

MediaTools Video Transcoder - User Guide

Comprehensive Documentation

Version: 1.0.0

Developer: Bala

Organization: MediaTools

GitHub: <https://github.com/MediaTools-tech/mediatools>

Website: <https://mediatools.tech>

Table of Contents

1. [Introduction](#)
2. [Installation & Setup](#)
3. [Interface Overview](#)
4. [Transcoding Process](#)
5. [Advanced Settings](#)
6. [Queue Management](#)
7. [Updates & Maintenance](#)
8. [Troubleshooting & FAQ](#)

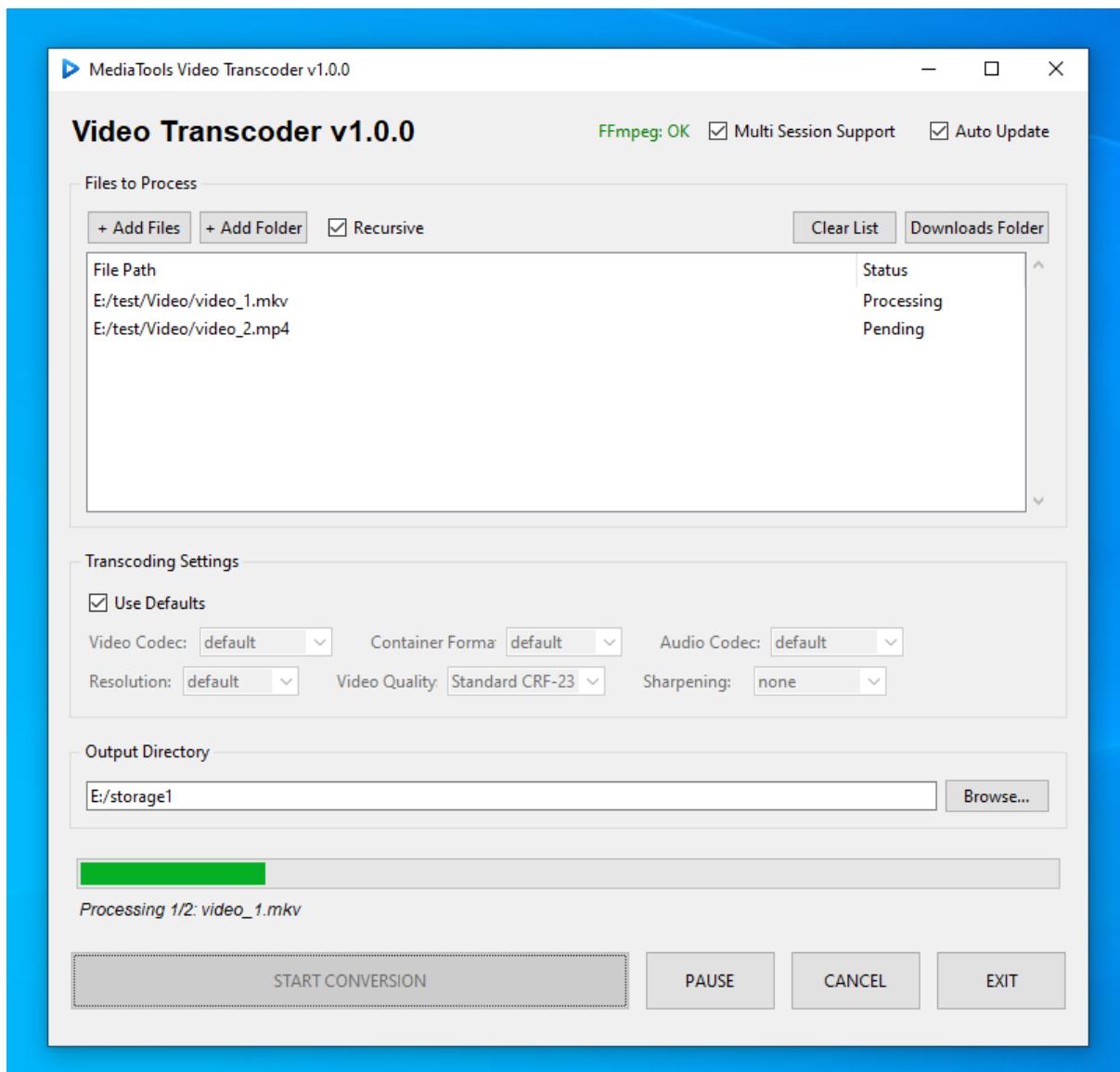


1. Introduction

MediaTools Video Transcoder is a streamlined, professional desktop application designed for high-quality video conversion. Built as a native GUI for FFmpeg, it combines ease of use with powerful batch-processing capabilities.

