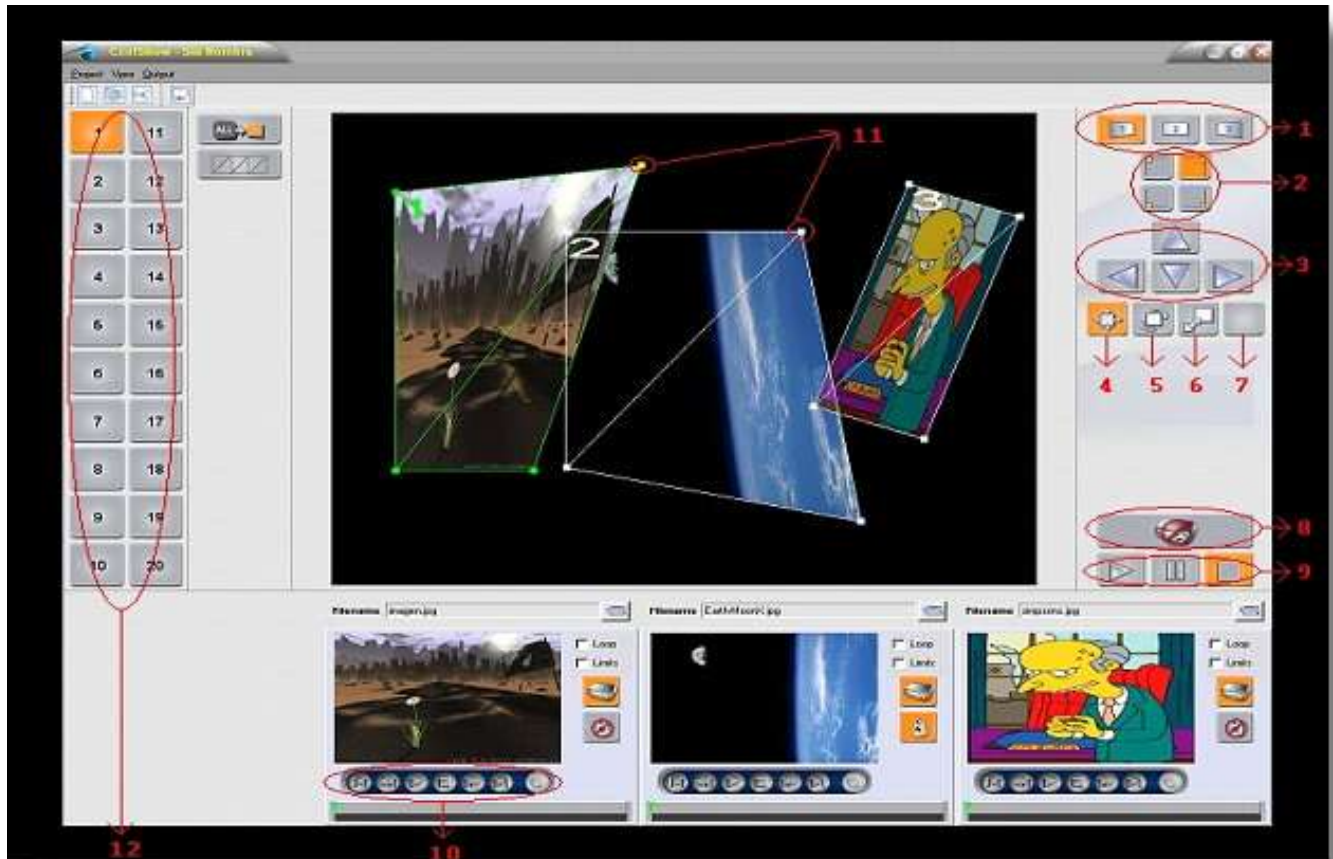




**Technologies:** C++, QT, DirectX, Visual Studio .Net 2003.

**Platform:** Windows XP, DirectX 9.0c. Second Screen/Projector needed.

**Description:** The application has Media Players that can read data from files, DVD, or devices like capture cards, webcams, DV Cams, etc. All common multimedia formats are supported (DirectShow compatible). The target of the application is to present more than one video using a projector or a second screen. Those videos can be modified in real time: keystone correction, move, rotate, scale, alpha blending



### Controls:

- 1: Selects which video is to be modify
- 2: Selects which vertex is to be modify
- 3: Fine adjustment
- 4: Moving
- 5: Rotating
- 6: Scaling
- 7: Transparency
- 8: Switch on/off projector output
- 9: General play / pause / stop, this is, for all the videos
- 10: The same than above, but for each individual one
- 11: Adjustable vertex of each image
- 12: Presets



