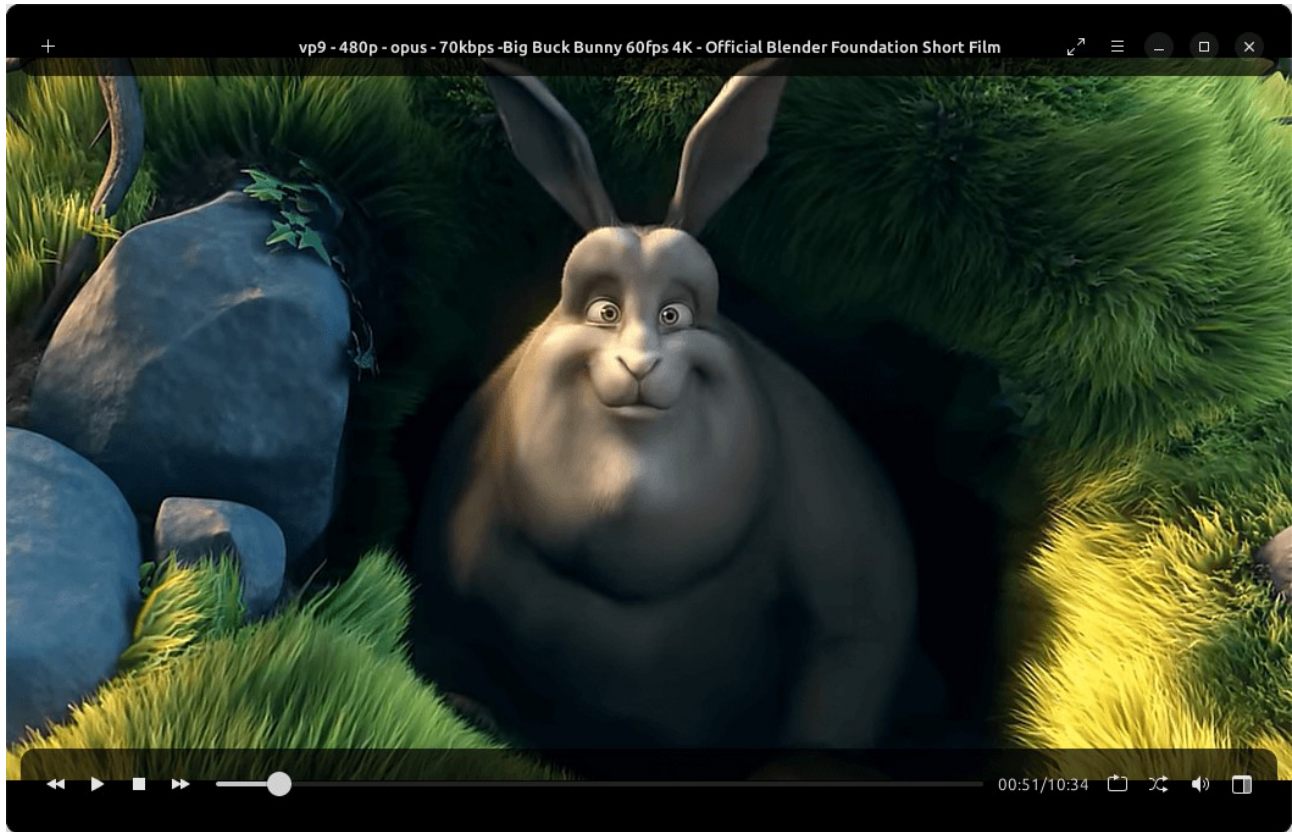


# EcoTubeHQ

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 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

