Stop motion in Pinnacle Studio 19.5

The **Stop Motion** function of the **Studio Importer** lets you create animated films by stitching together frames grabbed from a live source, such as a video camera, webcam or DSLR. The result of your **Stop Motion** import will be a collection of captured images, and a project file created from the images.

To prepare for **Stop Motion** import, make sure the camera is switched on and connected to your computer, then select it by name under the **Stop Motion** heading in the **Import from** panel of the **Studio Importer**. Before starting to capture, make sure that your destination folder, options and file name are set up in the other panels the way you want them.

If your source equipment is functioning correctly, you should have a live preview in the central area of the **Importer** window.

When you are ready to capture an image, you can click the **Capture Frame** button. A thumbnail of the grabbed frame is added to the Image Tray at the bottom of the window. Since this is a stop motion sequence, after each image is captured you will generally make small changes to the scene you are shooting in order to create the illusion of motion from frame to frame.

To make your task of gauging the movement easier, you can use alignment tools (line, grid, or circles). You can also use **Onion Skin Mode**, a mode that uses a ghosting effect whereby successive frames are shown simultaneously in translucent layers so that the differences can be clearly seen.

The number of images shot so far and the duration of the video (based on the number of images, rounded off) are displayed to the right below the control bar.

You can also import images that you have already captured for stop motion by clicking the **Import File** button below the control bar.

Project Settings

You can choose from the following settings for your stop motion project:

- **Aspect Ratio**: Set to **Standard** (4:3) or **Widescreen** (16:9)
- **Resolution:** Set to **NTSC Standard** or **PAL Standard**
- **Frame Rate**: Higher frame rates result in better quality, but require more image captures.
- **Image Duration**: Set the duration for each image you capture according to frames. The higher the number, the less images you need to capture, but the results might be less smooth.

The Stop Motion control bar

This bar provides transport and other functions for **Stop Motion** import. From left to right:

- **Video** and **Frames** indicators: These let you switch between previewing the live video feed and previewing the captured frames in the Image Tray. You can review – and if necessary replace – particular frames without having to undo other work.
- **Auto Capture**: The **Auto Capture** button toggles the feature on (orange icon) or off (white icon). Click the arrow for **Auto Capture** to specify the settings (**Capture Interval** and **Duration**).
- **Navigation buttons**: These buttons are for previewing your animation. They let you play, go to start, go back one frame, or go forward one frame. A **Loop Play** button lets you cycle the animation continuously.

- **DSLR Capture**: These optional controls can be used when you have a compatible DSLR connected to your computer (at this time most Canon DSLRs are supported). The **DSLR Capture** icon is orange when your DSLR camera connected. The arrow button lets you access the **DSLR Settings** dialog box. Here you can control the DSLR. This ensures consistent results across frames. The settings vary somewhat according to your camera and camera mode. It is recommended that you set your camera to Manual mode.
- **Auto Focus** (**AF**), **Manual Focus** (**MF**) and **Show Focus**: These optional controls can be used to adjust the focus for your camera in Pinnacle Studioï when you have a compatible DSLR camera connected to your computer (at this time most Canon DSLRs are supported). Your camera lens needs to be set to AF to use these onscreen focus controls.
- **Onion Skin Mode**: The **Onion Skin Mode** button toggles the feature on (orange icon) or off (white icon). Click the arrow for **Onion Skin Mode** to specify the settings. The first slider (**Original**-**Onion skin**) shows the difference in transparency between the original and successive frames. The **Frames** slider controls the number of frames, in addition to the current one, that will display onscreen. Experiment to find the settings that work best for your movie.



Using the Image Tray with Stop Motion

When you click **Capture Frame** (button displays below the Stop Motion control bar), the Image Tray opens and displays the images that you capture. You can view the start time for each image (time displays above the thumbnail). You can click a thumbnail to choose the frame. You can delete the frame by clicking the red trash icon above the thumbnail. You can also insert a frame to the right of the selected thumbnail by clicking **Capture Frame**. Note: You must be in **Video** mode to capture frames (click **Video** on the left side of the control bar).
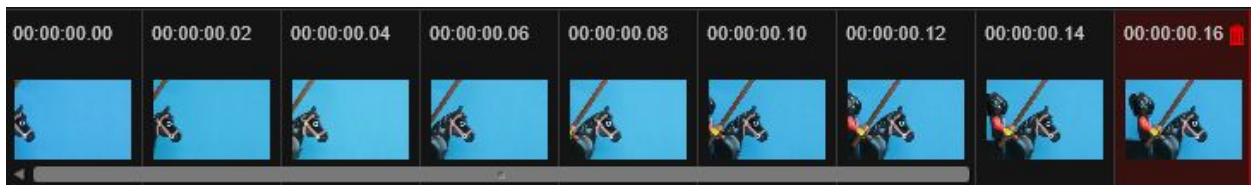
Alignment tools

