

AnnotateIX

User Manual — version 1.2.0

AnnotateIX turns video into training data for computer vision. You draw boxes, polygons or keypoints on the objects you care about, mark them again as they move, and AnnotateIX works out every frame in between. When you are done it writes a ready-to-train dataset — the image files and the label files together.

Everything runs on your own machine. No footage is uploaded, no account is needed, and the app works with no internet connection.

Contents

1. Installing AnnotateIX
2. First run
3. Creating a project
4. Adding footage
5. Defining labels
6. Recording extra detail with attributes
7. Annotating a video
8. Working across time: keyframes and interpolation
9. Working faster
10. Bringing in labels you already have
11. Exporting a dataset
12. Free and Pro
13. Troubleshooting
14. Keyboard reference

1. Installing AnnotateIX

What you need

Operating system	Windows 10 or Windows 11, 64-bit
Runtime	None. AnnotateIX is self-contained — .NET is not required.
Other	The WebView2 runtime, which ships with Windows 11 and is installed on most Windows 10 machines. FFmpeg is bundled.

Disk	About 400 MB for the program. Projects need room for your footage on top of that.
-------------	---

Steps

1. Double-click `AnnotateIX-1.2.0-x64.msi`.
2. Read the licence agreement and privacy policy shown on the first page, and tick **I accept** to continue.
3. Choose whether you want a desktop shortcut. A Start Menu entry is always created.
4. Click **Install**. Windows will ask for administrator permission, because AnnotateIX installs for all users into Program Files.

Verifying the download. The installer is digitally signed by *SquidSpark Inc.* Windows shows the publisher name in the User Account Control prompt. If it says "Unknown publisher", do not continue — the file is not the one we published.

2. First run

The first time you start AnnotateIX it asks you to accept the End User Licence Agreement and the Privacy Policy. You only see this once, unless the agreements change materially.