Key Features

- **Modern Codec Support:** H.264, H.265 (HEVC), AV1, and VP9.
- **Batch Processing:** Convert hundreds of files recursively with one click.
- **Professional Filtering:** Built-in CAS (Contrast Adaptive Sharpening) and Unsharp filters.
- **Smart Queue:** Right-click to reorder tasks; progress persists across restarts.
- **Zero Configuration:** Automatically manages FFmpeg binaries for you.



2. Installation & Setup

2.1 System Requirements

- **Windows:** 10 or 11 (64-bit).
- **Linux:** Standard distributions (Ubuntu 20.04+).
- **Disk Space:** ~200MB for application + space for processed videos.

2.2 First Run

On your first launch, the application will:

1. Check for **FFmpeg**.
2. Prompt to download it if missing.
3. Automatically configure paths.
4. Set up an optional desktop shortcut.

3. Interface Overview

3.1 File List (Queue)

This is where your pending tasks live.

- **+ Add Files:** Select individual videos.
- **+ Add Folder:** Select a directory for batch processing.
- **Recursive:** Toggle this to include videos in subfolders.
- **Clear List:** Empty the entire queue.
- **Right-Click:** Access the context menu to move items UP, DOWN, to the TOP, to the BOTTOM, or REMOVE them. If an item is **Cancelled**, you can also select **Enqueue Again** to reset it and move it to the end of the list.

3.2 Transcoding Settings

- **Video Codec:** Choose your encoding standard.
- **Container Format:** Select MP4, MKV, etc.
- **Audio Codec:** Choose “Copy” to keep original audio or re-encode.
- **Resolution:** Scale your video (e.g., 1080p, 720p) or keep original.
- **Video Quality:** Select quality presets which adjust the Constant Rate Factor (CRF).

4. Transcoding Process

1. **Add Media:** Use the buttons to populate the list.
2. **Configure:** Select your codec and container.
3. **Pick Output:** Verify the “Output Directory” path.
4. **Start:** Click **START CONVERSION**.
5. **Monitor:** Watch the status bar and overall progress.

Automatic Naming

The app never overwrites your original files. If a file name exists in the output folder, the app will automatically name the new one filename_1.mp4, filename_2.mp4, etc.

5. Advanced Settings

5.1 Constant Rate Factor (CRF)

We offer simplified quality settings:

- **High Quality (CRF 20):** Near-lossless, larger files.
- **Standard (CRF 23):** Best balance, default.
- **Low Quality (CRF 27):** Aggressive compression, smallest files.

5.2 Sharpening Filters

- **Unsharp:** Classical sharpening for softening effects.
- **CAS (Contrast Adaptive Sharpening):** Modern, edge-aware sharpening that preserves detail without looking “artificial.”

6. Queue Management

6.1 Interactive Controls

Right-click any item in the list to:

- **Move to Top:** Instantly prioritize a file.
- **Move Up/Down:** Fine-tune the processing order.
- **Remove:** Delete a specific item from the list.

6.2 Session Support

If you close the application while tasks are pending, the **Multi-Session Support** (enabled by default) will reload your queue exactly as you left it the next time you open the app.

7. Updates & Maintenance

7.1 Auto-FFmpeg

The app checks for FFmpeg updates every **28 days**. If a new version is available, it will prompt you to update. You can manually trigger a check by clicking the status label or the update logic in the header.

7.2 Clear Data

To reset the app to factory settings, delete the settings.json and queue.txt files found in your AppData (Windows) or .config (Linux) folder.

8. Troubleshooting & FAQ

Q: Why is my transcoding so slow?

A: Transcoding is a CPU-intensive task. Higher codecs like H.265 or AV1 take significantly longer than H.264.

Q: Where can I find my finished videos?

A: Click the **Downloads Folder** button in the app to open the output directory in File Explorer.

Q: How do I stop or exit?

A: Click **CANCEL** to stop the current batch, or **EXIT** to safely close the application.

Q: The app closed unexpectedly!

A: Don't worry. Your queue is saved. Re-open the app, and you can resume where you left off.