**Technologies:** C++, QT, DirectX, Visual Studio .Net 2003.

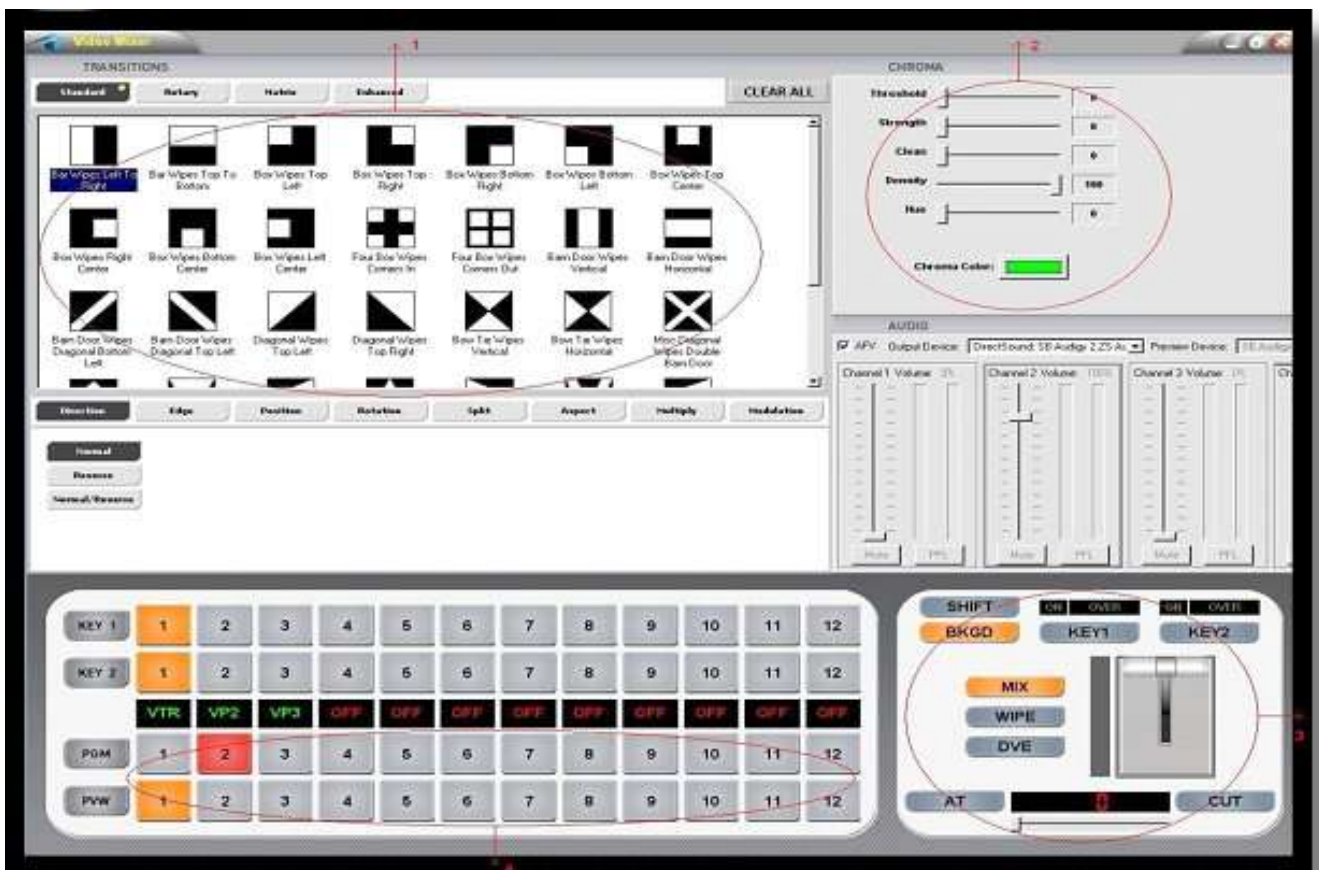
**Platform:** Windows XP, DirectX 9.0c. Second Screen needed.

**Description:** This application is part of a more ambitious program: **A virtual television studio.** The VideoMixer receives two video signals: One called “program”, which is the one that is being broadcasted, and another called “Preview”, which is the one that is going to be broadcasted. The user sees at any time both signals, being able to switch between them in different ways:

- Directly
- Using transparencies
- Using different effects

Also, the program can perform Chroma Key in real time.