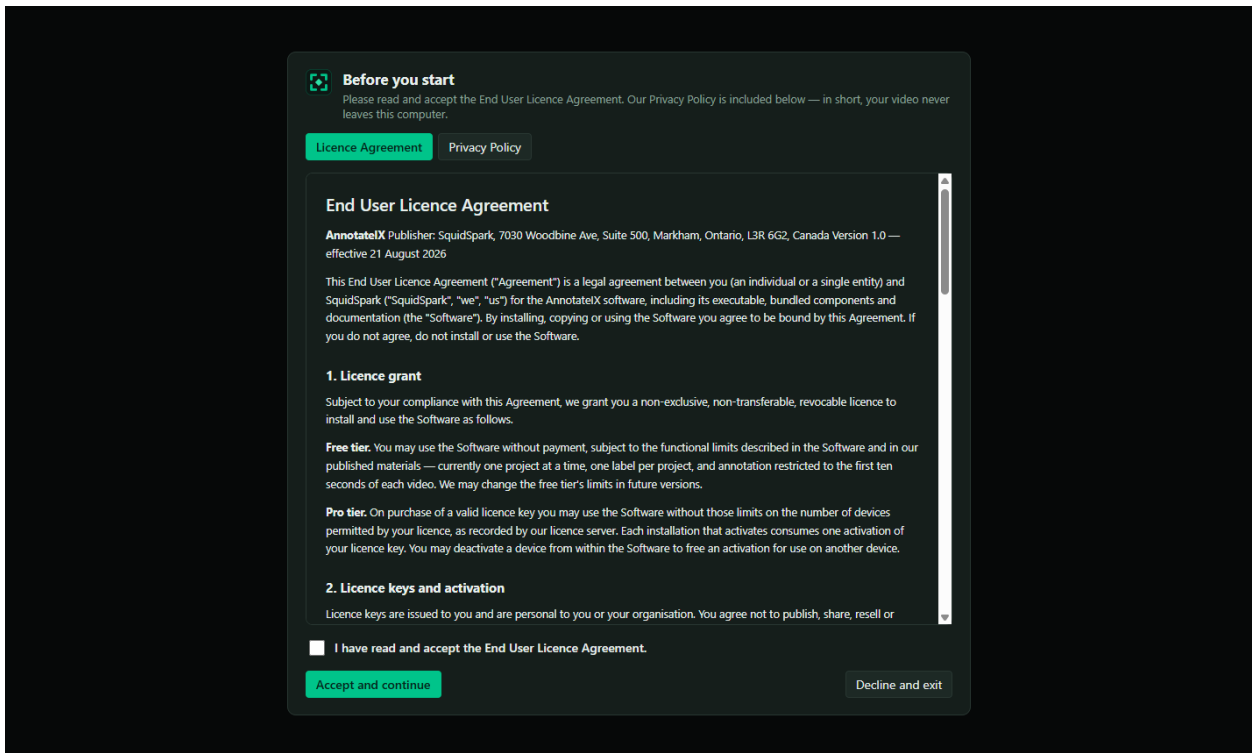


Figure 1 — The agreements are shown on first run. Both documents are also installed beside the program and available at any time from the Licence page.

After accepting, you arrive at the start screen. This lists the projects you have opened before, so you can pick up where you left off.

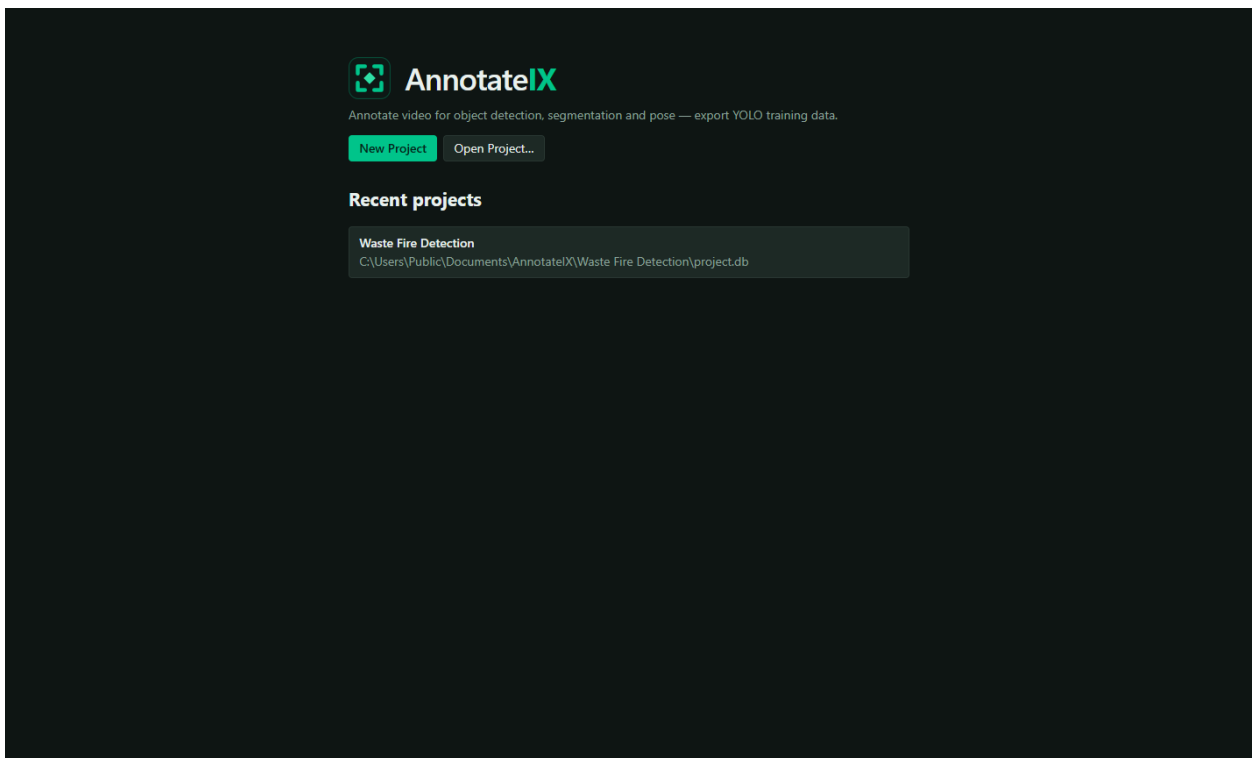


Figure 2 — The start screen. Projects are ordinary folders, so you can move, copy or back them up like any other folder.

