

SiggySoft Video Capture User Manual

SiggySoft Video Capture records VHS and other tapes, cameras and webcams through a USB capture device to MP4 files. It keeps a tape's 4:3 picture at full height when the device sends 16:9, picks the device's own sound, measures comb lines on the live picture and removes them when they are there, and stops when the tape ends.

How to read this. Chapter 1 connects the device. Chapter 2 is a recording from start to end. Chapter 3 explains the shape, the quality and the format, Chapter 4 comb lines, Chapter 5 the end of a tape, Chapter 6 the clip list, with renaming and the Edit button that opens a clip in SiggySoft Video Editor, Chapter 7 the Feedback menu, Chapter 8 installing and updates, and Chapter 9 the files and the setup check. The DV and Digital8 camcorders on FireWire belong to SiggySoft DV Capture, which copies their tapes as they are.

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PART A

Recording

Connecting the device, a recording from start to end, and the choices that shape the file.

Connecting the device

A capture device or webcam, and its sound

- Plug the capture device straight into a USB 3 port, not through a hub, with a cable that carries data. Some USB-C cables carry power only, and the device does not appear with them.
- For a tape: the VCR goes into an upscaler or converter, its HDMI output into the capture device. For a camera: its HDMI output into the capture device. A webcam plugs in on its own.
- Pick it in the **Device** box; the refresh button (F5) looks again after plugging one in. Virtual cameras that other programs make are listed last.
- **Sound** starts on the device's own: Windows names a capture device's sound after it (for example "HDMI (...)"), and a webcam's microphone the same way, so the program pairs them by itself. Another sound device, or none, can be chosen.
- **Picture from the device** starts on 1920 x 1080 at its highest rate, uncompressed, when the device offers it. *Uncompressed* is each picture as the device received it: 187 MB a second at 1920 x 1080 and 60, which needs a USB 3 port. *Compressed by the device* (MJPEG) sends less over USB, but the device throws some detail away first, and the recording then compresses the picture a second time. Keep uncompressed for tapes; compressed is for a USB 2 port, a webcam that sends 1080p smoothly only that way, or a size the device sends no other way.

A recording, start to end

From the preview to the MP4 file

The window has two columns. The first holds the **Device** block (the device, its sound and the picture it sends), the **Picture** block, the **Record** button and, under it, the **Recording** block: the shape, interlace, quality and format (Chapters 3 and 4). The second starts with the clips' heading, its Sort choice and its buttons, then the **Tape and files** block (the capture folder, the tape name, the tape photos and Stop when the tape ends, Chapters 2 and 5), the clips (Chapter 6) and the messages. The arrow at a block's top right folds it to what it is set to or doing; folded, the Device, Recording and Tape and files blocks list their choices one to a line. The Record button stays in sight with every block folded, and the program remembers what is folded. Drag the line beside the first column to make the picture wider (420 to 1100 pixels). The bar along the bottom gives the frames dropped, the last file, the free space on the capture folder's drive and the memory the program uses.

The program records. Trimming, splitting, joining and the other changes to a clip are SiggySoft Video Editor's, which each clip's Edit button opens (Chapter 6).

1. The Picture block shows the picture as it will be recorded. On it are the figures: what is recorded ("Records 4:3, 1440 x 1080, 60 fps"), what the picture arrives as, **Progressive** in green or **Interlaced** in red (Chapter 4), and during a recording the file's size, the bit rate, the frames written and any dropped. Under it are the sound meters, left and right from -30 dB to 0 dB as in SiggySoft DV Capture (one meter, marked M, for a mono sound), and the readings: the sound, and whether the picture is moving or standing still. The sound plays through the PC's speakers, a fraction of a second behind the picture; tick **Mute**, or Capture > Mute the monitor sound, to silence them. The recording keeps its sound either way.
2. Type the **Tape name**; the file is named after it, with the date and time. Drop photos of the tape and its case under it if you like (below).
3. Press **Record** (Ctrl+R), then play the tape. A red REC mark counts the time.
4. Press **Stop** (Ctrl+.), or let the program stop at the end of the tape (Chapter 5). The file is finished at once, because a normal MP4 is written beside the recording's safe copy while it runs: a 20-second test recording finished in 0.1 seconds. The message says how long the recording is, how many frames it has and how many were dropped. Only when the normal file is not whole is the safe copy turned into one, without encoding it again; the recording's row then says **finishing** with how far it has got, and the picture shows "Finishing the file" with a bar.

