

# Tips, Tricks, & Traps

## 3dChor Video Effects Studio

### Edition 1.00

#### Extracting a talking head from a video

##### Easy Cases

The easy cases are in the book. See example below:

Notice that there is an adequate neck below the lowest point of the chin. Also the neck is clearly above the shoulders.



Easy Case – Fig. 1

##### Hard Cases

The hard case described in figure 2 below is one of many classes of potential problems.



Hard Case – Fig. 2

This one is due to a shirt collar extending to above the lowest point of the chin. A crop box placed around the head includes part of the collar. This part of the collar will be interpreted as a part of the neck. See figure 3 below.



Cropping box Fig. 3

The situation is actually worse than shown; as the actor will move about during the scene requiring the crop box to be larger, incorporating more of the collar.  
Strategies for great head videos

**If you can, take the original video so that you have the “easy” case shown in Fig. 1 above.**

If not, consider the two possibilities

Case 1. The actors head movements are limited, so that the one crop box may contain too much but it suffices for the extent of the video.

Case 2. Not only does the crop box not exclusively cover the head and neck but because of the movement of the actor, the head falls partly or wholly outside of the crop box during the video.

Case 1 Strategy

Step 1 Make a mask that will expose the head and neck while blocking out the collar and/or shoulders that would show in a normal crop box.



Original Video  
Frame Fig. 4



Simple Mask  
Fig. 5



Conforming Mask  
Fig. 6

Notes:

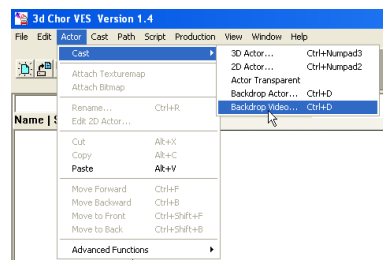
Gray background of the masks roughly matches background of video  
So that small errors of coverage won't be noticed

Green (any color will do) is selected as identifying the area in the mask that will be made transparent. The green band at the top of the mask makes green the transparent color.(actually only the top leftmost pixel does the determination)

The simple mask is usually adequate, the conforming mask is useful for video with complex backgrounds.

Step 2. Create a new head video.

1. In 3dChorVES bring in the video as a video background.



Select Video background  
Fig.7

2. In 3dChorVES bring in the mask over the video as an “actor transparent”

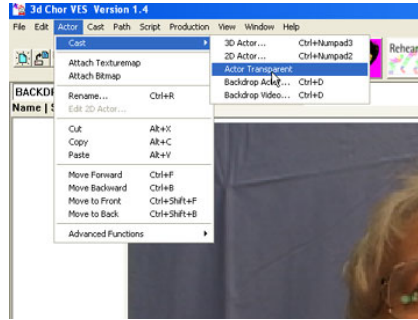


Fig. 8

Load your mask

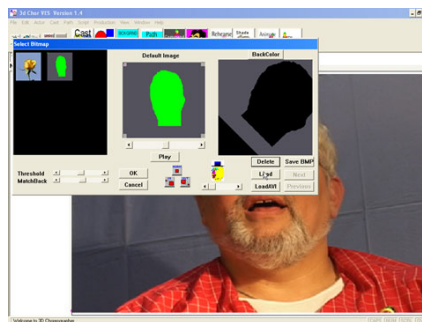


Fig. 9

When the mask loads, it is at a 45deg angle and not correctly scaled to cover the head. Edit the path point to change the angle from 45 to 0 degrees

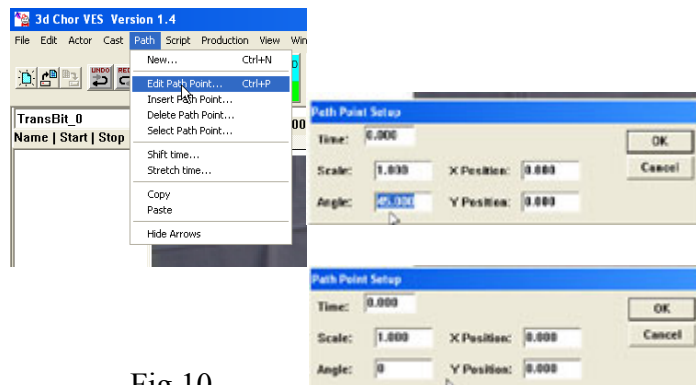


Fig 10

To get a better perspective when using the mask view out

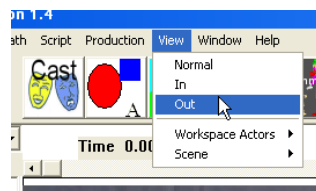


Fig 11

Size the mask by pulling on the lower right hand dot visible when the mask is selected. Use the “shade” icon to see how the mask covers the head.

The two images below show the head before and after the mask.

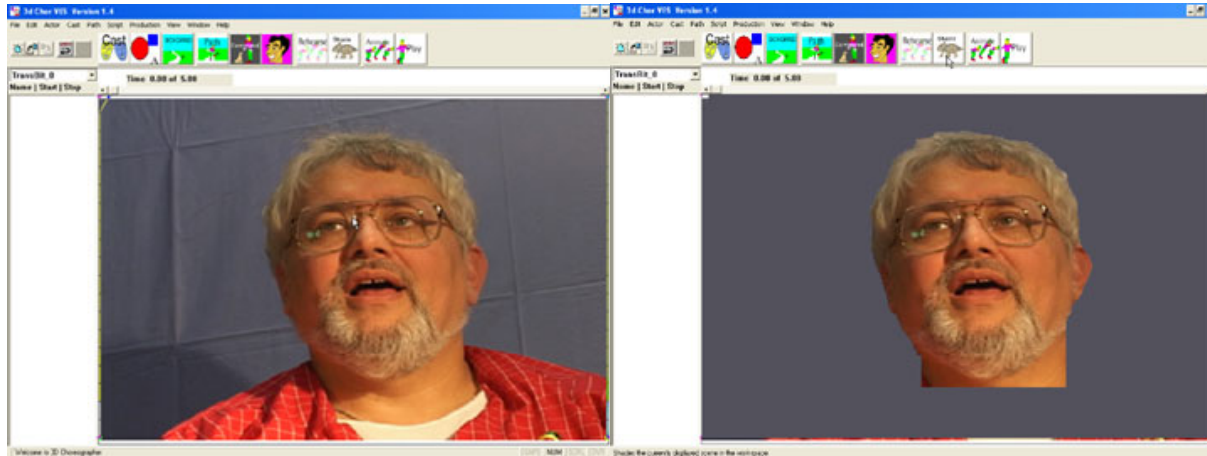


Fig 12

Next step is to create a new video.

Animate the file using highest quality video options: 720X480 pixels, 30 frames per second and make the length of the new video equal to the old video new head video, which is a cleaned up version of your original video. Use this video to make a composite cartoon/video head actor for your video or animation. If you followed the directions, you should have a clean attachment.

The above assumes the head of the actor on the original video does not vary much horizontally or vertically during the video. For the case where the collar or shoulders impinge on the crop box **and** the actor's head moves significantly the solution is to track the head movements in 3dChorVES, make a new video with the head stationary and inside the mask and then use that video for head attach. Look for details in Tips Tricks & Traps Edition 1.1.