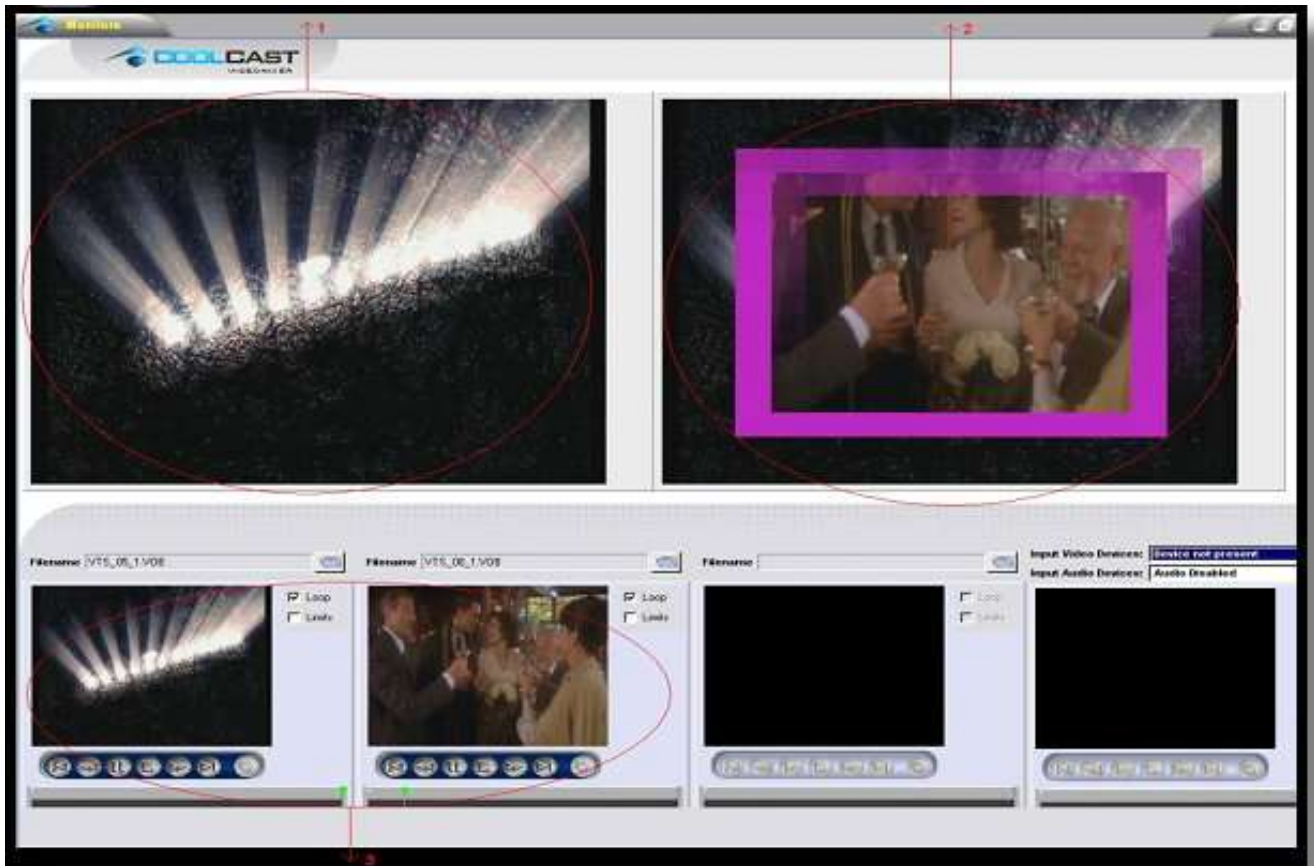
The VideoMixer is meant to be used with two screens, the first one has all the controls, and the other one has the Preview and Program signals, as well as the different mediaplayers.



## Controls:

*First monitor (controls)*

- 1: Different ways of transition between a preview to a program signal
- 2: Chroma Key parameters
- 3: Handle to go from preview to program:
  - Selecting MIX, will result in a transition using transparency.
  - Selecting WIPE, will result in a transition using effects (the ones shown in figure 1).
- 4: Select which media player is in preview mode, and which is in program mode



