Stop-Motion Camera Instructions

The topics we introduce in this guide are covered by the Stopmotion Explosion book in greater depth. Where applicable, we've noted what chapters to turn to if you wish to learn more about a subject.

For those who prefer to watch instead of read, we've also included links to a number of video tutorials on the StopmotionExplosion.com website. You'll find even more links in the book.

If you do not have a CD Drive and wish to access the Software CD contents, then visit the link below (turn to page 6 for step-by-step installation instructions):

stopmotionexplosion.com/downloads

How Does This Work?

If you've never seen a stop motion video created before, the animation process might seem a bit strange. In a nutshell, here's how it works.

1 A camera is connected to your computer.

2 The camera sends a video signal to a special program called a "framegrabber".

3 Clicking a button in the framegrabber program "grabs" a picture, or "frame" from the camera.

Grab, move, grab is how I get around!

4 To create an animation, you point the camera at a small object. First, you click the frame-grab button in the framegrabber software. Next, you move the object a small amount, and pull your fingers out of the picture. Then you click the button again.

5 After clicking the frame-grab button and moving the object several times, you can click the play button, which allows you to preview the animation you've created!

6 When you've finished animating, the framegrabber program allows you to save a movie file. Using other programs, this file can be developed into a finished movie, with sounds, video effects, titles and so on.

There are many other ways to create stop motion animation. Instead of using a framegrabber program, you can use pictures from a digital camera and convert them into a video file. These techniques and more are covered in the Stopmotion Explosion book.

Windows Installation

1 Insert the Software CD into your computer. The installer should automatically start. Install the software following the on-screen instructions. Note that it is not necessary to install the Audacity program unless you plan on completing the advanced sound recording and editing tutorial in the Sound chapter (but you can do some cool stuff, so be sure to check it out!)

No CD drive? No problem. Turn to page 6!

2 Plug the camera into your computer. For the best result, you should be working in a well-lighted area.

3 Launch the Stopmotion Explosion Animator program. Adjust the focus and resolution following instructions in the Camera Image section (page 7) to achieve the best image. Clicking the Start button will grab your first frame. Clicking the Play button will play back the frames you've captured.

To learn more about SME Animator, read the Animation chapter, or follow the video tutorials on our site.

OS X Installation

1 Insert the Software CD into your computer's disk drive. Open the Finder window and click the CD Drive icon.

2 Drag the Stopmotion Explosion folder into the Applications folder.

3 Plug the camera into your computer. For the best result, you should be working in a well-lighted area.

4 Open the Stopmotion Explosion folder, and launch the FrameByFrame app. Adjust the focus and resolution following instructions in the Camera Image section (page 7) to achieve the best image.

Download Users

If you do not have a CD Drive and wish to access the Software CD contents, visit the link below. You will need to enter some information before accessing the Downloads page. Follow the on-screen instructions.

stopmotionexplosion.com/downloads

Windows

1 Download and install the camera driver (**vmuvc.zip**).

2 Download and unzip the **Stopmotion Explosion Animator** application into a folder. SME Animator can be launched from its folder by double-clicking the application icon.

3 Download the **Sound Effects Collection**. This should be placed into your Documents folder, or any place you can easily access it.

You can wait to install any remaining software or resources until you reach the relevant section in the Stopmotion Explosion book.

OS X

1 Download the **FrameByFrame** application.

2 Double-click the DMG file, and drag the app icon into your Applications folder. FrameByFrame can be launched by double-clicking the application icon.

3 Download the **Sound Effects Collection**. This should be placed into your Documents folder, or any place you can easily access it.

Improving the Camera Image

To achieve a great image, you'll need to make a few adjustments to the camera and your animating environment.

Lighting

The light from a desk lamp can provide a noticeable increase in image quality, as compared to animating with ambient, or room light. In the **Lighting** chapter of Stopmotion Explosion you will find several lighting suggestions.

FOCUSING RING
CAMERA LED LIGHT

FLEXIBLE NECK

USB PLUG
BASE

BASE LED LIGHT

Focus

Focus is another critical component of a good image. To focus the camera included with the animation kit, turn the silver ring on the front of the camera, either to the right or left as needed.
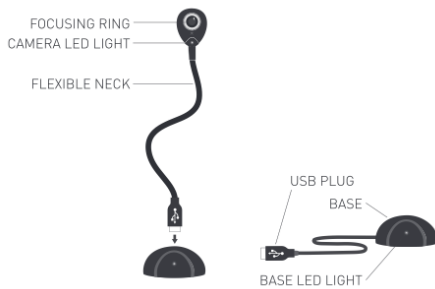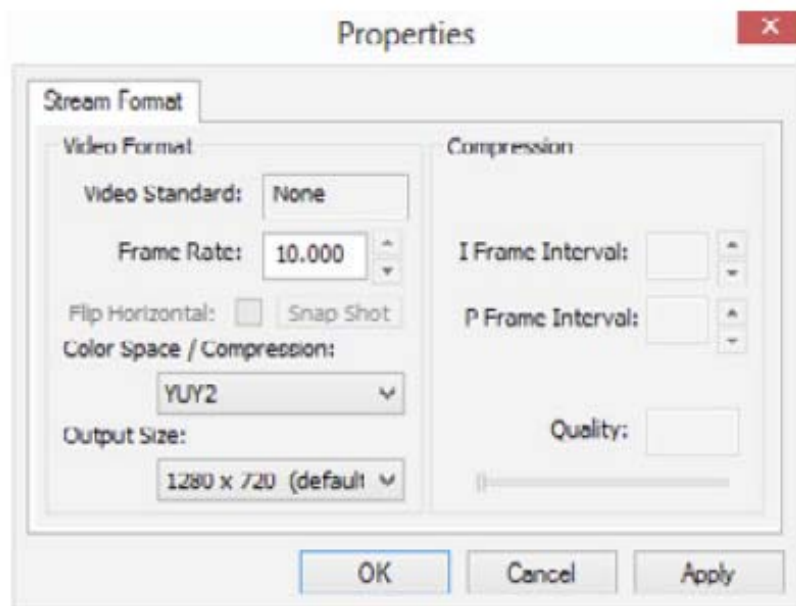
Camera Resolution

