

User Guide for Shiva_bbene Tandem Skydiving Editing Procedure 1.0

Serena Di Santo

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Hello

I've always looked for a program for doing the editing of Tandem videos and I could never find something easy, fast, free and that didn't lower the quality of the raw files. So I decided to write one and share it with you guys. It is distributed under beer-ware license and it makes use of some excellent programs written under Gnu Public License, so that everything you are going to download and use is free and perfectly legal.

So thank you for trying my Tandem Skydiving Editing Procedure 1.0.

Here is all that you have to know to install and use it.

Installation

First of all: it works fine on MacOS (I've tested it on Snow Leopard and Yosemite) and on Linux (I've tested on OpenSUSE). As it is, it doesn't work on Windows (any distribution) unless you try to use cygwin or win-bash, which is probably very easy but I cannot help you.

If you satisfy those requirements, in addition you will need:

- ffmpeg & mplayer (<https://www.ffmpeg.org/>)
- dvdauthor (<http://dvdauthor.sourceforge.net/>)
- cdrtools (<http://cdrtools.sourceforge.net/private/cdrecord.html>)

What i suggest you is to use brew on MacOS or apt-get (or equivalents) on Linux.

How to install prerequisites on a MacOS

1. Go to the App Store and download Xcode (it is a free development tool)

2. Open a Terminal (if you don't know how to do this press "cmd + space" on your keyboard and type "terminal")
3. Install Homebrew (<http://brew.sh>): just copy and paste the following command line (is all on one line) and press Enter:

```
/usr/bin/ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"
```

4. Follow the instructions
5. type:

```
brew install ffmpeg  
brew install dvdauthor  
brew install cdrtools
```

How to install prerequisites on a Linux based distribution

type:

```
apt-get install ffmpeg  
apt-get install mplayer  
apt-get install dvdauthor  
apt-get install cdrtools
```

Good job! Now we check that everything is ready

type:

```
ffmpeg  
mplayer  
dvdauthor  
cdrtools
```

If everything worked fine you will get a message with the version and some informations about your new tools. If something didn't work you may want to try again more carefully or you can just type on Google those names and download the programs, or have a look at the links i put above.

How to use Editing Procedure

Download the files attached herein and possibly save those in a folder that you will be able to find. We will call this folder "the main folder". Let's say it is a folder called TandemProject in your home folder.

In the terminal go to this folder¹, for instance: `cd ~/TandemProject`
We are ready to go!
just type:
`./editvideo.sh`
and follow the instruction given!

How does the Program work

Short version - just a few things to know

- If at any time you want to exit from the procedure you will have to type “Ctrl+c” (for Mac users, Ctrl is not not Cmd!)
- you have to download the raw files from your camera to a folder in Desktop with the name of the Tandem student
- the audio files must be in “the main folder”
- when you trim the files you have to give a starting AND an ending point. It’s mandatory that you select the end of the trim, even if it is one fraction of second before the clip ends. Check the manual of mplayer to learn how to navigate through a clip.

Long version - for dummies

You have to download the raw files from your camera to a folder in Desktop with the name of the Tandem student. We will call this “the student folder”. Then you launch the program (by typing `./editvideo` while being in your “main folder”) and follow the instruction. This “bash” thing is a text-based interface that is a (very powerful) alternative to the graphic interface you are probably used to. That means that input and output are based on text rather than on icons and visual indicators.

[Only the first time and only if you are unlucky] the program will ask the path to your Desktop folder. For example on Mac it would be `/Users/[your_user_name]/Desktop`. Just type the string and press Enter. {Guess what? you have to replace “[your_user_name]” with your user name}.

The program will ask for the name of the “student folder”.

[Only the first time and only if you are unlucky] it will ask what camera do you use and eventually to type the prefix and the format of your raw files. For example if you use a GOPRO, the files are called `GOPR0001.MP4`, so that your prefix would be `GOPR` and the format would be `MP4`.

It will ask you to check that it has detected the files correctly (just type y and then Enter for yes).

The audio of the output file will be a song (or two songs) that you like. The corresponding files have to be in the main folder. I suggest you to put as many

¹you can navigate in your computer using the commands `cd` (change directory), `ls` (lists the command of a directory), `pwd` (prints current working directory)

songs as you like in the main folder and name them with names that are easy to remember and to type, for example 1.mp3, 2.mp3, 100.mp3..

You can choose if you want to use one or two songs. Using one song means that the audio of the whole final file will be this song (so make sure that the video you want to make is not longer than your song). If you want to use two songs you will be asked the number of clip in which you want song2 to start. For example let's say I have 3 clips, being an interview, the skydive and the landing. I might want to use a song for the interview and a different one when the skydive starts, that is to say that I will answer 2, because I want the second song to start with the clip number 2.

Now you choose where do you want to save the finished file. You will always have a copy called "TANDEM.JUMP.MP4" in the student folder, but you can choose to save it into an usb device or burn it on a dvd (so that when you come back everything is ready). If you choose usb you will have to specify the name of the usb device (for example "NONAME"). If you choose dvd (guess what?) you will have to introduce a blank dvd. No checks here, so be kind and introduce a proper blank dvd.

You will be asked now (it is the last effort) if you want to trim your files. If you do NOT trim the files, the procedure will just concatenate the video clips as they are, one after another. If you DO want to trim the files, the program will open a movie player (namely mplayer) that will play the clips. While it is playing you will have to press "i" to set the starting and "i" again to set the ending point of a trimmed clip. You can navigate inside one clip with your keyboard.

Let's say you have a clip that lasts 20 seconds and while it plays you press "i" at second 3, at second 6, at second 12 and 18. It will extract from the clip two pieces: from second 3 to 6 and from 12 to 18. Since you are able to navigate you can put the same piece (for example the exit) many times, you go backwards and extract the same piece as many times as you like.

Try and experiment by yourself. The only rule that you have to keep in mind is that INSIDE A CLIP YOU MUST PRESS "I" AN EVEN NUMBER OF TIMES!

Check the manual of mplayer (ask google or type "man mplayer" on a free terminal) to learn how to navigate through a clip. Mostly you will use LeftArrow and RightArrow to seek backward/forward 10 seconds and Enter to go to next clip.

That's it! you can go and come back in about 10/15 minutes (or earlier if you hear the voice of your computer) and everything will be ready...

The procedure will include an (awesome) Intro and Outro file. If you want to put your own Intro/Outro, just replace the files in the main folder.

Let me know if you find any bugs.

Hope that you find it useful.

Extra feature

In the files you downloaded there is also another procedure to download photos from a video. Just in case your photo camera didn't work. Just open a terminal go to the “main folder” and type:

```
./downloadphotos.sh
```

It will download one frame per second from your video.

Enjoy Blue Skies! :)