3. Creating a project

A project holds your footage, your labels and every annotation you make. It is a normal folder on disk containing a small database and a `media` folder — nothing hidden, nothing proprietary.

1. On the start screen, click **New project....**
2. Choose where to put it and give it a name. AnnotateIX creates a folder of that name.
3. The project opens straight away.

To reopen a project later, either pick it from the start screen or click **Open project...** and select the `project.db` file inside its folder.

Moving a project. Because everything lives in the one folder, you can move it to another drive, put it on a network share, or zip it and send it to a colleague. Open the `project.db` inside and it works exactly as before.

4. Adding footage

AnnotateIX works with video files and with folders of still images. Both appear in the **Footage** list and behave the same way once imported.

Adding a video

1. Click **Add video....**

2. Choose an MP4, MOV, MKV, AVI or WebM file.
3. Wait while AnnotateIX reads it and copies it into the project.

Some videos cannot be played directly, or have a variable frame rate that would make frame numbers unreliable. AnnotateIX detects this and builds a *proxy* — a converted copy with a constant frame rate that it annotates instead. You do not have to do anything; a **proxy** badge simply appears next to the video.

Adding a folder of images

If your frames are already extracted to disk, click **Add image folder...** and choose the folder. AnnotateIX orders the images the way you would read them, so `frame2` comes before `frame10`, and treats them as one sequence you can scrub through like a video.

All images must be the same size. Annotations are stored in pixel coordinates, so a folder of mixed sizes would place shapes wrongly on some frames. AnnotateIX refuses such a folder and tells you which image differs, rather than silently resizing.

When you export, AnnotateIX gives you back your *original* image files, byte for byte — not re-compressed copies.

5. Defining labels

A label is the class name for a kind of object: *car*, *fire*, *person*. Every shape you draw belongs to exactly one label.

Create at least one label before you annotate. The drawing tools stay switched off until a label exists, because a shape with no label has nowhere to go. If you open the editor with no labels defined, a bar across the top says so and the Box, Polygon and Points buttons are greyed out.

Adding a label

1. In the **Labels** panel on the project page, type a name in the box.
2. Pick a colour using the colour swatch. This is the colour its shapes are drawn in.
3. Click **Add**.

Label order sets the class number

Each label shows a number to its left. That is the class id written into your exported dataset — 0, 1, 2 and so on. Use the arrow buttons to reorder labels if you need a particular numbering.

Class numbers do not move. They are assigned across every label in the project, not only the ones that happen to appear in a given export. If a label goes unused, the numbering of the others is unaffected, so a model trained on an earlier export still means what it says.

Renaming, recolouring and deleting

Edit the name or colour in place and the change is saved immediately. A label can only be deleted once nothing uses it; AnnotateIX will tell you if annotations still refer to it.

6. Recording extra detail with attributes

Sometimes a class name is not enough — you need to record that a car was *occluded*, or that its colour was *red*. Attributes let you do that.

Defining an attribute

1. In the **Attributes** panel on the project page, type a name.
2. Choose what kind of value it holds:
 - **Yes / no** — a tick box, for things like *occluded*.
 - **One of a list** — a fixed set of choices you type in, comma separated.
 - **Text** — free text.
 - **Number** — a numeric value.
3. Click **Add**.

By default an attribute is offered on every label. Use the second dropdown to restrict it to one label — for example, only *person* objects get a *wearing helmet* attribute.

Filling them in

Select an object in the editor and its attributes appear in the panel on the right, below the object's other actions. Values are recorded on the object as a whole, not per frame.

Attributes travel in COCO exports, with their proper types — a tick box becomes a JSON boolean, a number becomes a JSON number. The YOLO label format has no way to carry them, so choose COCO if you need attributes downstream.

