EchoSub

I. Introduction

These days it's nothing special anymore to watch a movie on your computer. But of course, you also want matching subtitles. These can be gotten from many sources, but often they are not correctly timed, or the translation isn't accurate. Echosub can easily alter subtitles while you are watching, using the scene editor, stretch timings for versions which were made with different framerates. If you want to, you can even build a subtitle file from scratch. EchoSub uses the Subrip (SRT) format for storing subtitles, but a wide array of subtitle formats might be available in the future.

II. Version Information

V 1.2 (29.07.2003)

- *Almost complete makeover, completely skinned (let me know what you think of it)*
- *You can now drag subtitles to adjust their timing in the TimeBar, and they can snap if you want to*
- *You can now see and drag the markers for stretching and shifting in the TimeBar*
- *You can zoom the TimeBar in and out*
- *You can skip to invalid subtitles to easily correct timings*
- *You can select multiple subtitles*
- *You can delete multiple subtitles at a time*
- *Improved stretching and shifting procedures*
- *You can split and merge subtitle files*
- *The save dialog now reads 'save' instead of 'open' ;)*
- *You can stretch or shift only parts of the file, leaving other parts untouched*
- *Visual Editor and Listing use the same selections*

V 1.1 (08.06.2002)

- *Made tons of bug fixes*
- *More bad data checks*
- *EchoSub now remembers last used directories and window locations*
- *Windows can now be dragged and docked*
- *Windows don't get behind the taskbar anymore*
- *Improved Look-and-feel*
- *Got rid of the listview/sceneview separation bug. Both windows can now be open at the same time.*

V 1.0 (06.06.2002)

- *Initial version.*

III. Ideas for the future

- *more subtitle formats supported*
- *Wizards for stretching and shifting*
- *Dragging multiple subs in the TimeBar*
- *Scrolling TimeBar*
- *Marking the time on the TimeBar*

If you have any ideas or suggestions,
feel free to mail me at cube@pandora.be

Chapter 1 :

Interface Overview

When you first launch EchoSub, you will notice two windows, the main window, and the TimeBar. At first run, the main window will automatically dock at the upper-left corner of the screen, and the timebar at the lower-left corner of the screen. You can move these windows by clicking and dragging them.

1.1 The Main Window

The main window is mainly used for loading and saving, opening an AVI to work with, and launching the other principal windows. Clicking the Question Mark will show the About window, which contains the copyright information. The cross in the upper right corner closes the program when clicked.

To open a movie to work with, click *Load Video File*. When you do so, the visual editor (explained later) will automatically pop up. To load a subtitle file (subfile), click *Load* Subfile. The Subtitle Listing Window will pop up. To save your work, click *Save Subfile.* You will be asked for a location to save to.

The other 4 buttons launch the Visual Editor, the Subtitle Listing Window, the Time Stretching window and the Time Shifting window, all which are explained later. If these windows are already open, clicking the buttons will bring them to the top, or, if they already are, close them again. The checkmarks next to the buttons show wether or not that specific window is already open.
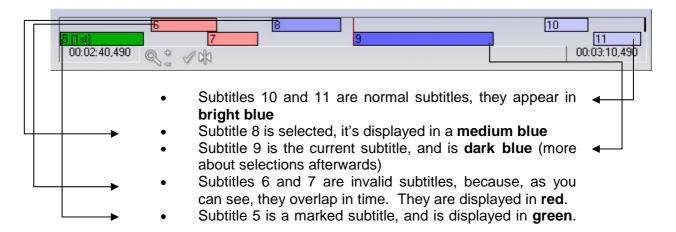
The small arrow in the lower right corner will display some general information when clicked, such as how many subtitles there are in the file, which movie is loaded, etc …

1.2 The TimeBar window

This window gives a visual representation of the subtitles over a certain amount of time. When you first launch EchoSub it's practically empty. You will notice though, while playing a movie in the visual editor, or while working in the list editor, the TimeBar always shows the segment of the movie you are working on.

1.2.1 Subtitles

Each subtitle is shown as a rectangle on the bar, alternating high and low for better viewing. The color of the rectangle has a meaning.

