How To Use Xplorer GLX For Lab # 12

Initial setup

1. Connect a sonar cable to the Xplorer.
2. Turn on the switch (right bottom, green button – push it about a second).
3. If the screen does now show menu, push "Home" button.
4. Using <, >, /\, and \/ keys, move to "sensors" and hit the check key.
5. Make sure the rate is "10 samples per second" (if not, change it to 10), and push "Home" button.
6. Go to "Graph" mode, and hit the check key. A graph of "Position vs. Time" will appear.
7. Hit the check key to go to Position Axis, and hit the check key again.
8. It will give you options to graph "Position" or more. Choose "More" select and check.
9. It will give you options to graph "Velocity" and "Acceleration". Select "Acceleration and check.
10. The graph should be "Acceleration vs. Time" now.
11. Hit the check key again and when it high lights "acceleration", hit the check key again.
12. Go to "Data Properties" and hit the check key.
13. Move to "Fixed Decimals" and hit the check key.
14. Choose either "Scientific Notation" or "Engineering Notation".
15. Move one below, "Number of digits".
16. Using "+" key to increase the number of digits to at least 8.
17. Hit "F1" key for "OK".

Actual Run

1. Make sure that the ring is aligned with the track so that the ring will roll straight.
2. Push "Play" button when ready.
3. Catch the ring before it hits the end and push "Play" button again to stop recording.

Retrieving Data

1. You will notice that the line is rather flat because of the scale chosen.
2. Push"F2", "Scale" to change the scale.
3. Use /\ key to choose an appropriate scale. When chosen, hit "ESC" button.
4. Use < or > to move a cursor to read accelerations of appropriate region and record all of them.

Turning off Xplorer

1. When you push the on/off button (right bottom, green button), it will ask "Save Changes to the file 'Untitled (2)'?" Choose "No" by pushing F2 button.
2. After it turns off, disconnect a sonar cable from the Xplorer.