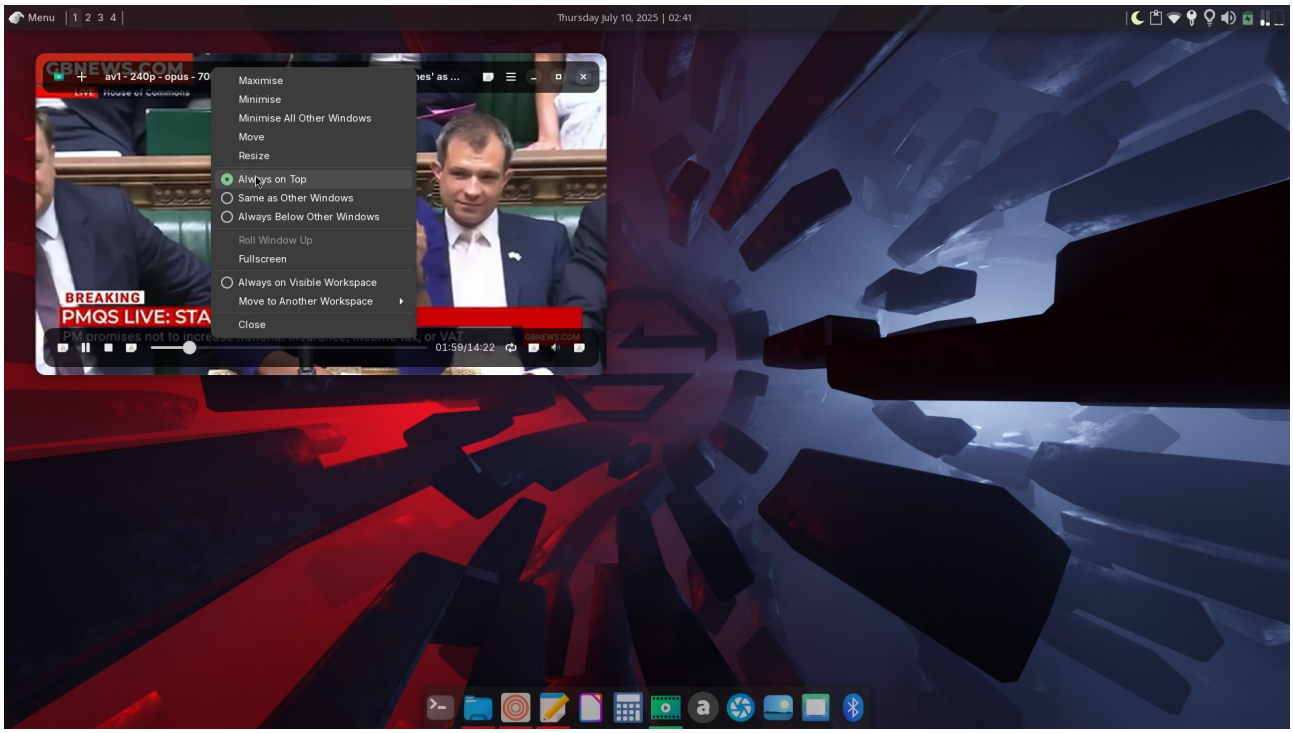
- Press the space bar or right click the mouse on the player screen to pause / play video playback.
- Rotate the mouse wheel on the playback window to turn the audio volume up / down – the volume will reset to normal when the player is restarted.
- Pressing ‘Esc’ or double clicking on the player window during fullscreen playback reduces the player to non-fullscreen playback.

Non-fullscreen video

If you are watching a YouTube video which does not require fullscreen or you want to minimize CPU usage during playback then set the player's video output resolution to 144p or 240p.

This automatically reduces the size of the player's non-fullscreen window – the size of 240p videos is shown in the screenshot below, and 144p videos are displayed in a smaller window.

