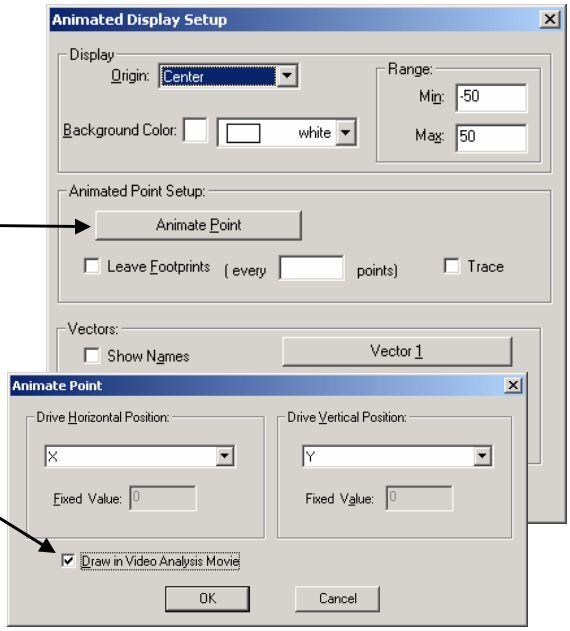
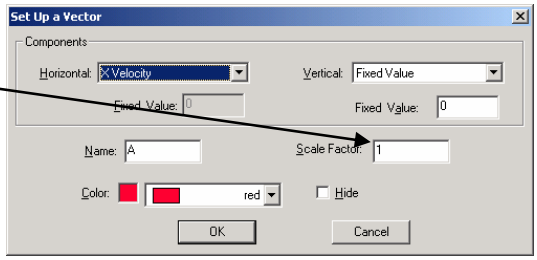
Showing Vectors in Logger Pro 3.3

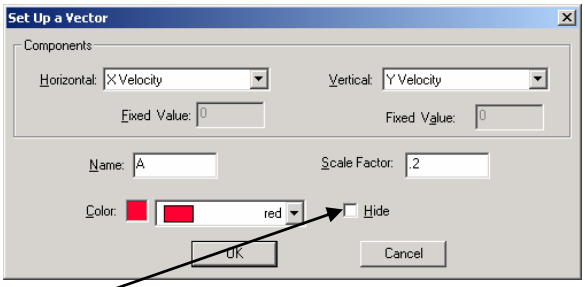
- You must have Logger Pro 3.3 installed to do this. If you have an earlier version of Logger Pro 3 then you must download the updater from http://www.vernier.com
- From the "Insert" Menu slide down to "Meter" and select "Animated Display". This will add a totally white box to your screen. Drag it out of the way so you can see your video window.
- Double Click on the Animated Display window (the white box) to pull up the Animated Display Setup.
- Click on Animate Point
- Set Drive Horizontal Position to "X" and Drive Horizontal Position to "Y". This will cause your vectors to be drawn at each point you placed in the Video Analysis window.
- Place a check mark in "Draw in Video Analysis Movie" and click OK.



- Click on Vector 1 in the Animated Display Setup window.
- To do Component Velocity Vectors set Horizontal to "X Velocity" leave Vertical as "Fixed Value"
- Notice the Scale Factor Box. You probably will want to make this smaller. The exact size will depend on your video. I've found I usually have it set to 0.1 or 0.2 in most cases. If left at 1 the vectors are too long.
- Click OK
- Click on Vector 2. Leave Horizontal as "Fixed Value" and set Vertical to "Y Velocity". Set your scale factor to the same level as you did for your other vector. Click OK
- Now Click OK in the Animated Display Setup window. If you've done everything correctly you should now see your component vectors drawn in your video.



- You can add your resultant vector just as easily. Double click on your Animated Display Window and this time select Vector 3.
- Set Horizontal to "X Velocity" and Vertical to "Y Velocity" Be sure to use the same scale factor again. Click OK
- Now Click OK in the Animated Display Setup window.
- Things may now be too jumbled up to see. You can fix this by going back into the Animated Display Setup. Put a check in the "Leave Footprints" box and put a 2 or 3 in the "every ___ points" box. Now it should skip a point or two when drawing vectors.



Other Things to Note:

- You can hide the Vectors easily by checking the Hide box in the "Set Up a Vector" window. This would make it much easier to investigate individual vectors.
- The vectors are also drawn in the "Animated Display Window" (the big white box). If you pay with the Range in the Animated Display Setup you can make them show up better if you want them for some reason.
- You can also create new columns and show those as vectors. For example you could create a new calculated column by taking the derivative of Y Velocity to get the Acceleration vector (thereby showing that acceleration is the same on the way up as it is on the way down for the visual learners).