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Subject: Re: TrackBall Object.

Posted by [davidf](#) on Tue, 13 Jul 1999 07:00:00 GMT

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David Borland (dborland@egi.com) writes:

- > Does the trackball object always rotate around the natural origin, or will
- > it rotate around a user defined origin?
- > What I am doing is I have the viewplane rectangle centered around the
- > polygon, and the trackball set to [xdim/2.,ydim/2.],xdim/2.. So that it
- > should be the entire view plane. The problem is that the polygon is
- > rotating around something other than the center of the viewplane rectangle.
- > Any hints on how to make this behave?

A couple of questions:

1. What coordinate system are you using in your viewplane rectangle?
2. How are you scaling the polygon into that viewplane?

My guess is that the coordinate system you are using for the viewplane rectangle and the coordinate system you are using for the trackball do not align. For rotations, it's nice to choose a coordinate system whose origin is in the center of the display window. If your polygon is displayed from the center of rotation, you must first translate it to the center, rotate it, then translate it back to where you want it. (Assuming, of course, that you want to rotate the polygon about its center of mass, if you like.)

Unfortunately, there are LOTS of things that can go wrong here. It's hard to speculate without more information.

Cheers,

David

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