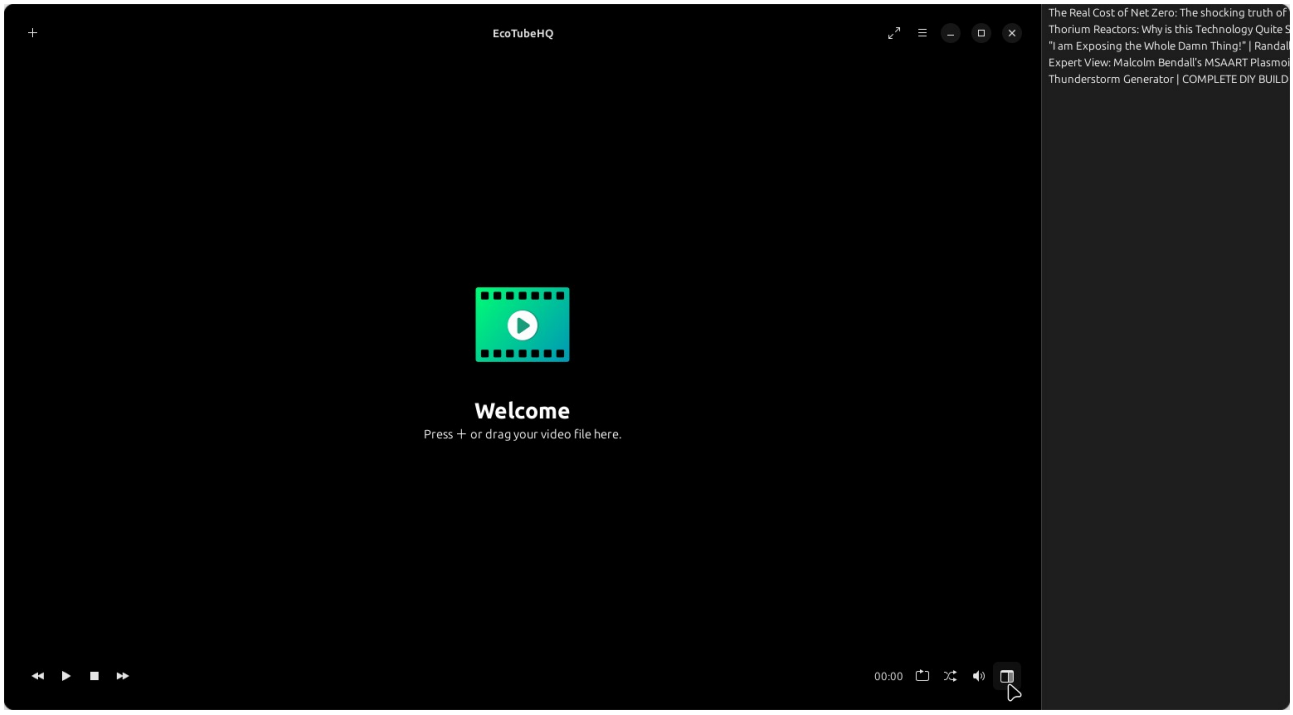
To keep the player on top of all other windows during playback right-click on the top bar and select 'Always on top'...



...the end result minimizes CPU usage, and it significantly reduces the bandwidth of videos such as podcasts where video quality is not paramount.

* To further reduce CPU usage set the Video Output to LE [Low Energy]

Playlists



To add a playlist click on the bottom right icon titled "Toggle Playlist". When this is done the playlist opens.

To add videos from an external streaming service drag and drop the browser URL for the playlist onto the player's playlist. Additional videos can be added prior to, and during playback. To start playback simply double-click on the required playlist video.

EcoTubeHQ Original Concept: Colin Bett

Coding and additional ideas: Sako Adams

Forked from the Celluloid Video Player

Changelog

v25.7.2

- Forced mpv to avoid HLS - temporarily

v25.7.1

- Added Vulkan support
- Fixed video / audio download + improved video loading
- Fix format selection
- Updated caching system
- Fixed auto-resize player

v25.5.1

- Upgrade to gtk4.16 and libadwaita-1 1.6
- Enhance interface with playlist overlay
- New update notification
- New dialog for "How to use it"
- Minor playback fix

v25.3.3

- Buffering: prefetch is now limited to 10 seconds to minimize data used when videos are not played in their entirety.
- Hardware acceleration is automatically activated if a laptop is running on battery power.
- Auto update parsers.
- Updated the way default resolutions are selected.
- The preference interface has been updated.

V25.2.1

26 February 2025

Initial conversion from Celluloid.

Thanks to haggen88 for the icon update and albanobattistella for the patches,

14 August 2024

Initial commit to Github.