

## Tracking a Rotating Object with ProAnalyst

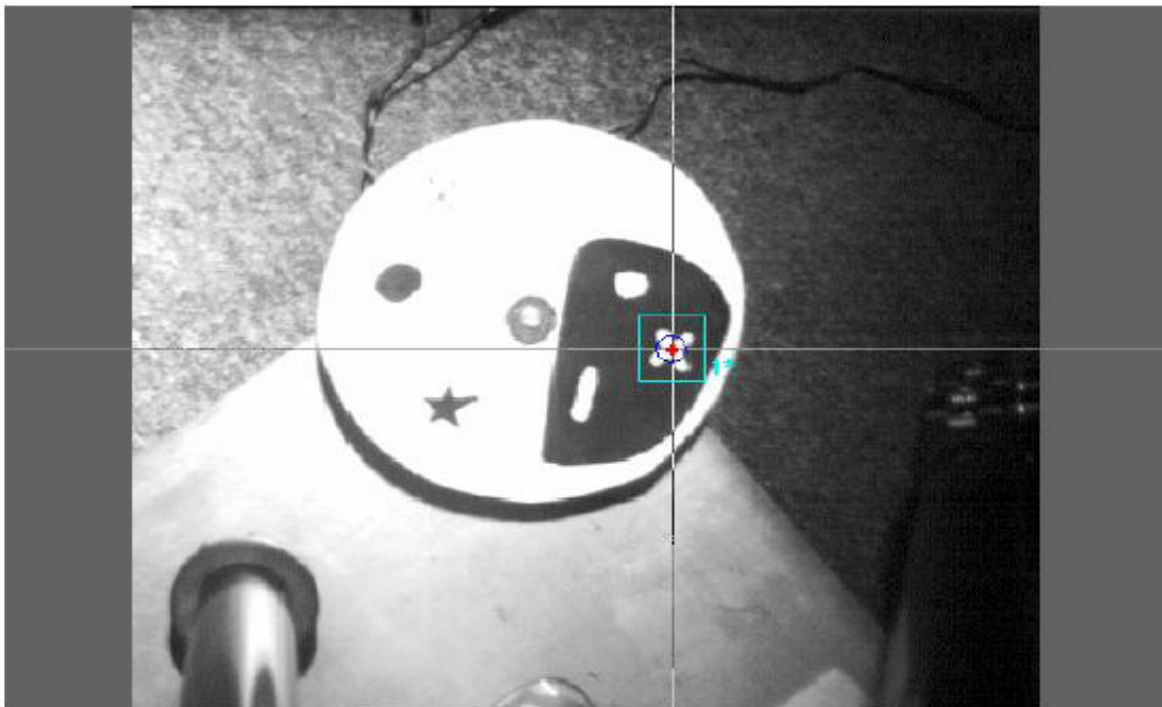
Date Published: October 21, 2009


Revised: February 1, 2010

### Abstract

ProAnalyst's feature rotation algorithm can automatically track rotating objects by comparing rotated versions of a feature template against its search region to find a match. The feature template is rotated across a user specified Angular Range, and the best match over the entire range of rotation is returned as the final match.

1. Click the **2-D** icon to open the **Feature Tracking** control panel.
2. Press the **Enable** button.
3. Define and set a region around the feature that you wish to track as shown below:



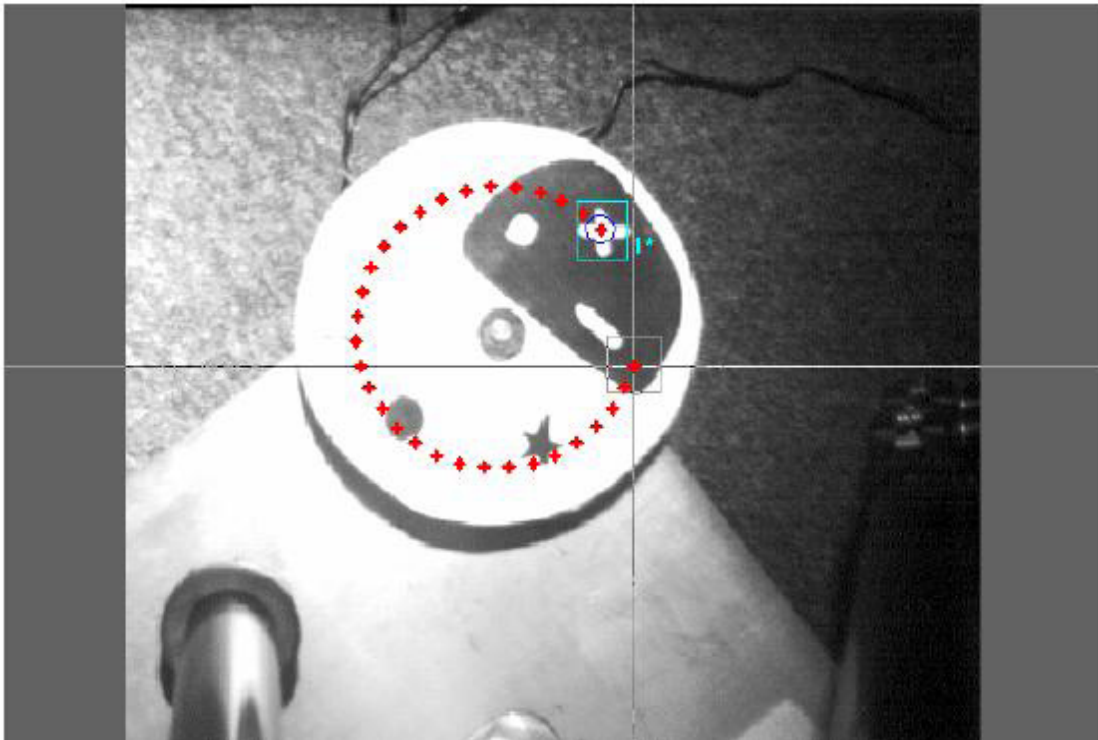
4. Click the  icon to open the Track Settings window.
5. **Enable Feature Rotation** by clicking the **Enable** check box as shown below:



6. Input an “Angular Range” and “Step Size” in degrees. The feature template will be rotated plus or minus the Angular Range value in intervals of step size. For example, a rotation range of 30 degrees with a step size of 5 will examine the range of -30 to 30 degrees in 5 degree intervals.



7. Click the **Apply** button, followed by the **Close** button.
8. Press the **Track Forward** button. ProAnalyst will display the feature track as it happens frame by frame.



This application note is copyrighted by Xcitex Inc. and intended for use by end users of Xcitex products. This Application Note is supplied without specific warranty to any purpose and based on information currently available at the time of this writing.

For further information on Xcitex products, visit [xcitex.com](http://xcitex.com) or send an email to [support@xcitex.com](mailto:support@xcitex.com). For further information on National Instruments products, visit [ni.com](http://ni.com).

Xcitex Inc.  
25 First Street Suite 105  
Cambridge, MA 02141  
617-225-0080