Closing the window during a recording asks first, then stops the recording and finishes the file.

Photos of the tape, its case and its cards

Under the tape name is an area for up to four photos: the tape's label, its case, a card that came with it, a screenshot of anything else that belongs with it. Drop them on the area, or click it to choose them. Each is copied into the capture folder as `tape name - tape photo 1.jpg` to `... 4`, named after the tape as its recordings are, so the handwriting on the label stays with the recordings; the originals stay where they were. A photo's cross sends its copy to the Recycle Bin. A photo dropped before the tape has a name waits, marked "needs a tape name", and is copied once the name is confirmed: Enter, leaving the box, or Record.

Change the tape name and the photos stay under the old one. If nothing was recorded under the old name, so it may have been a typo, a button offers to move them to the new name; they never move by themselves.

For the next tape, press the bin at the right of the **Tape photos** row: it empties the tape name and the photo area, ready for the next tape's name and photos. Nothing is deleted: the last tape's photos stay in the capture folder under its name. This is SiggySoft DV Capture's bin, which does the same there.

With **Cut the tape out of each photo** ticked (under the area), each photo also gets `... tape photo 1 (cut out).png` : the tape on a clear background, which the area then shows. It is made on this PC, one photo at a time and never during a recording, by the BiRefNet lite model, which Tools > Setup check downloads once (224 MB, MIT license) into the folder SiggySoft DV Capture uses, so either program's download serves both. A photo takes a few seconds; the photo itself is never changed. Right-click a photo to open it or its cut-out, or to cut the tape out again.

Shape, quality and format

4:3, 16:9 or square; how much detail to keep; H.264, HEVC or AV1

The shape

SHAPE	FROM 1920 X 1080	FOR
4:3, the black sides cut off	1440 x 1080, the middle at full height	Tapes through an upscaler that adds black sides: they are cut off and nothing is scaled.
4:3, squeezed from the sides	1440 x 1080, the whole picture made narrower	Tapes through an upscaler that stretches the picture to the edges of the screen.
16:9	1920 x 1080, as it comes	Cameras, game consoles, widescreen tapes.
1:1, a square from the middle	1080 x 1080, the middle cut out	Square videos for social media.
1:1, squeezed square	1080 x 1080, the whole picture made narrower	A square video that keeps everything at the edges, with people made thinner.

To tell which 4:3 a tape needs, play it and look at the preview with 16:9 chosen. Black bars at the left and right: pick **the black sides cut off**. The picture reaches the edges and faces and round things look too wide: pick **squeezed from the sides**. Cutting off a stretched picture loses a quarter of it, an eighth at each side; squeezing a picture with black sides leaves the bars in, made narrower. Either way, the recording is 1440 x 1080. The squeeze changes only the width, so comb lines (Chapter 4) are found and removed as before. A device that sends 720 x 480 or 720 x 576 sends a standard-definition picture with narrow pixels; it is kept at its size and marked 4:3 or 16:9, so players show it in its shape.

Quality

Quality names what is being recorded, and the grey line under it says what the recording will be: its size and frame rate, the format and the encoder, the quality number (lower is better and larger), the most bit rate it may use and so the most an hour can take, and what the source holds.

CHOICE	RECORDS	WHY
VHS, VHS-C, Video8, Betamax	the lines the device sends; quality 24, at most 25 Mbit/s	These tapes hold 240 to 250 lines of detail. On a VHS tape through an upscaler, about 10 Mbit/s, 4.5 GB an hour.
S-VHS, Hi8, LaserDisc	the lines the device sends; quality 23, at most 30 Mbit/s	400 to 420 lines of detail: one step finer.
DVD, DV, Digital8	the lines the device sends; quality 22, at most 30 Mbit/s	Up to 540 lines of detail: two steps finer.

