

# CineCinch — Complete Product Documentation

*A Professional, Comprehensive Overview of Features, Workflows, and Best Practices*

## 1. Introduction

CineCinch is a Windows-based video analysis and compression utility designed to help users quickly identify storage-heavy video files and reduce their size using efficient, high-quality H.265 (HEVC) encoding. All compressed videos are output as MP4 files for maximum compatibility. It provides a streamlined interface for scanning folders, evaluating video efficiency, and performing batch compression with precise control and real-time feedback.

CineCinch is engineered for reliability, clarity, and operational safety. Every workflow—from scanning to compression—is designed to be transparent, predictable, and resistant to user-interface conflicts or threading issues.

CineCinch is distributed through the Microsoft Store and includes a 24-hour free trial with limited functionality. The trial provides full access to folder scanning, video analysis, and all four compression modes so you can evaluate CineCinch’s workflow and output quality. The trial is limited to analyzing and compressing the first 10 files in a folder and does not allow CSV export. The full version removes the 10-file limit, enables CSV export, and is designed for ongoing, high-volume compression workflows while retaining the same streamlined interface.

## 2. System Requirements

### Operating System:

- Windows 10 or later (64-bit)

### Dependencies:

- FFmpeg and FFprobe (bundled automatically when packaged; otherwise discovered via PATH)

### Hardware:

- Multi-core CPU recommended for faster compression
- Sufficient disk space for temporary and output files

## 3. Key Features Overview

- **Fast Folder Scanning** with real-time duration probing via FFprobe

- **Automatic Video Efficiency Rating** (Efficient, Average, Bloated, Error)
- **Customizable File Type Filters**
- **Search and Category Filtering**
- **Batch Compression** using H.265 with four preset modes
- **Drag-to-Reorder** for compression priority
- **Select-All/None Compression Control**
- **Real-Time Progress Tracking**
- **Pause, Cancel, and Stop-After-Current** compression controls
- **Output to Source Folder or Custom Folder**
- **Optional Deletion of Originals**
- **CSV Export of Scan Results**
- **Persistent Settings** via QSettings
- **Custom Frameless Window with Drag/Resize**

## 4. User Interface Overview

### 4.1 Title Bar

- Custom frameless window with:
  - Minimize
  - Maximize/Restore
  - Close
- Window can be dragged by the top bar and resized from edges/corners.

### 4.2 Scan Settings

#### Folder to Scan

- Displays the selected folder path.
- “

#### Scan Videos

- Begins scanning the selected folder.
- Disabled until a folder is selected.

#### Stop Scan

- Immediately stops an active scan.
- Safely interrupts the worker thread.

#### Export CSV

- Exports the current table (excluding the Compress column) to a CSV file.

## Quality Rating Threshold

Determines how MB/sec values are categorized during a scan:

Tolerance	Efficient Threshold	Average Threshold
Low	0.16 MB/s	0.75 MB/s
Medium	0.32 MB/s	1.5 MB/s
High	0.75 MB/s	3.52MB/s

## 4.3 File Type Filters

- All supported video extensions are listed with checkboxes.
- “Select All/None” toggles all file types.
- Filters persist between sessions.

## 4.4 Compression Settings

### Output Folder

- “Same folder as source” (default)
- Or a custom folder selected via “

### Delete Originals

- Removes source files after successful compression.
- Use with caution.

### Output Mode

Four presets:

1. **High Quality**
  - H.265, preset=slower, CRF 21
2. **Standard**
  - H.265, preset=slow, CRF 25
3. **High Compression**
  - H.265, preset=medium, CRF 29
4. **Max Compression**
  - H.265, preset=fast, CRF 34

## 4.5 Compression Controls

- **Start Compression**
- **Cancel** (immediate termination)

- **Stop After Current** (graceful stop)
- **Reset Progress** (clears progress column)

## 4.6 Search and Category Filters

- Search bar filters rows by text.
- Category checkboxes filter by rating:
  - Errors
  - Bloated
  - Average
  - Efficient

## 4.7 Table Columns

Column	Description
Compress	Checkbox to include/exclude file from compression
File	Full file path
Size (MB)	File size in megabytes
Duration (sec)	Video duration
MB/sec	Size ÷ Duration
Rating	Efficiency category
Progress	Compression status

Double-click behaviors:

- Column 1 (File): Opens file location in Explorer
- Column 6 (Progress): Opens output file location (if exists)

# 5. Scanning Workflow

## 5.1 Starting a Scan

- Select a folder.
- Ensure at least one file type is enabled.
- Click **Scan Videos**.

## 5.2 What Happens Internally

- UI enters “scan mode”:
  - Default sorting on MB/sec
  - Controls disabled to prevent conflicts
- A background `ScanWorker` thread:
  - Recursively walks the folder

- Probes each file with FFprobe
- Emits rows to the UI queue

### 5.3 Scan Completion

- UI restored to normal mode
- Status label shows total files and elapsed scan time
- Export and compression become available

### 5.4 Stopping a Scan

- Worker is interrupted safely
- UI restored
- Partial results remain visible

## 6. Compression Workflow

### 6.1 Building the Queue

CineCinch includes a file in the compression queue only if:

- Row is visible
- Compress checkbox is checked
- Progress column is empty or “Cancelled”
- File path and duration are valid

Rows with existing progress (e.g., “Complete”, “Failed”, “Skipped”) are skipped.