7. Annotating a video

Click **Annotate** next to any item in the Footage list to open the editor.

The editor at a glance

Left panel	Tools, your labels, undo and redo, and the zoom control.
Centre	The video with your shapes drawn over it.
Right panel	Every object in this video, and actions for the selected one.

Bottom

The timeline, one lane per object, and the playback controls.

Drawing your first shape

1. Click a label in the **Labels** list to choose what you are about to draw. The first label is selected for you automatically.
2. Pick a tool:
 - **Box** — drag a rectangle around the object.
 - **Polygon** — click each corner in turn. Click the first point again, or press `Enter`, to close the shape.
 - **Points** — click once for each keypoint in order. The tooltip tells you which point it is expecting next.
3. The shape becomes an object and appears in the panel on the right.

The Points tool needs a keypoint schema. Before you can place points, the label has to say what its points are called. Click the ✱ button next to the label on the project page and enter one keypoint name per line, plus any skeleton connections.

Adjusting a shape

- With the **Select** tool, drag a shape to move it.
- Drag any of the eight handles on a box to resize it.
- Drag an individual polygon vertex or keypoint to move just that point.
- Double-click a polygon edge to insert a new vertex; right-click a vertex to remove one.
- Right-click a keypoint to switch it between *visible* and *occluded*.

Zoom and pan

Scroll the mouse wheel to zoom, hold the middle mouse button to pan, and click **Fit** to scale the frame back to the window. Zooming never affects the accuracy of your shapes — they are stored in the video's own pixel coordinates.

8. Working across time: keyframes and interpolation

This is the idea the whole product is built around, and the reason annotating video in AnnotateIX is far quicker than labelling frames one by one.

How it works

1. Draw a shape on the frame where the object first appears. That frame becomes a **keyframe**.
2. Move forward to a later frame — anywhere the object has visibly moved.
3. Drag the shape onto the object's new position. That frame becomes a second keyframe.

Every frame between the two is now filled in automatically, moving smoothly from one to the other. A 300-frame sequence often needs only four or five keyframes.

The object panel tells you what you are looking at on the current frame:

keyframe	A frame you positioned yourself.
interpolated	Worked out automatically between two keyframes. Drawn dashed.
held	After the last keyframe, the shape stays put until you say otherwise.

When the object leaves

An object holds its last position to the end of the video, which would put labels on frames where it is not there. Two ways to deal with that:

- **End object at this frame** — the object is gone for good from here on.
- **Hide from here** — the object is out of shot for a while and will come back. Move to where it reappears and click **Bring back from here**.

Use "Hide from here" rather than making a second object. A car that disappears behind a lorry and comes out the other side is still the same car. Keeping it as one object preserves its identity, which is exactly what a tracking model needs to learn.

The timeline

Each object gets a lane at the bottom of the window. Diamonds mark keyframes — click one to jump to it, right-click to delete it. The bar shows which frames the object exists on, with gaps punched out where it is hidden.

9. Working faster

Undo and redo

`Ctrl+Z` undoes, `Ctrl+Shift+Z` redoes, and there are buttons in the toolbar that name what they would reverse. The last hundred edits are kept, including deleting an object — which is otherwise the one mistake that costs real work. Reshaping a polygon counts as a single step, so an outline never comes back half-changed.

Working on several objects at once

- Hold `Shift` and click to add objects to the selection, on the canvas or in the object list.
- `Ctrl+A` selects everything on the current frame.

- Drag any selected shape and the whole group moves together.
- With more than one selected, a bar appears offering **Delete all**, **Duplicate**, and a dropdown to change every one of them to another label.

Copying shapes

`Ctrl+C` copies the selected shapes as they appear on this frame, and `Ctrl+V` pastes them onto whatever frame you are on now as *new* objects. `Ctrl+D` does both at once.

To add a keyframe to an *existing* object rather than create a new one, press `K`. That pins the shape where it currently sits.

10. Bringing in labels you already have

If you already have YOLO label files — from an earlier export, or from running a model over your frames — you can read them back in and correct them by hand.