The 720p Stopmotion Explosion Camera is capable of outputting a 1280 x 720 image, however depending on the computer you're using, it may default to a much smaller image when you start the framegrabber application. You can switch to a higher resolution using the application menus.

Not every computer can handle the processing requirements of HD video. If setting the camera to an HD resolution causes a noticeable decrease in computer responsiveness, then consider animating at a lower resolution. Most computers can handle standard-definition 640 x 480 video without issue.

Windows

In Stopmotion Explosion Animator set the resolution to 640 x 480 or 1280 x 720 by clicking **Options** > **Camera Resolution...** This will open the window pictured here. Select a resolution from the **Output Size** drop-down menu.

OS X

In FrameByFrame set the resolution to High (640 x 480) or Maximum (1280 x 720) via the drop-down **Camera Resolution** menu.


Q&A

I can't see an image from the camera. What should I do?

Ensure that the camera is plugged into the computer directly, and not plugged into a USB hub or extension cable, both of which can effect the camera signal.

It's not uncommon to use the animation kit on a computer with an internal webcam. If this is the case, you'll need to select the correct camera from one of the following menus.
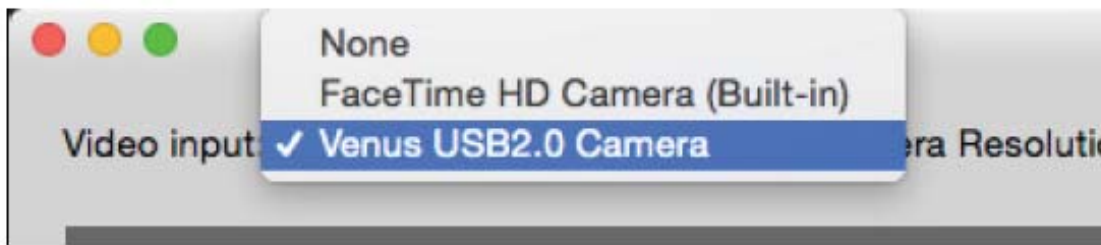
Windows

In Stopmotion Explosion Animator, click **Options > Camera Source...** and select the correct camera from the **Camera Source** window.

OS X
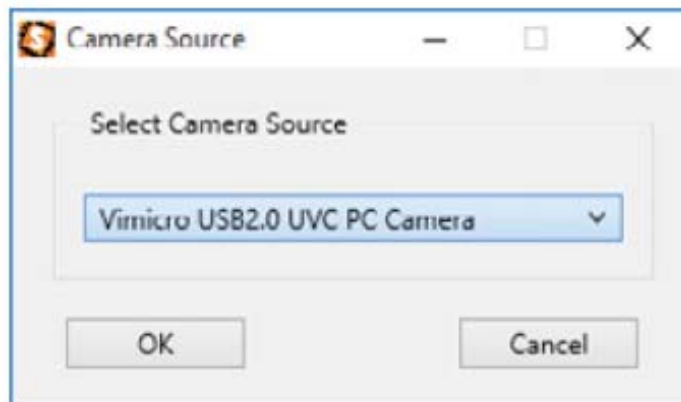
In FrameByFrame, select the camera from the **Video Input** drop-down menu.

If neither of these steps revolves the problem, then please contact us at support@stopmotionexplosion.com

During installation of the camera driver, I plug the camera in, but it isn't recognized (Windows)

Make sure that the camera is plugged into a USB port directly, and not an external USB hub or extension cable. Try a different USB port. If these steps fail, contact us at support@stopmotionexplosion.com

How do I add sound to my animation?

Since sound is not recorded while you animate, all the sound effects and voices must be added in afterwards. This is accomplished using the video files saved by your framegrabber program, and a video editing program.

In the Video Editing chapter of Stopmotion Explosion, you will find instructions for adding sound to a stop motion film using Windows Movie Maker, a free

video editor. On our site, you can watch a video tutorial for Windows Movie Maker, and iMovie, an editing program for OS X:

CHECK IT OUT!

Video Editor Tutorials

Learn how to add sounds to, and edit stop motion movies with these two programs!

stopmotionexplosion.com/wmm
stopmotionexplosion.com/imovie

Why not add sounds using the framegrabber?

It's best to add sound using a video editor because it allows you to create a finished movie. In addition to adding and recording sound, you can create titles and credits, special video effects, combine multiple animation clips, and save the results as a video file which can be shared with others and uploaded to video sites, like YouTube.

I said roll the credits, not release Rex!