### 6.2 Starting Compression

- Sorting disabled
- Scan controls disabled
- Output controls disabled
- Category filters disabled
- Timer begins
- Worker thread starts processing queue sequentially

### 6.3 Real-Time Progress

Worker emits:

- `progress_signal(row, status, percent)`
- `status_signal(message)`
- `completed_signal(count)`

Status examples:

- Queued
- Compressing (with %)
- Complete (with output size)
- Failed
- Cancelled

## 6.4 Cancel Behavior

- Immediate termination of FFmpeg
- Current file marked Cancelled
- Remaining queue abandoned
- UI restored

## 6.5 Stop After Current

- Allows the current file to finish
- Stops before next file
- UI indicates “Will stop after current file...”

## 6.6 Completion

- Timer stops
- UI restored
- Status shows total processed files and elapsed time
- Reset Progress becomes available

# 7. Output File Rules

## 7.1 Same Folder as Source

Output path: <source\_basename>\_compressed.mp4

## 7.2 Custom Output Folder

Output path: <output\_folder>/<source\_basename>.mp4

## 7.3 Output Path Discovery

Double-clicking the Progress cell:

- Opens output file if it exists
- Otherwise opens source file location

## 8. Efficiency Rating Logic

Rating is based on MB/sec:

- **Efficient:**  $\leq$  efficient\_threshold
- **Average:**  $>$  efficient\_threshold and  $\leq$  average\_threshold
- **Bloated:**  $>$  average\_threshold
- **Error:** duration or MB/sec unavailable

Colors:

- Efficient: green
- Average: orange
- Bloated: red
- Error: gray

## 9. Settings Persistence

CineCinch stores:

- Last scanned folder
- File type selections
- Tolerance level
- Output folder
- Output mode
- Same-as-source toggle
- Category filter states
- Last export directory

Settings load automatically at startup.

## 10. CSV Export

- Exports all rows, including hidden ones
- Excludes the Compress column
- Saves to user-selected location
- Remembers last export directory

## 11. Error Handling and Warnings

### 11.1 Scan Errors

- Missing files
- FFprobe failures

- Permission issues

Rows with errors are marked “ERROR”.

## 11.2 Compression Errors

- FFmpeg failures
- Invalid output folder
- Missing source file
- Permission issues

Rows marked “Failed”.

## 11.3 UI Safety Guards

- Sorting disabled during compression
- Move Up/Down disabled during operations
- Output folder button disabled during compression
- Prevents race conditions and inconsistent row ordering

# 12. Performance Tips

- Use **High Compression** or **Max Compression** for greatest reduction in file size.
- Use **Standard** for balanced quality, speed, and compression efficiency.
- Use **High Quality** when you want to preserve detail in videos that were poorly compressed or heavily artifacted to begin with
- Avoid scanning network drives for best performance.
- Keep output folder on a fast local disk.
- Disable unnecessary file types to speed up scanning.

# 13. Troubleshooting Guide

## Scan shows 0 files

- Ensure file types are enabled
- Ensure folder contains supported formats

## Duration shows ERROR

- FFprobe could not read the file
- File may be corrupted or unsupported

## Compression is slow

- H.265 is CPU-intensive

- Try a faster preset (High Compression or Max Compression)

## Output file not found

- Check custom output folder
- Ensure write permissions

## Rows disappear

- Category filters may be hiding them
- Check “Show: Errors / Bloated / Average / Efficient”

## 14. Frequently Asked Questions

**Why does MB/sec matter?** MB/sec indicates how “dense” a video is in terms of storage per second of playback. Higher MB/sec often means inefficient encoding or unnecessarily high bitrates for the content. CineCinch uses MB/sec to categorize files as Efficient, Average, or Bloated so you can focus compression where it will have the most impact.

**Is there a free trial?** Yes. CineCinch includes a 24-hour free trial through the Microsoft Store.

**What’s the difference between the trial and full version?** The trial lets you experience the full workflow—scanning folders, reviewing efficiency ratings, and using all four compression modes—on a limited set of files and without CSV export. The trial is limited to analyzing and compressing the first 10 files in a folder. The full version removes the 10-file limit, enables CSV export, and supports ongoing, large-scale compression and analysis.

**Does CineCinch modify my original files?** Only if “Delete originals” is enabled after successful compression. By default, CineCinch writes compressed files alongside the originals (or to a custom output folder) and leaves the source files untouched.

**Can I reorder files in the compression queue?** Yes. Use the ▲ and ▼ buttons when no scan or compression is active. This lets you prioritize certain files without changing the underlying folder structure.

**Can I resume compression without rescanning?** Yes. You can reuse the existing scan results and start compression again. If you want to reprocess files that already show a status such as “Complete” or “Failed”, use Reset Progress to clear those statuses before starting compression.

**Why is compression slow?** H.265 (HEVC) is CPU-intensive, especially at higher quality settings. Try a faster preset such as High Compression or Max Compression if you need quicker results, and ensure you are writing to a fast local disk rather than a network drive.

**Does CineCinch use GPU acceleration?** No. CineCinch currently uses CPU-based H.265 encoding only. There is no GPU acceleration in this version.

**Can I use custom FFmpeg flags?** Not in this version. CineCinch uses carefully chosen presets for consistency and safety and does not expose arbitrary FFmpeg command-line options.

**Can CineCinch compress multiple files at once?** CineCinch processes one file at a time. This avoids overloading the system and keeps progress reporting simple and predictable.

**Does CineCinch include a video player or preview?** No. CineCinch focuses on analysis and compression. You can open files in your preferred player or in Explorer directly from the table.

## 15. Legal Notes

CineCinch uses FFmpeg under LGPL/GPL licensing. Users are responsible for ensuring compliance with local laws and codec licensing requirements.