### Supported Video Codecs

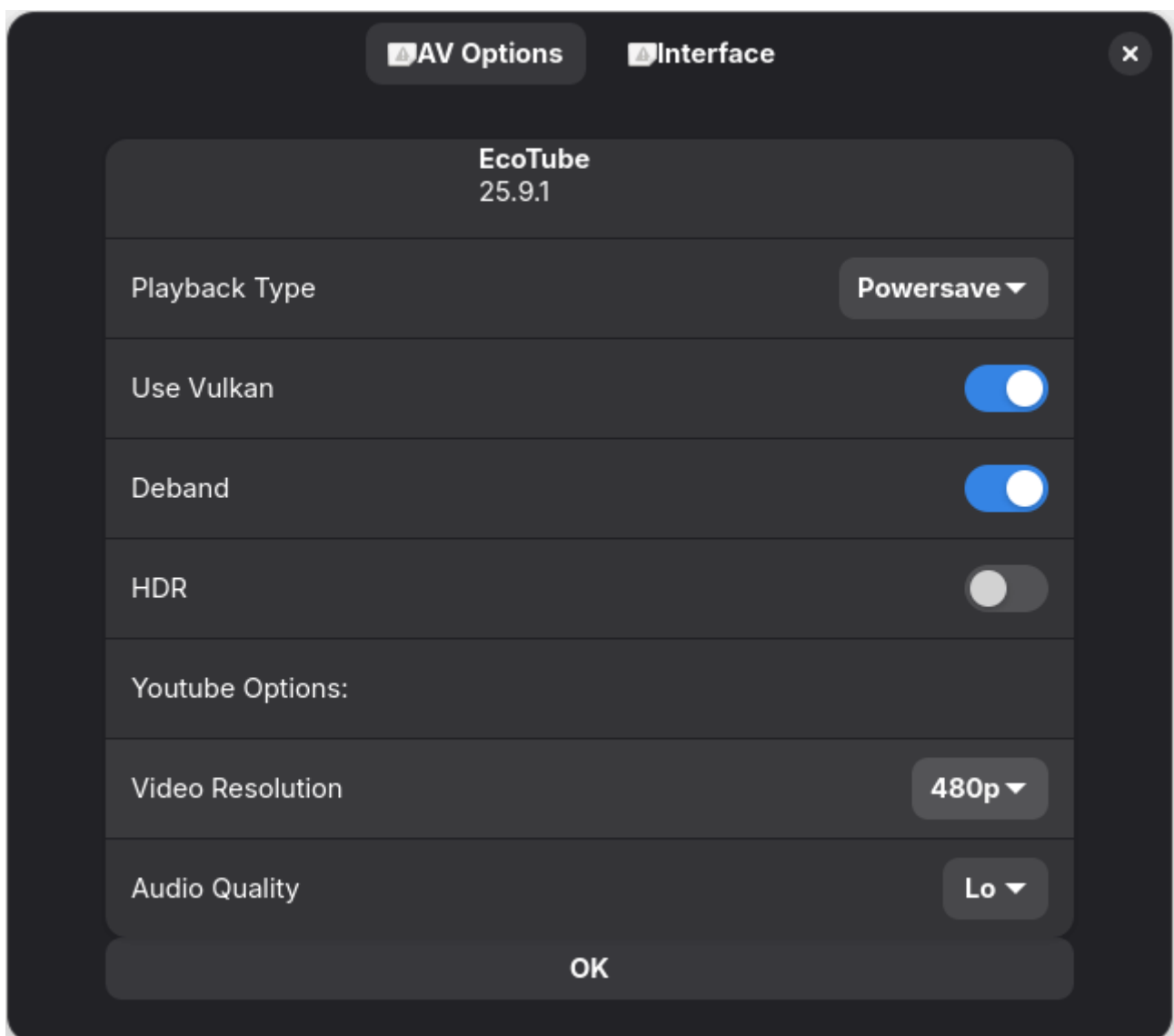
av1 - Best quality video with lowest bitrate

vp9 - Good quality video with low bitrate

h.264 - Lowest quality video with the highest bitrate

### 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:

## Playback Type

**Quality** – high quality video output: av1 video codec with AMD FidelityFX Super Resolution Video Upscaling [if av1 is not available then vp9 is used, and if vp9 is not available then h.264 is used].

**Powersave** – reduced CPU / GPU usage: vp9 video codec with Bicubic upscaling [if vp9 is not available then h.264 is used].