1. On the project page, click **Import labels...** next to the video the labels belong to.
2. Click **Browse...** and choose the folder containing the `.txt` files. Subfolders are searched too, so you can point at an export's root and pick up both `train` and `val`.
3. Say whether the files are **Detect**, **Segment** or **Pose** labels.
4. Map each class number in the files onto one of your labels. If a `data.yaml` sits alongside, the class names are read from it and matched up for you.
5. Click **Import**.

File names must end in a frame number, such as `clip_001_000123.txt` — that is how AnnotateIX knows which frame each file belongs to. This is the format its own exports use. Files without a number are skipped and reported.

Each detection comes in as its own single-frame object. AnnotateIX does not guess that two boxes on consecutive frames are the same car, because guessing wrong would invent an identity that was never in your data. Import sparse frames, or use a frame stride when exporting the dataset you intend to re-import.

11. Exporting a dataset

Click **Export dataset...** at the top of the project page.

Check before you build

Click **Check dataset** first. It counts what you would get — images per split, objects per class, the typical size of each class's objects — without extracting a single frame, so it comes back immediately. It also warns about the problems that otherwise only show up after hours of training:

- a class with too few examples to learn from;

- a class that never appears in validation, so its accuracy is never measured;
- objects so small they may vanish when the model resizes its input;
- a badly lopsided balance between classes.

Choosing the settings

Format	YOLO for Ultralytics, COCO for Detectron2, MMDetection and the Hugging Face stack.
Task	YOLO only. <i>Detect</i> makes every shape a box; <i>Segment</i> writes polygon outlines; <i>Pose</i> writes keypoints. COCO carries all three at once.
Validation / test split	The share held back for measuring accuracy. 20% validation is a common starting point.
Frame stride	Export every Nth frame instead of all of them.
Split by	Leave on Contiguous chunks . See the note below.
Background frames	A share of extra frames containing no objects, which teaches the model what <i>not</i> to detect.
Skip near-duplicates	Drops frames that are effectively the same picture as one already kept.
Split seed	Change it to reshuffle. The same seed always reproduces the same split.

Why "contiguous chunks" matters. Consecutive frames of video are almost identical. If they are split one by one, a near-copy of nearly every validation frame ends up in the training set, and the accuracy your training run reports comes back higher than the model deserves. AnnotateIX deals runs of about a second to each split instead, so validation frames are genuinely unseen. Only choose *Individual frames* if you need to reproduce an old export.

Near-duplicate skipping is safe for moving objects. A frame is only dropped when *both* the picture and your annotations are unchanged. If the thing you labelled moved, the frame is kept — those are exactly the examples worth having.

What you get

Everything is written into an `exports` folder inside your project:

```
my-dataset/  
  images/train/...  images/val/...  
  labels/train/...  labels/val/...  
  data.yaml
```

The folder is self-contained. Zip it and send it anywhere — the original video is not needed. For COCO you get `annotations/instances_train.json` instead of the `labels` folder.

Training on it

```
yolo detect train data=exports/my-dataset/data.yaml model=yolo11n.pt epochs=100
```

Use `yolo segment train` or `yolo pose train` for the other tasks.

12. Free and Pro

AnnotateIX is free to use at small scale, with every feature working — including export — so you can judge it honestly before paying.

	Free	Pro
Projects kept in the app	1 at a time	Unlimited
Labels per project	1	Unlimited
Annotatable video	First 10 seconds of each	Full length
Videos per project	Unlimited	Unlimited
All shape types and export formats	Yes	Yes

Longer videos still import and play in full on the free tier — only annotation stops at the ten-second mark, and the timeline shows you exactly where.