- Subtitles 10 and 11 are normal subtitles, they appear in **bright blue**
- Subtitle 8 is selected, it's displayed in a **medium blue**
- Subtitle 9 is the current subtitle, and is **dark blue** (more about selections afterwards)
- Subtitles 6 and 7 are invalid subtitles, because, as you can see, they overlap in time. They are displayed in **red**.
- Subtitle 5 is a marked subtitle, and is displayed in **green**.

1.2.2 Lines

Besides rectangles, another thing you'll see on the timebar are vertical lines. In the image above you can see a red line in the center. This is the current time. A green line (not in the picture) is a time marker (as opposed to a subtitle marker).
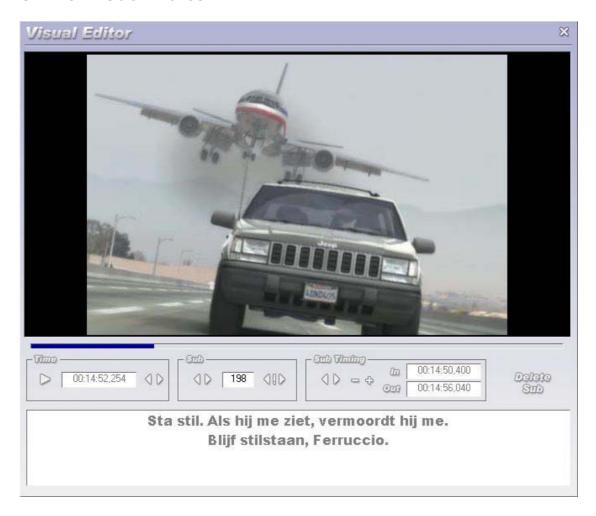
1.2.3 Zooming

In the bottom of the timebar is a magnifying glass and two buttons. Clicking the minus sign will zoom out the timebar to show more time at once. Clicking the plus sign will zoom in, allowing for more detail to be seen. Zooming is limited in both directions.

1.2.4 Drag and snap

Grab the edges of the subtitle and drag, to change the in and out time. Grab the center and drag to change it's general position. Grab vertical lines and drag to change their position. Next to the magnifying glass and the two buttons is a checkmark and a final button. This is the snap button. The checkmark shows wether or not snap is on. (in the picture, it is) When snap is on, subtitles you drag will automatically snap to each other, or to the current time or a marker time. This allows you to easily make subs appear right after each other.

1.3 The Visual Editor

This window can be launched from the main window, by clicking 'Visual Editor'. You'll probably spend most of your time here. It can be used for changing subtitles as you watch, and for finding out exact times of words being said. You cannot use the visual editor when no movie is loaded, so clicking 'visual editor' for the first time will ask you to load a movie if you haven't done so already.

(the next few chapters will refer to the frames in the picture above, like time, sub, sub timing)

1.3.1 Time

When working with subtitles, time is a very important thing. The current time is shown in a textbox under the main movie display , and you can change it and press enter to jump to a certain time. You can also move back and forward between seconds with the two arrow buttons at the right. At the left hand side is the play button, which can be used to play or pause the movie. You can also do this by simply clicking the main movie display itself. You can also seek using the blue trackbar right underneath the movie.

1.3.2 Sub

The main this here is the subtitle textbox. (it displays 198 in the picture) This shows which sub is current. (which sub is selected, which sub is active at the current time) Again, change it and press enter to jump to that subtitle. You can only edit this while the movie is paused. When this is blank, there is no subtitle active at this time. Use the two arrows at the left to go to the previous/next subtitles. Use the two arrows on the right, with the exclamation mark, to go to the previous or next invalid subtitles.
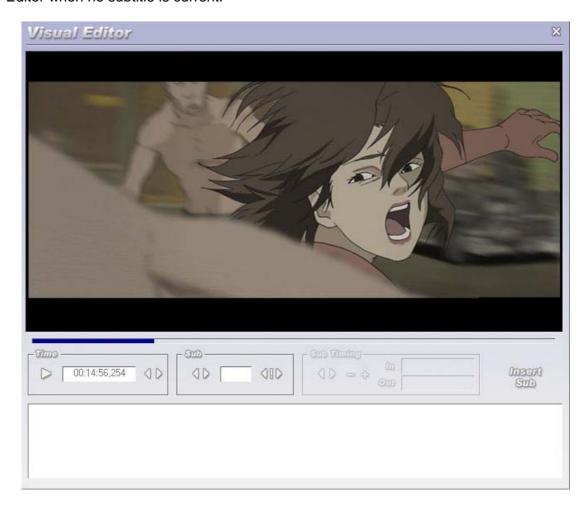
1.3.3 Sub Timing