*Second monitor (Signals and mediaplayers)*

## Controls:

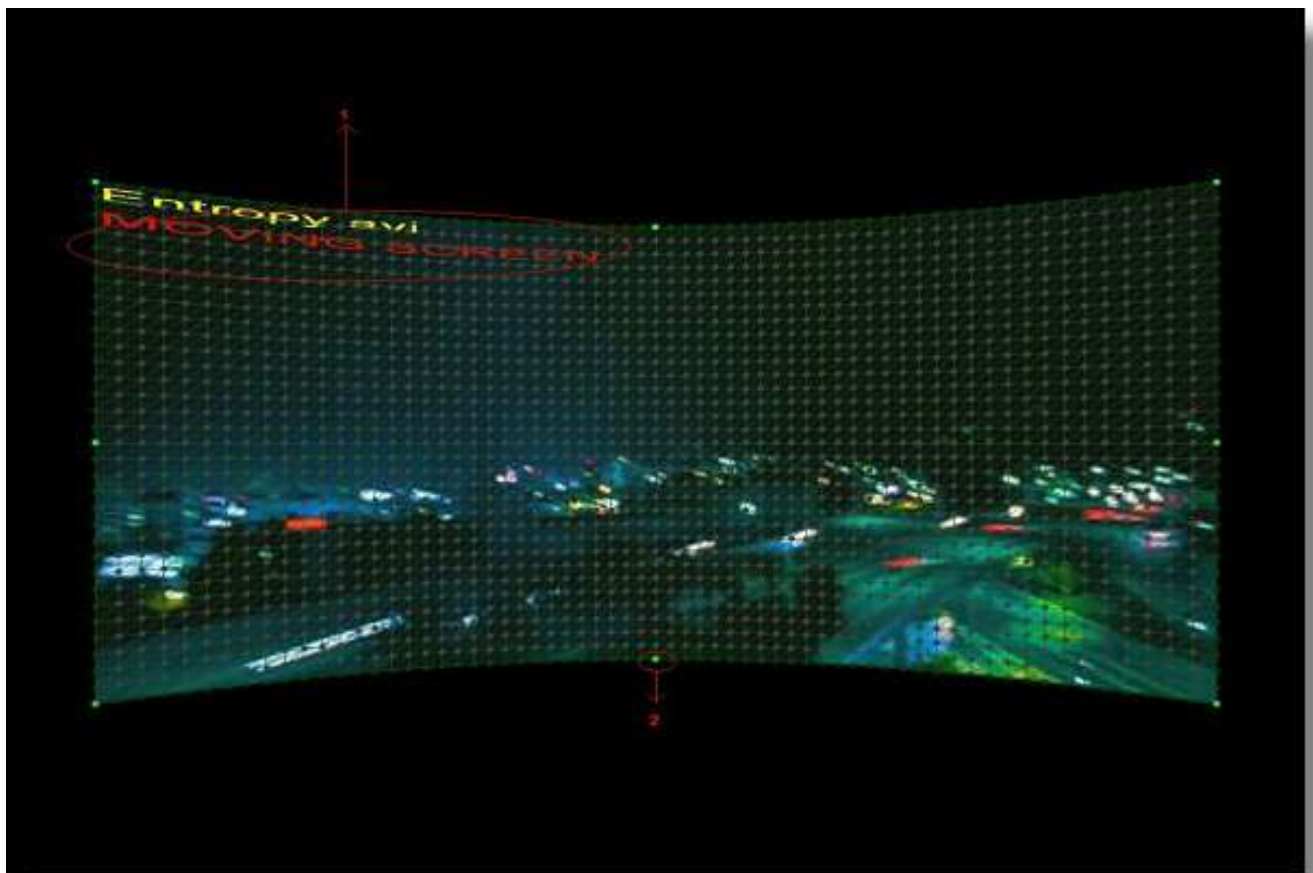
- 1: Preview signal
- 2: Program signal
- 3: Mediaplayers