## Vulkan

Default **Off**

Vulkan GPU Compute Acceleration reduces CPU use by providing 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.

## 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.

## HDR

Default **Off**

Allows the playback of High Dynamic Range videos if this form of playback is supported by your distro.

## YouTube Options

### 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.

*Note: Some h.264 videos on YouTube 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

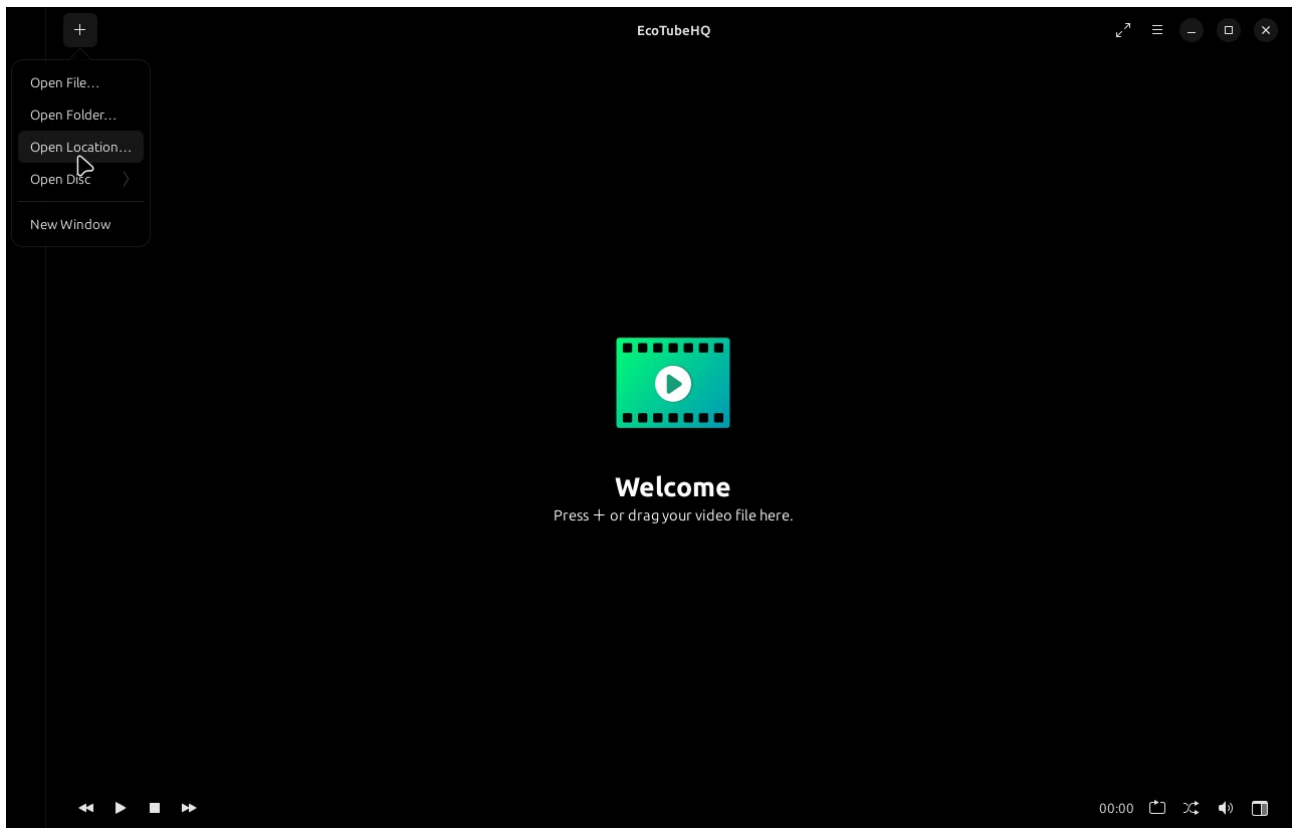
**Lo - 70Kbps [Default]**

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

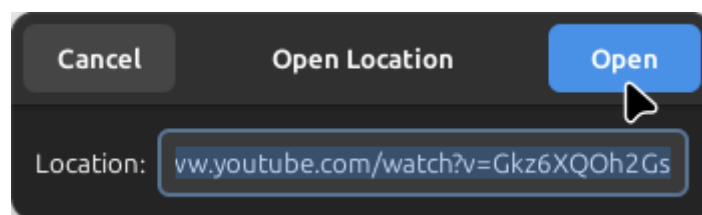
## How to use

Local files can be dragged and dropped onto the player interface to initiate playback.