This frame is only active when the movie is paused and there is a current subtitle. It shows the in and out times of the current subtitle. (the times at which the subtitle is first shown, and taken away) You can change these values and press enter to apply. When changing times, always make sure you use the format hh:mm:ss,sss.
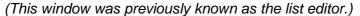
1.3.4 Subtitle text

This section refers to the big white textbox at the bottom. This is where the subtitle text appears. When the movie is paused, you can edit this text. (you don't have to press enter to apply) This is an easy way to correct typos while you are watching
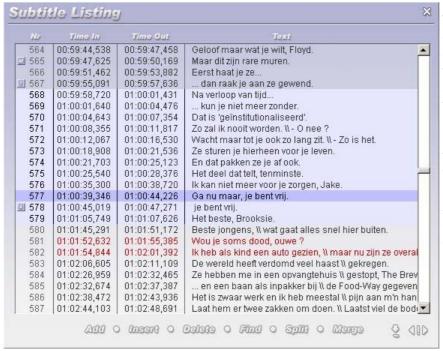
1.3.5 Delete Subtitle

The Delete subtitle movie is only available when there is a subtitle current. It quite simply deletes that subtitle. If no subtitle is current, it is replaced with 'Add Subtitle' which will add a subtitle at that location. The image below shows a picture of the Visual Editor when no subtitle is current.

1.3 The Subtitle Listing Window

(This window was previously known as the list editor.)

This window gives an overview of all the subtitles in the file, and gives access to some basic functions like adding, deleting, splitting and merging files, and finding subtitles.

If you want to create a subtitle file from scratch, this is where you want to be.

As you can see in the screenshot on the left, colours are again very important.

1.3.1 Colours and marks

The bright blue area is the selected region. You can select a region by clicking, keeping the mouse button pressed, and dragging. Or you can select the first subtitle in the region, and then shift click the second. All the subtitles inbetween will be added to the selected region.

The dark blue line is the selected subtitle. (it's the same as the current subtitle in the visual editor) You can change which subtitle is selected by clicking on a subtitle. (this does not work if a movie is playing in the visual editor, pause the movie) Clicking a sub will also jump to that position. You can edit the text of the sub, or the timings here, too. Just make sure you use the correct format. (hh:mm:ss,sss) When editing the text of the sub, you'll notice that some subs contain the characters : ' \\ '. This indicated a carriage return. (next line) You can type these characters yourself if you want, but an easier method is to press shift+enter to insert a carriage return. Pressing enter without shift will move to the next subtitle, and add one if there is no next. This is an easy way of typing a file from scratch.

The red subtitles are incorrectly timed. You can jump between these invalid subs using the two arrows in the bottom right with the exclamation mark inbetween them.

There are small symbols next to subs 565,567 and 578. These are markers. (in the TimeBar, these subs were shown in green) More about markers afterwards.

1.3.2 Buttons

Below is a series of buttons. Here's what they do, from left to right :

Add : Add a subtitle at the end of the file. It will automatically be 5 seconds long, and start right after the last subtitle.

Insert : Insert a subtitle right after the selected one. It will be 1 second long.

Delete : Delete the currently selected sub(s)

Find : Enter a search string and find subtitles which contain those words

Split : Split this file right after this subtitle (the second part will be saved, the first part will remain open)

Merge : Add another subtitle file to this list. The other file can be added before or after the current list, and times can be adjusted to fit.

Goto (arrow) : If the selected sub is not in view, adjust view

Previous and Next invalid : Go to the previous and next invalid sub

Chapter 2 :
Techniques and Info

Now that we've seen the general interface, we'll teach you the basics behind working with subtitles, and working with EchoSub specifically. How to build a subtitle file from scratch, how to use markers, etc... After this chapter, you should be able to edit your subfiles the way you want to.