**Technologies:** C++, QT, DirectX, Visual Studio .Net 2003.

**Platform:** Windows XP, DirectX 9.0c.

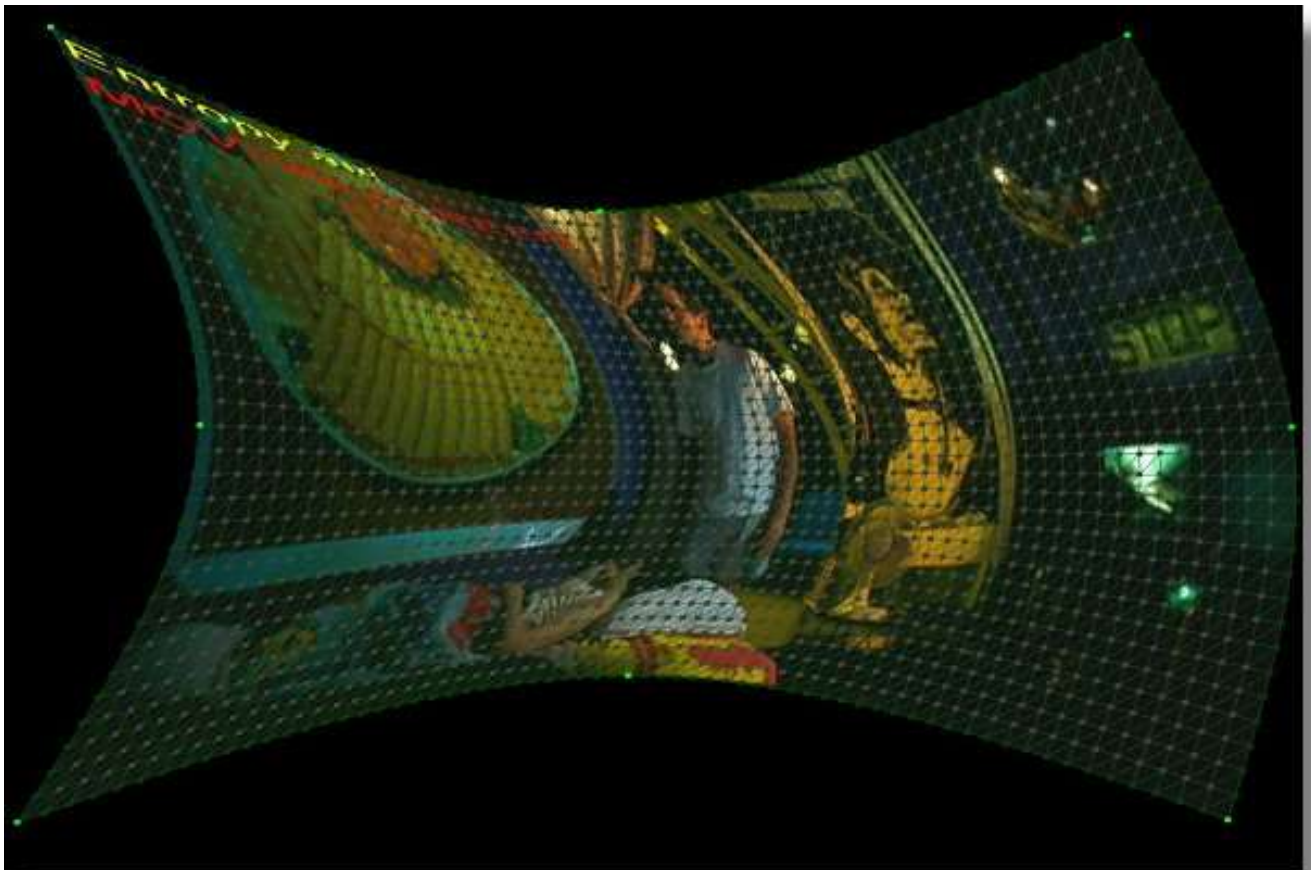
**Description:** Beamer is an application orientated for watching movies. It reads a video file, and projects it on to a 3d mesh, being able to adjust the vertex, so it is possible to fit the video on any surface. Also, it allows to perform some real time effects:

- Bright, contrast, saturation and hue adjustment.
- Black and white filter.
- Sepia filter.
- Píxel effect.
- Blur effect.



## Controls:

- 1: File name and adjust mode: moving, rotating or scaling
- 2: Adjustable mesh vertex: These are the vertex that can be clicked and moved anywhere on the screen



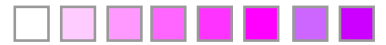
## Controls:

All the interaction in this application is achieved through the keyboard.  
Following is a list of the keys used to control it:

ENTER: swith on/off edition mode  
SPACE: play/pause  
1-5: different mesh shapes  
6: Bright, contrast, saturation and hue adjustment.

**MODE 6 enabled** --> Being in this mode, the keys to adjust these effects, are:

F:	Increases brightness	A:	Increasesaturation
G:	Decreases brightness	S:	Decreases saturation
H:	Reset brightness	D:	Reset saturation
Q:	Increases contrast	Z:	Increases Hue
W:	Decreases contrast	X:	Decreases Hue
E:	Reset contrast	C:	Reset Hue
7:	Black and white filter	B:	Moving mode
8:	Pixel effect	N:	Rotating mode
9:	Sepia filter	M:	Scaling mode
0:	Blur effect	ALT+F4:	Exit



## More Info:

In any mode, the video is moved, rotated or scaled by pressing and moving the mouse. This, only affects the x and y axis, unless the SHIFT key is pressed, in which case the z axis is also affected.

The picture that is shown by default, is defined in the following line in the file config.xml:

```
DefaultVideo="imagen.jpg"
```

To use another image, or video, just type the whole name and path of the file, like this:

```
DefaultVideo="c:\my_videos\video1.avi",
```