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.

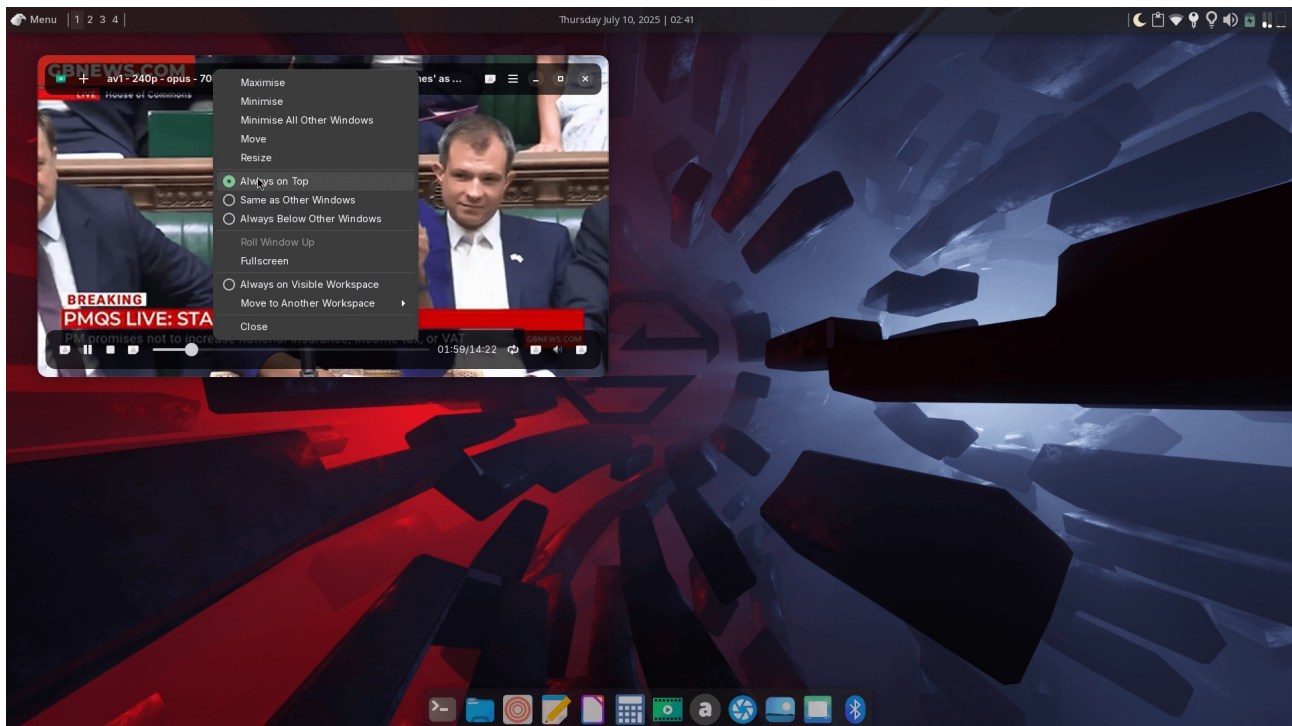
- Press the space bar or right click the mouse on the player screen to pause / play video playback.
- Rotate the mouse wheel on the playback window to turn the audio volume up / down – the volume will reset to normal when the player is restarted.
- Double click the player window during playback to play the video fullscreen.
- Press 'Esc' or double click on the player window during fullscreen playback to return 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, effectively providing you with a miniplayer. The size of 240p videos is shown in the screenshot below, and 144p videos are displayed in a smaller window.