2.1 Markers

Let's define the general idea of a marker. Markers are subs or times which are used as a reference by other functions. As said, there are two kinds of markers, sub markers, and time markers. And of both of these, there are three markers you can use : the shift marker, the 1st stretch marker and the 2nd stretch marker. So that's a total of 6.

In the TimeBar a marker-sub is shown in green, a marker-time is shown as a green vertical line. There is also an indication which marker it is, 1st, 2nd or M for shift marker. In the listing, marker-subs are indicated by a small symbol on their left. This symbol reads '1' for 1st stretch marker, '2' for 2nd stretch marker and 'M' for shift marker.

To set a marker you need the appropriate window. To set the shift markers, open the Time Shift window and click the arrows. The arrow next to 'time' will mark the current time as the Shift-Time-Marker. The arrow next to 'sub' will mark the current sub as the Shift-Sub-Marker. In the stretch window, you can do the same for the 1st and 2nd stretch markers.

You can adjust the time markers by dragging them in the TimeBar, or simply changing their time values in the appropriate window.

The next chapters will show you how to make markers useful.

2.2 Time Shifting

When all your subs are off by a single time, Time Shift is there to help you. Click Time Shift in the main window. In order to perform a time shift, you need to set two markers, the Shift-Time marker and the Shift-Sub marker. The program uses these markers to determine how much your subs are off.

First, set a sub as the marker using the arrow button in the shift window. It doesn't really matttert much which sub. Then, set the time marker at the exact position where this sub is said. Then, click the 'Shift' button to complete the process.

You can choose to apply this shifting to the entire file, or only the selected region, using the to buttons in the lower left corner.

2.3 Time Stretching

In most other instances where the timing is off, this can be resolved using time stretching. (if it doesn't work the timing in your subfile is just plain wrong, or for another version of the movie)

In order to perform a time stretch, you need to set four markers.

First, let's just keep our attention to the part of the window marked '1st marker'. Mark a sub near the beginning of the file (or if you only want to stretch a selection, near the beginning of the selection) by pressing the arrow button next to the word sub when you've selected it.

Then, seek the exact time in the movie where that line is said, and click the arrow next to Time to markt that time. You've now made a match between that time and that sub, because that's the time where your marked sub belongs

Now to the second marker. Essentially, do the same, mark a sub near the end of the file or selection, and then mark the time where that sub is said.

When all 4 markers are at their exact position, choose wether you want tot affect the entire file (default) or only the selected region. Then, click stretch and watch the magic happen. All your subs should be at their correct times.
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2.4 Find

Click find in the list window to open the search dialog.

Enter the term you are looking for in the white textbox. Then, choose wether caps are important, and wether you're looking for a whole word, not just a part of a word.

Next, choose wether you want to search all of the subs or only the selection, and in which direction you want to search. (default is down)

Click Find, and if there is a subtitle matching your criteria, the list window will automatically jump to the nearest one.

2.5 Split

If you have a movie in two parts, it's a nice idea to split your subfile, too. You can find split at the bottom of the list window.

Select the subtitle which should be the last one in your first file, and click split. Click 'browse' to enter a filename for the **second part**.

Select wether or not you want to keep the timing. If you choose reset, the subs in the second file will start counting from zero again. With two movie files, this is advised.

Click OK. A file will be made containing the second part. The first part remains open. (you still have to save if you want to preserve it)

Hint : If you have a single subtitle file, but a movie in two parts :
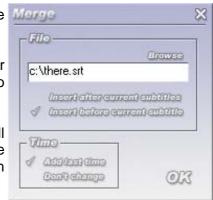
- Use stretching to adjust the timing to the first part of the movie (the subs for the second part will also be stretched, but ignore that)
- Split the file at the right sub and select Reset timing
- Save the first part, then open the second part and shift the timing to be correct. Done! Your subs should match your movie.

2.6 Merge

Click Merge in the list window to open the merge dialog.

Click browse to select the file to merge your current list with. You can choose wether you want to add those subs after or before your current file.

If you choose 'Add last time' the program will add the last time-out of the first part to the subs of the second part. If the timings of the second part start from zero, this is strongly advised.

Hint : If you have a single movie but two subtitle files :

- Stretch both files individually so they both match the movie (though both will be uncomplete)
- Merge the files. Done!