Gauging movement in stop motion projects can be tricky. In addition to the **Onion Skin Mode** described above, you can use the following tools:

- **Line**: Drag across the screen to set a line with nodes that mark intervals. Look for the pink node to find the suggested alignment for your next capture.
- **Grid**: Displays a grid overlay onscreen
- **Circles**: Displays a circle pattern onscreen
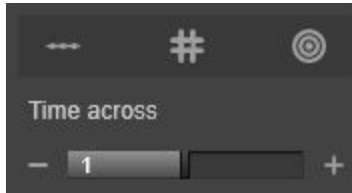
The interval for the nodes, grid lines, or circles is determined by the **Time across** setting. The value (seconds) determines how many suggested captures to make, as indicated by the space between intervals. You can use the alignment tools to create smooth even motion, or to help you gauge how much you need to move the subject to speed up or slow down the movement.

Exporting the animation

When you have added all the frames you want to the animation, click one of the following options:

- **Export to Library**: Converts the frames to an .axps file and imports both the .axps file and the collection of images to the Library. Similar to an .axp file, an .axps file is a project file that lets you easily reopen the project in the **Stop Motion** mode of the Importer so that you can continue to work on the project at another time. It references the project files.
- **Edit in Timeline**: Imports the frames to the Library and add the project to the Timeline (Edit mode) for further editing.

How to create a stop motion project in Pinnacle Studio

The steps below guide you through a basic workflow for a stop motion project. Before you start, it's best to have all your materials ready and have your shooting area set up with the lighting you need. If you are using a DSLR that is supported in Pinnacle Studio, set your camera to **Manual** mode. A tripod is recommended.

To create a stop motion project

1. If using an external camera to capture your stop motion project, ensure that the camera is plugged into your computer and is on, ready to capture photos. Set the camera to manual mode.
2. In Pinnacle Studio 19.5, click the **Import** button (to the right of the **Author** button). The Studio Importer window opens.
3. In the **Import from** list, click **Stop Motion**.
   Supported cameras that are connected to the computer and switched on are listed below **Stop Motion**. Click a camera name and do one of the following:
   - On your camera, manually choose the best settings for your stop motion scene and adjust the focus (can set the lens to MF to focus manually).
   - If you have a compatible camera (at this time most Canon DSLRs are supported), in the control bar below the preview area, click the arrow beside the **Camera** button. In the **DSLR Settings** dialog box, choose your camera from the drop-list, and choose the settings for your camera, using the Preview screen as a guide. Make any adjustments you want and click **OK**. You can then focus the camera manually or set the lens to AF mode, and in Pinnacle Studio, enable **Show Focus** to display the onscreen controls. Click **Auto Focus** or **Manual Focus**. For **Auto Focus**, drag the rectangle to the area of focus. The camera will automatically adjust the focus. For **Manual Focus**, click the plus or minus symbol on the preview screen until the subject is in focus.
4. Choose your **Project Settings**, and if you want to change the default destination for your project files, in the **Import to** area, click the arrow buttons and navigate the location you want.
5. When you know what kind of motion you want to make, you can choose from different types of alignment tools and set the **Time across** setting (value is time marked in seconds).
6. When you have the subject set up, click **Capture Frame**.
7. Move your subject the way you want, and continue capturing an image for each movement. If you are making a series of simple movements, you can set up **Auto Capture**.
8. When you are ready to review the frames, on the control bar, click the **Play** button to review the movie. To reactivate the **Capture Frame** button if you want to add more frames, click **Video** in the control bar.
9. When you are finished, click **Export to Library** or **Edit in Timeline** button.
   If you want to save the project without exporting to the **Library**, click the **Save** button in the **Project name** panel (on the left side). You can click the **Open** button (beside **Save**) to access the saved project.