4K, 2K (1440 lines), HD (1080 lines), 720 lines, each at 60 or 30 frames a second	no more lines and frames than chosen, and never more than the device sends; quality 23, at most half again YouTube's recommended upload rate	Cameras, webcams, game consoles and screens. A 60-frame device at a 30-frame choice records every second frame.
Custom	your own settings (below)	

Custom

Custom opens a panel laid out as the output settings of other recording programs, each name on the left of its box. Its settings apply only while Custom is chosen; the other choices use the automatic encoder, its own preset and 192 Kbps sound.

SETTING	WHAT IT DOES
Rate control	Constant quality at a quality number (0 to 51, lower is better and larger): each picture gets the bits it needs. Variable bitrate : an average, allowed up to half again in busy pictures. Constant bitrate : the same all the time.
Video bitrate	For the two bitrates, in Kbps, 1,000 to 200,000. 6,000 Kbps is 2.8 GB an hour with 192 Kbps sound.
Audio bitrate	96, 128, 160, 192, 256 or 320 Kbps.
Video encoder	Automatic (the graphics card when it works), or one of the encoders that work on this PC for the format: the graphics card's, or the processor's (x264 for H.264, x265 for HEVC). Format, under the panel, chooses H.264, HEVC or AV1.
Encoder preset	How much work the encoder puts into each picture. The names depend on the encoder. One graphics card maker's run from P1: Fastest (lowest quality) to P7: Slowest (best quality), and the program's own choice there is P5: Slow (good quality); the processor's run from ultrafast to veryslow; the other makers' run from veryfast to veryslow, or are Speed, Balanced and Quality. A slower preset gives a better picture at the same bitrate; on the processor it can drop frames.
Audio encoder	AAC at 48 kHz, which every MP4 player and editor reads. It is shown, not chosen.

The numbers are those of the graphics card encoder on the development PC; the line under Quality gives the one the encoder on your PC uses. The detail the tapes hold is their horizontal resolution in TV lines per picture height (Wikipedia, "Television lines"). A tape keeps the lines the device sends: measured on a VHS tape through an upscaler, at the same bit rate the full 1080 lines kept more of the picture than 720 or 540 lines, because the upscaler's lines carry its sharpening and the tape's grain. A recording has a key frame every 2 seconds and, with that encoder, B-frames.

Format

Format is **MP4, H.264**, which plays almost anywhere, **MP4, HEVC**, or **MP4, AV1**, offered when a graphics card on the PC encodes it (the three main makers' cards from their 2022 generations on). On the VHS tape, H.264 at the same quality number made files 12 percent larger than HEVC, and AV1 at its own matching number (six higher) 16 to 20 percent smaller, with about the same picture. AV1 needs a newer player: Windows plays it with Microsoft's AV1 Video Extension.

The graphics card compresses the video when it can; the setup check says which, and so does the marker beside PREVIEW at the top right of the window: the graphics card maker's name and **GPU**, or **CPU**, followed by the format (such as HEVC). Before a recording it names the encoder the next recording will use; during one, the encoder at work. Its

edge is blue for a graphics card and orange for the processor.

Comb lines

What they are, how they are measured, and removing them

A tape picture is made of two half-pictures taken a moment apart, one on the odd lines and one on the even lines. Shown together as one picture, anything that moves gets jagged edges like the teeth of a comb. In measurements of 14 capture paths for MiddleSiggy's Digital World (2026), every one joined the halves properly; a device that does not passes them through as they are.

The program measures them on the live picture with ffmpeg's interlace detector, ten pictures a second, and the picture shows what it arrives as over the last five seconds, with the other figures: **Progressive** in green, **Interlaced** in red, or **Not judged yet** when the picture is too still or blank to tell, as a blue screen is. Holding the pointer over the word gives the counts. The **Interlace (comb lines)** choice in the Recording block shows while the picture is interlaced or not judged; a progressive picture has no comb lines to remove, and the block says so.

