

RushAnalyzer



Video analysis and motion detection software

User Manual

1. Introduction

RushAnalyzer is a video analysis software that automatically detects motion in a recording, presents it as time-stamped events, and allows you to browse, annotate, and export them.

The application is designed for the quick review of video footage, surveillance recordings, or long recordings: instead of watching the entire video, you get a list of moments where motion was detected, with the ability to jump directly to each moment, add names, notes, and a location/camera name, then generate reports or clips.

2. Minimum configuration

Recommended resolution 1920 × 1080.

Additional space depending on the size of the videos being analyzed.

Memory: 4 GB RAM minimum (8 GB recommended).

Storage: 500 MB free space minimum (8 GB recommended).

Intel Core i3 or equivalent processor.

Operating system: Windows 10 (64-bit) version 1903 or higher.

3. Opening a video

Loading

- Click the **Choose a video** button or go to **File** → **Open a video**.
- Drag and drop a video file onto the window.
- **Video history** menu: reopen recent files.

Supported formats

Common formats: MP4, MOV, AVI, MTS, MKV, and others provided the codecs are installed on the system.

 If playback fails, a message will indicate that you need to install a codec pack (e.g., K-Lite Codec Pack Basic).

Location / Camera (optional)

When loading a new video, a window may ask for a location or camera name (e.g., Living room, Office). This name is used in reports and can be displayed on screen; it is saved for that video.

4. Automatic motion analysis

As soon as a video is opened, background analysis begins:

- Scans the video frame by frame (according to the configured analysis interval).
- Detects moving areas (sensitivity threshold, minimum size, merging of close events).
- Flicker / orb option for small reflections or moving lights.
- Progress bar during analysis.
- Upon completion: Detected events list, markers on the timeline, and an alarm sound (adjustable volume).

You can restart the analysis (button or menu) after modifying the detection settings. Events close in time can be merged (the Event merging setting).

5. Main interface

Zone	Role
Video (left)	Playback, overlays (zones, presentation, heatmap, camera label).
Right panel	Display options, transport, events list, actions.
Timeline	Position cursor; click to jump; markers at event timestamps.
Time / frame	Current time, frame number, total duration.

6. Video playback

Controls

- Play / Pause
- Speed: slow motion or fast forward
- Volume
- Previous / Next frame
- Previous / Next event

Keyboard shortcuts

Key	Action
Left / Right arrow	Previous / Next frame
Ctrl + Left / Right arrow	Previous / Next event
F11	Full screen

Automatic pause

If Auto pause is checked, playback stops at each detected event (with a delay and the option to ignore the beginning of the video — settings in Settings → Playback).

Portable optimized mode

Option in **Settings** → **Playback**: reduces CPU load during playback only (~15 fps, no heavy recalculation while paused). Does not affect analysis or export. Can be automatically activated for heavy videos (high resolution).

7. Detected events

Each row corresponds to a motion at a specific moment (default timestamp such as "motion detected at ...").

Actions on an event

- Click in the list: jump to that moment.
- Rename: custom label (e.g., "Falling book").
- Note: free text + location / camera for that event.
- Right-click on an event: rename, note, export a clip centered on this event.

 Names, notes, and locations are saved automatically (local cache)

8. Display and visualization

Detection events

Rectangles on the video showing motion areas. Live tracking can update these rectangles during playback (setting in Settings → Detection).

Presentation mode

- Discreet arrow: an arrow instead of the rectangle.
- Grouped event: a single merged rectangle for all visible detections.

Zoom mode

- Scroll wheel: zoom
- Right-click + drag: move the zoomed image

Display (menu)

- Noise reduction: smoothing to facilitate visual detection.
- Edge detection: sharpens edges.

On-screen location / camera

Checkbox Location/camera on screen: displays "Camera: ..." at the top left (playback, screenshots, exported clips).

9. Heatmap

The heatmap shows where activity has been concentrated in the video (the "hottest" areas).

- On-demand calculation (**Heatmap** button), not automatic after each analysis.
- Progress bar and **Cancel** button during calculation.
- Result is cached: an identical recalculation is faster.
- Semi-transparent overlay on the video once generated.

Settings → **Heatmap**: quality, interval between analyzed frames, automatic adaptation according to the video resolution.

Mode	Max resolution	Interval
Fast	480p	1 frame / 15
Balanced	720p	1 frame / 10

Mode	Max resolution	Interval
Quality	1080p	1 frame / 5

10. Exports

Export	Content
Export results (TXT)	Text report: camera, video filename, list of events with names, locations, notes.
Export HTML report	Readable table in a browser (same information).
Export clip	MP4 excerpt around the selected event or current position; adjustable duration before/after.
Screenshot	Screenshot of the displayed image (with overlays), PNG format.

11. Settings

Detection

- Presets: General, Orbs / small movements, Large movements, Live demo, Custom.
- Detection threshold: lower = more sensitive.
- Analysis interval: 1 = every frame (slower, more precise).
- Minimum motion size (px²).
- Event merging (seconds).
- Flicker / orb events.
- Live tracking during playback.

 After modifying, restart analysis.

Playback

- Auto pause: seconds ignored at the beginning of the video, delay before pausing.
- Portable optimized mode and automatic activation on heavy videos.

Heatmap

- Quality, interval, automatic adaptation to resolution.

Export & alarm

- Before / after duration for exported clips.
- Maximum number of rectangles displayed simultaneously.
- Alarm volume at the end of analysis.

 *Reset settings button: returns to the General preset*

12. Menus

Menu	Main functions
File	Open, export TXT, history, exit
Analysis	Re-analyze the video
Display	Noise reduction, edge detection, full screen
Settings	Settings window, reset
Language	French, English, Spanish, Chinese, Hindi, Arabic, Russian, Portuguese, German
Help	About

13. Backup and cache

In the software folder, the subfolder `.rush_cache` keeps:

- Event metadata (names, notes, locations, camera) per video.
- Already computed heatmaps (depending on settings and source file).
- Reopening the same video restores your annotations without having to re-enter everything.

14. Usage tips

1. Start with the **General** preset, then adjust if there are too many or not enough detections.
2. On a long HD video, leave the analysis interval > 1 and use **Portable optimized** mode for smooth playback.
3. Use **Auto pause** to stop the video after each event.
4. Name events and add notes before exporting the HTML or TXT report.
5. The heatmap helps identify common movement areas; it does not replace the list of time-stamped events.

14. Video tutorials

1. **Complete demonstrations**, user guides, and analysis examples are available on the official [YouTube channel](#).
2. **You will find** there in particular:
 - Getting started with RushAnalyzer
 - Complete video analysis
 - Using heatmaps
 - Exporting reports and clips
 - Advanced settings

RushAnalyzer

Video analysis software for motion detection

Developed by [The Good Sensation](#)