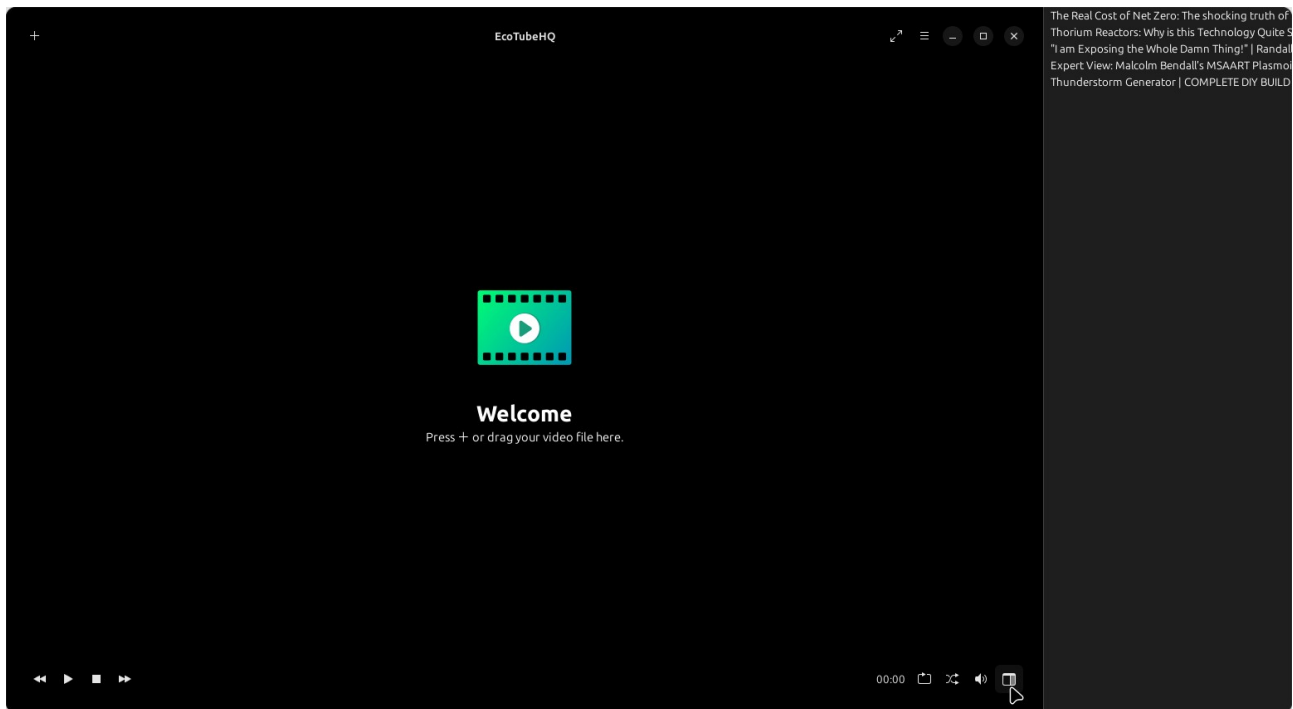
To keep the player on top of all other windows during playback right-click on the top bar and select 'Always on top' as shown below.



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

\* To further reduce CPU usage set the Playback Type to Powersave

## 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

This application comes with absolutely no warranty. See the GNU General Public Licence, version 3 or later for details - <https://www.gnu.org/licenses/gpl-3.0.html>.

# Changelog

## v25.9.2

- Fix codec selection in powersave mode
- Update playlist mode
- Enhance UI

## v25.9.1

- Update playback options - Powersave and Quality -
- Update playlist mode
- Add HDR option in preference
- Enhance UI
- Fix memory usage in startup

## v25.8.2

- Add two playback options - Powersave and Quality -
- remove codec selection
- Reorganize default playlist
- Include no https protocol in format selection
- Reduce network stream usage

## v25.8.1

- Force yt-dlp to use MPEG-DASH on some resolutions
- Reduce stream when paused
- Fix resolution dropping
- Exclude HDR
- Add playback type



### 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.