What is time-lapse?

Time-lapse is a way to speed up the action in your video story to show hours of time passing in just seconds. It’s a great way to show a long process in a short space of time; the stars zoom across the sky, and the sun sets in just seconds. You can also use it as a transitional device to show your viewers that time has moved forward.

There are lots of subjects and scenes that work well for time-lapse shots. The movement of clouds, activity at a building site or even a day at the beach - any scene that displays a change over a period of time will deliver good time-lapse results.

Examples

HO CHI MINH CITY, VIETNAM

In this video time-lapse is used to show the hustle and bustle of Ho Chi Minh City. Time-lapse was captured of various locations in the city at different times of the day and edited into a montage with music.

http://vimeo.com/32958521

YOSEMITE

This video uses time-lapse to show the beautiful landscapes of Yosemite National Park at various times throughout the day & night.

https://vimeo.com/35396305

AFTERMATH

In these videos, time-lapse is used as just one visual device to help tell the story. In the examples below, time-lapse is used as a transitional device to show that time has passed or to show a long process like planting a field in a short timeframe.

http://open.abc.net.au/projects/aftermath-08vh8ac/contributions/that-s-me-getaway-05ys0hq

http://open.abc.net.au/projects/aftermath-08vh8ac/contributions/aftermath-bess-fraser-episode-1-75jd2lb

TIMESCAPES: RAPTURE

This video uses time-lapse vision to show a wide range of American landscapes and starscapes.

http://vimeo.com/16369165
TIME-LAPSE

Equipment

Tripod

When capturing time-lapse it’s really important to keep your camera still. Movement happens within the frame and camera movement will spoil the effect.

It’s a good idea to set your camera up on a tripod or mount it to something that will minimise any movement.

If you don’t have a tripod you can balance your phone on a bag of rice or tape it to something solid and stationary.

Cameras

You can use a video camera (including some mountable video cameras), a DSLR or the camera in a smart phone to create a time-lapse sequence. Before you start, think about the best vantage point to capture the change. Could your camera be up high, looking down? Or how about getting down low, and looking up?

Video cameras

If you are using a video camera, record everything you want to capture e.g. if you want to film a time-lapse sequence of sunrise to sunset, you will need to record the whole time between those two events.

Some video cameras have in-built interval modes that will record a set duration of video at periodic intervals. Check your video camera’s manual to see if your camera has this feature.

When shooting time-lapse with a video camera some things to remember are:

- Turn off the auto focus - you don’t want this changing spontaneously during your shoot.
- Set your camera to manual exposure.
- Use slow shutter speeds to blur motion for a smooth effect - faster shutter speeds give a choppier look.

DSLR Cameras

A DSLR camera is a better choice for time-lapse photography compared to a ‘point-and-shoot’ camera or others. It has higher output quality and better control over your image.

- Place your camera focus on manual.
  (TIP: make sure that you focus on your subject before you start your timer)
- Select Av. For most time-lapse shot outside with light and/or subject changing use Aperture Priority (Av.) Shoot in Manual (M) mode if you’re in a controlled, stable lighting environment.
- Choose and set your desired Aperture.
- If confident, select an appropriate Manual White Balance for the time of day you are shooting. You can choose Auto White Balance (AWB), although in changing light you may see a shift in the white balance appear as a flicker in your image.

Smart phones

There are several smart phone apps available for free or minimal cost. These apps allow you to program a smart phone to take photos at particular intervals and export a time-lapse video ready to edit.
Extra equipment

Timers

• If you have a DSLR you might want to use a remote control timer, known as an intervalometer, to set the snap intervals ("Remote shutter release") for every 1 sec, 10 sec, 1 min, 1 hr etc. This will automatically time your snaps.

• Some intervalometers are available for point and shoot cameras.

• Plug-in attachments are available to use with a smart phone as an intervalometer to control a DSLR.

Things to consider

Interval between each photo taken

The interval between each photo will determine the appearance of the video e.g. whether the video will appear smooth or blocky.

Smooth (Shorter interval)

A shorter interval between each photo gives a smoother video output. It is usually used to shoot something with a slightly faster rate of change, e.g. ice melting, clouds moving or busy city street.

Blocky (Longer interval)

Longer intervals between each photo give you a more blocky video output. It is usually used to shoot something with a slower rate of change, e.g. a seedling growing into a plant, progress of a building going up, or anything that takes a really long time.

The pause time between each photo can vary depending on how long the action takes and how long you want the final video to be.

HOW TO WORK OUT THE INTERVAL

A good way to decide how frequently you want the camera to capture images is to work backwards from the desired duration of your shot.

In the finished video, there are 25 frames per shot. So, for example, to shoot a time-lapse sequence of a sunset which will end up being four seconds long, you will need four times 25 frames, i.e. 100 frames.

So if you set the camera to take one frame per minute, you’d need to record 100 minutes of real time to get 100 frames (or four seconds) of vision.

Comfort

If you are going to try time-lapse you may be in one spot for quite a while so you should consider bringing things like:

• A chair and blanket if it’s cold

• Food and drink

• Sunscreen and a hat

• Insect repellent

• A lens cloth in case the lens fogs up

• Safety reflectors if you are in a location where vehicles are passing.

• A book to read or music to keep you occupied.
Editing

Editing from a still camera

- Check if your editing program has the option to change the duration of each still frame prior to import. If you have the option, choose one frame as your duration.
- Import your still images into the editing program.
- Place photos on the timeline in order of the date and time taken.
- Amend the still photo durations in the timeline as desired.
- Render photos and audio in sections (this cuts down on the rendering time at the end).

TIP: Finding the right audio will really help your video come together. There are lots of websites which provide free audio to use Creative Commons licenses - contact your local ABC Open producer to find out more.

Editing from video

If you already have some real-time footage from your camcorder that you want to use, you can speed it up to give the appearance of time-lapse. The images aren’t quite as sharp or impressive, but the effect is the same.

Import the existing vision into the editing software you’re using and adjust the speed to fit the duration you would like sequence to be. E.g. 500% is five times the speed of the original clip.

For example:

In iMovie HD 6, select the clip in the timeline and click on the Editing button. Open the Video FX pane and choose the Fast/Slow/Reverse effect. Drag the Speed slider toward Faster, and then click on Apply.

Even at the fastest setting, your scene still may not pass quickly enough to suit your needs. To work around this problem, export the speeded-up clip as a full-quality QuickTime movie, and then re-import the file into iMovie. You can now apply a double dose of the Fast/Slow/Reverse effect.

Related links

There are lots of great tutorials online to help you shoot and edit professional looking time-lapse. Here are just a few:

HOW TO MAKE TIME-LAPSE VIDEO - ULTIMATE GUIDE
http://www.hongkiat.com/blog/how-to-make-time-lapse-video-ultimate-guide/#ixzz1CfyKcXYX

CREATE A TIME-LAPSE MOVIE
http://www.macworld.com/article/1053805/decembercreate.html

TIME-LAPSE WITH DSLRS – PHILIP BLOOM
http://philipbloom.net/2010/12/16/timelapse-with-dslrs/

HOW TO TURN YOUR DSLR STILLS INTO TIME-LAPSE VIDEO – PHILIP BLOOM
http://philipbloom.net/2009/10/18/tutorial-on-how-to-turn-your-dslrs-stills-timelapse-into-video/