- **Automatic** removes them when the preview shows them as you press Record. Play a few seconds of the tape before pressing Record so there is something to judge.
- **Always remove them** and **Leave the picture as it is** do not look.

Removing them uses a deinterlacer (bwdif). A picture of 30 or fewer frames a second becomes 60, one picture per half-picture, so motion stays as smooth as on the tape. A picture already enlarged by a device with the comb lines in it cannot be repaired cleanly at that size: the lines were enlarged with it.

The end of a tape

Stopping by itself when the tape runs out

When the tape ends, a VCR shows a blue or black screen, or snow, and an upscaler without a picture shows its own “no signal” card. The blue or black screen and the card are pictures that stand still, with no sound. With **Stop when the tape ends** ticked, in the Tape and files block, the recording stops when both have lasted the set time, 60 seconds unless changed: the picture standing still and no sound. A still picture with sound, such as a black screen with music, never stops it. A VCR that shows snow on blank tape keeps the picture moving, so stop the recording by hand then.

Before it stops, the program warns. Once the picture has stood still with no sound for a quarter of the set time, an orange box at the top right of the picture counts down the seconds left: with 120 seconds set, it appears after 30 seconds and shows “Stops in 1:30”. Once the box shows, a change of up to 10 seconds holds it rather than clearing it: a VCR going from a no-signal card to its blue rewind screen changes the picture for a moment and may click. The box then adds “unless the picture keeps moving” (or “unless the sound keeps playing”), the count goes on, and the recording stops once the picture and sound are still and silent again. A change that lasts longer than 10 seconds, such as the tape playing again, clears the box and starts the count again; so does any change before the box shows. Folded, the Picture block’s line shows the countdown too. To keep recording, play the tape, or untick Stop when the tape ends.

The clip list

The recordings in the capture folder: playing, renaming, and opening them in SiggySoft Video Editor

The list in the second column shows every recording in the capture folder: three pictures from each (a tenth of the way in, the middle and near the end), the name, the date and time, the length, the size, the picture size and frame rate, the format, and whether it has sound, with its shape on a tag. While a recording runs it has a row of its own with its time, size, bit rate and frames, tagged **recording**, then **finishing** while its file is finished. **Sort** puts the list in capture order, newest first, or by name.

TO	DO THIS
Play a clip	Double-click it, or press Enter. It opens in the PC's video player.
Rename its file	Click the pen before its name, or select it and press F2 (Clips > Rename). One clip at a time.
Trim, split, join or change it	Click its Edit button, or select it and press Ctrl+T (Clips > Edit in SiggySoft Video Editor).
See the file	Show in Explorer, in the Clips menu, the right-click menu or the buttons above the list.
Take clips off the list	Del, or Clear the list for all of them, to start a tape on an empty list. No file is touched, and new recordings show on it. The refresh button above the list (Clips > Read the folder again) brings back every recording in the folder.
Delete clips	Shift+Del sends them to the Recycle Bin, after asking.

Renaming changes the file's name in its folder and nothing in it, for a recording started under the wrong tape name. The window opens with the name as it is; a name already in the folder, or one with any of \ / : * ? " < > |, is refused and the window says why. A recording is renamed once it has stopped. A file another program has open, as ffmpeg has a new clip for a second or two while it makes the pictures, or a player, is renamed as soon as it is let go, within 10 seconds; the window says so while it waits.

Edit hands the clip to SiggySoft Video Editor, where it is trimmed, split, joined to others or changed; SiggySoft DV Capture's clips have the same button. The button is there when SiggySoft Video Editor is installed on the PC.

Feedback

Reporting a problem, suggesting a feature, asking a question or saying thanks, from the Feedback menu

Sending a report

The Feedback menu, last on the menu bar, opens the same window four ways: Report a problem, Suggest a feature, Ask a question and Say thanks. The kind can still be changed in the window.