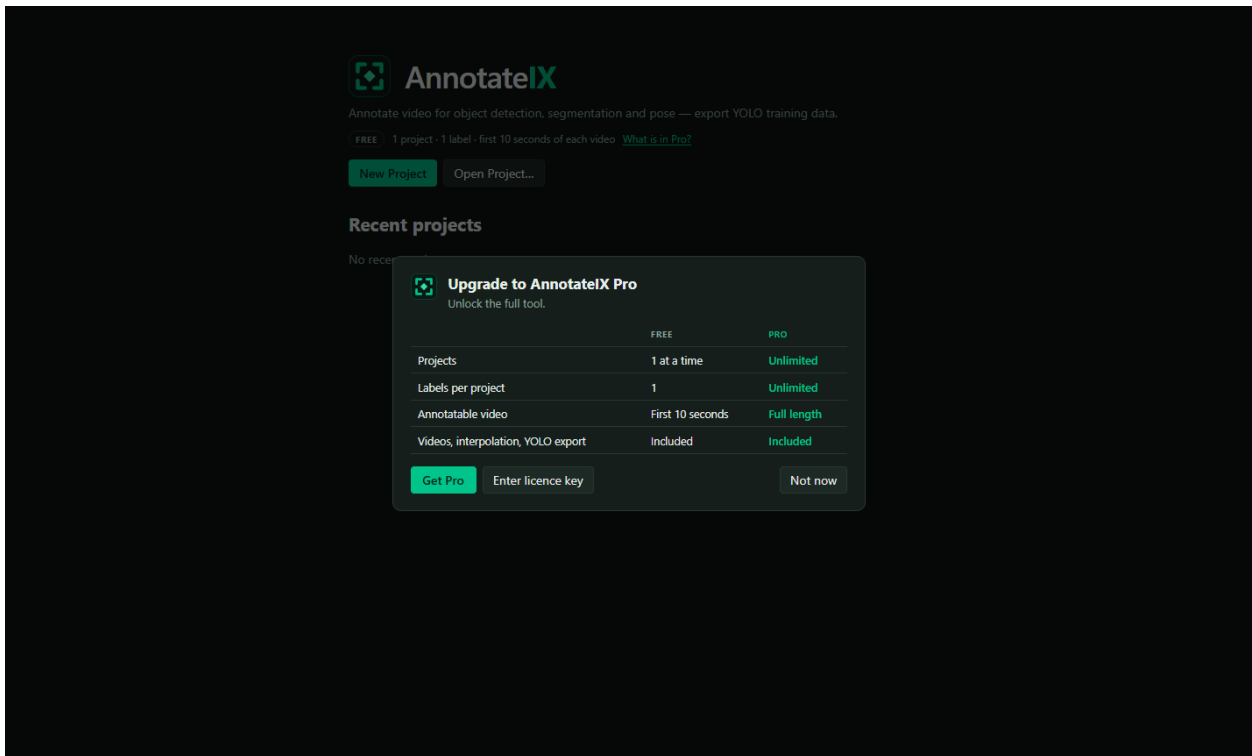


Figure 3 — When you reach a limit, AnnotateIX explains which one and offers to upgrade.