- **Title and description.** The title says in a few words what the report is about. For a problem, the description says what happened, what you expected and the steps that lead to it.
- **Email address.** Optional. Give one for an answer by email, and tick *SiggySoft may email me about this report*. Replies also appear in My feedback without it.
- **System details.** Ticked at first: the Windows and .NET versions, the processor, the memory, the graphics card and the screen size.
- **This program's log.** Not ticked at first: the last 200 lines of SiggySoft Video Capture's log. Your user folder in it is written as %USERPROFILE%.
- **Pictures and files.** Up to 3, 5 MB together: pictures of SiggySoft Video Capture's windows (*Add pictures of this program's windows*), or PNG, JPEG and text files (*Add a file*).

Show exactly what will be sent displays the whole report before anything leaves the PC. *Send* sends it and shows its ticket number, such as FB-2026-000123, with a link to its page on www.siggysoft.org. *Save to send later* keeps it on the PC instead.

My feedback

Feedback, My feedback lists the reports sent from this PC by every SiggySoft program, newest first, with their status (New, Seen, Planned, In progress, Fixed in a version, Won't fix, Duplicate or Closed) and SiggySoft's replies. Refresh asks the site again.

When the site cannot be reached

A report that cannot be sent waits on the PC in %LOCALAPPDATA%\SiggySoft\Footer\outbox. It goes the next time any SiggySoft program starts, or when you press *Send them now* in My feedback, and is deleted from the PC once the site has given it a ticket number.

What is sent, and who sees it

SiggySoft Video Capture sends nothing in the background: no usage counts and no crash reports. A report leaves the PC when you press Send, or when a saved report goes from the outbox. It travels over HTTPS, signed with a key this PC gets from the site with its first report. The key is kept in %APPDATA%\SiggySoft\Footer\client.json, readable only by your Windows account. A report's page shows its title, status and replies, never your email address, the system details, the log or the pictures. Feedback, What is sent and why lists every part of a report.

Installing and updates

Setup.exe, and new versions from www.middlesiggy.com

Download `SiggySoftVideoCapture-win-Setup.exe` from www.middlesiggy.com and run it. It asks nothing: it installs SiggySoft Video Capture for the Windows user signed in, in `%LocalAppData%\SiggySoftVideoCapture`, without administrator rights, puts it on the desktop and in the Start menu, and first installs Microsoft's .NET 10 Desktop Runtime when the PC has none. Settings > Apps > Installed apps removes it again; your settings and recordings stay where they are.

An installed copy looks for a new version at every start and when you choose Help > Check for updates. A new version downloads in the background; when only a few files changed, only those are downloaded. It goes in when you close the program, and the next start runs it. It never goes in during a recording: closing first finishes the recording's file. Help > Check for updates offers to close and start again on the new version at once.

The setup check's tick box *Look for a new version at every start* turns the check at start off. A copy started from a build or publish folder does not update itself; the setup check says so.

Files and the setup check

Where recordings go, and what the program needs

- Recordings go to the capture folder (Videos\SiggySoft Video Capture unless changed), named `tape name 2026-10-06 14.05.00.mp4`. While recording, two files are written side by side from the one recording: `... (being recorded).mp4`, a safe copy that stays readable even after a crash, and `... (being written).mp4`, the normal MP4. At Stop the normal file takes the name and the safe copy is deleted. A recording cut off by a crash or a power cut is finished from its safe copy the next time the program starts.
- Tools > Setup check shows what the program needs: ffmpeg, which reads the device and writes the file, installed from there into the folder every SiggySoft program shares; the capture folder, with a short write test; the devices found; the encoder; and whether .NET and Windows get their fixes.
- Tape photos go beside the recordings in the capture folder, `tape name - tape photo 1.jpg`, with their cut-outs, `tape name - tape photo 1 (cut out).png` (Chapter 2). The cut-out model is in `%LOCALAPPDATA%\SiggySoft\Models\BiRefNet lite`, shared with SiggySoft DV Capture; Tools > Setup check downloads it.
- Settings are kept in `%APPDATA%\SiggySoft\Video Capture`, the log in `%LOCALAPPDATA%\SiggySoft\Video Capture\logs`.
- Feedback (Chapter 7): this PC's key in `%APPDATA%\SiggySoft\Feedback`, reports waiting to be sent in `%LOCALAPPDATA%\SiggySoft\Feedback`, shared by every SiggySoft program.