Activating a licence

1. Open the **Licence** page from the start screen.
2. Paste your licence key and click **Activate**.

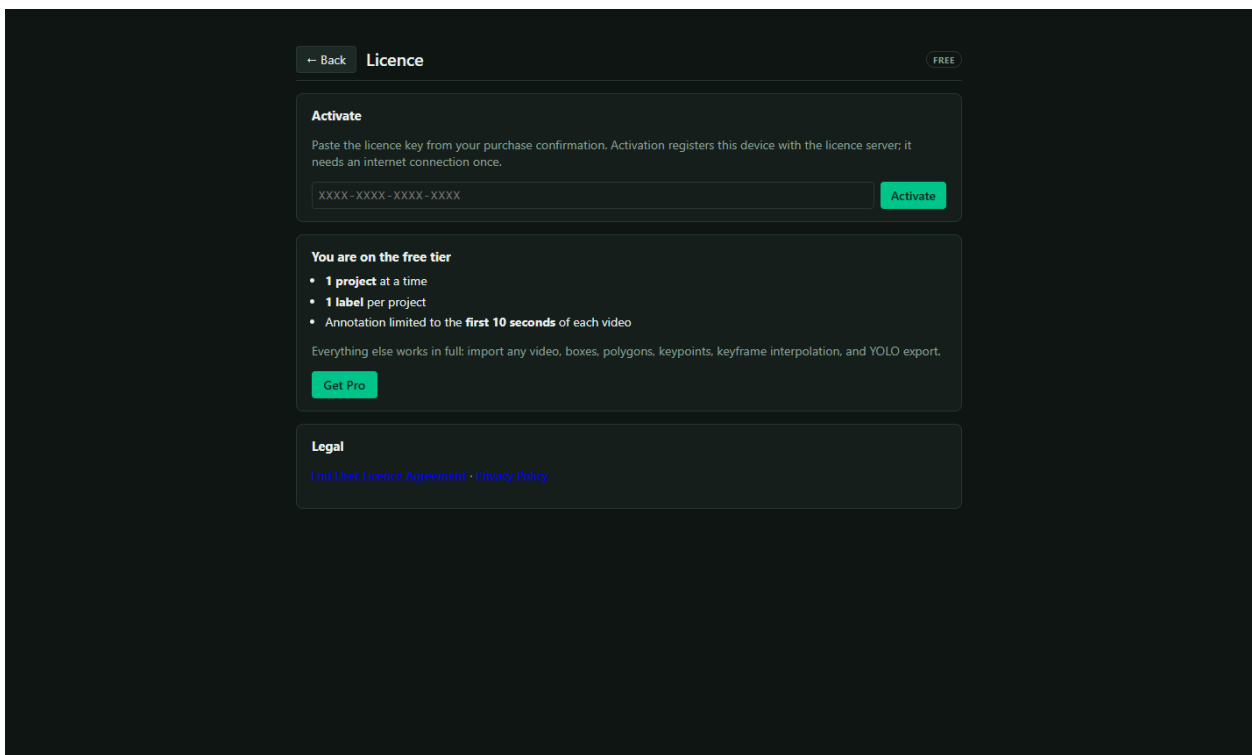


Figure 4 — The Licence page shows your current tier and lets you activate or release a key.

One activation is used per device. To move your licence to another machine, click **Deactivate** here first. Once activated, AnnotateIX works offline for 14 days between licence checks, which is fine for field and air-gapped machines.

Nothing you have already made is taken away if a licence lapses — the limits simply return.

13. Troubleshooting

I click on the video and nothing is drawn

You almost certainly have no labels defined. Every shape must belong to a label, so the drawing tools stay switched off until one exists. A bar across the top of the editor says so, and the tool buttons are greyed out. Go back to the project page and add a label.

The Points tool is greyed out

The selected label has no keypoint schema. Click the ✱ button beside that label on the project page and list its keypoint names, one per line.

The video does not play, or the picture is blank

Close the project and reopen it. If it persists, the media file may have been moved or deleted from inside the project's `media` folder.

Import said "no frame number in the filename"

AnnotateIX works out which frame a label file belongs to from digits at the end of its name, after an underscore or hyphen — `anything_000123.txt`. Rename the files to match and import again.

My exported dataset has fewer images than I expected

Check the frame stride, and whether near-duplicate skipping is switched on. Run **Check dataset** to see exactly what would be written before committing to it.

Where my data lives

Projects	Wherever you created them. Each is a self-contained folder.
Settings and recent projects	<code>%AppData%\AnnotateIX</code>
Exports	The <code>exports</code> folder inside each project

14. Keyboard reference

Key	Does
Space	Play / pause
← →	Step one frame
Shift+← / →	Step ten frames
, .	Jump to the previous / next keyframe of the selected object
K	Pin the current shape as a keyframe
Delete	Delete this frame's keyframe on every selected object
S B P V	Select, Box, Polygon, Points tool
1–9	Choose the nth label
Ctrl+Z	Undo
Ctrl+Shift+Z	Redo
Ctrl+A	Select everything on this frame
Ctrl+C / V / D	Copy / paste / duplicate
Esc	Cancel what you are drawing, or clear the selection
Enter	Finish a polygon

AnnotateIX is a product of SquidSpark Inc. This manual describes version 1.2.0.