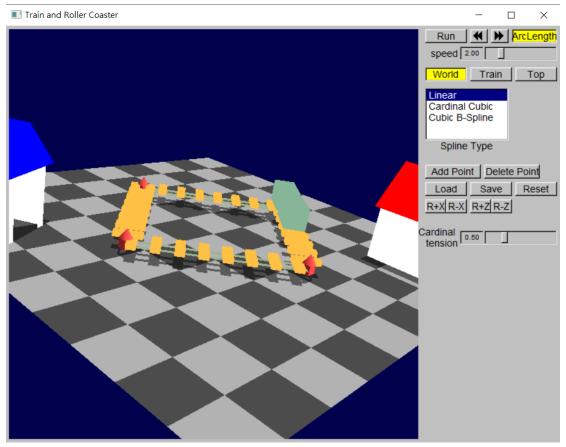
# User manual

This is a roller coaster simulation. What you can do with this program includes adjusting the track, making the train run, and so on.

## **User interface**



After clicking the executable file RollerCoaster.exe, you will see an user interface like this.

#### **Train**

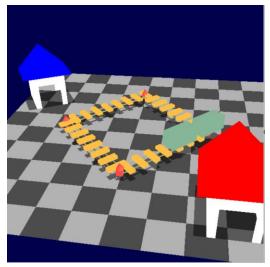
There are a few things you can do with the train.

- 1. Press the "Run" button to make your train start running. If you want to stop it, simply press the button again.
- 2. "<<" and ">>" button allow you to move your train forward and backward manually.
- 3. Use the "Speed" slider to control the speed of your train. The higher the number is, the faster your train run.

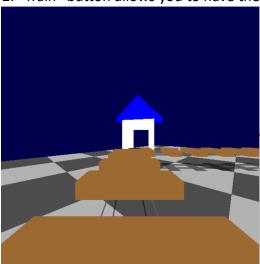
# Viewing

There are three button you can use to change the perspective you are looking.

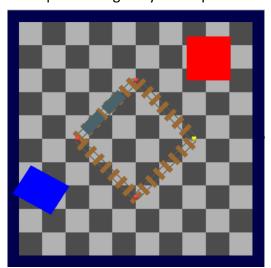
1. "World" button gives you the perspective like you stand at a certain position and look at train. In this mode, you can drag with right button of your mouse to move.



2. "Train" button allows you to have the perspective like you are on the train.

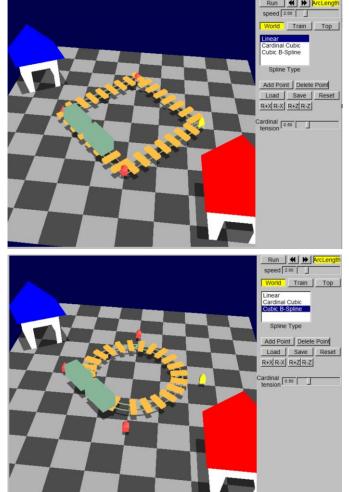


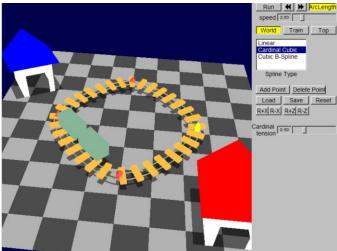
3. "Top" button gives you a top-down view.



## Track

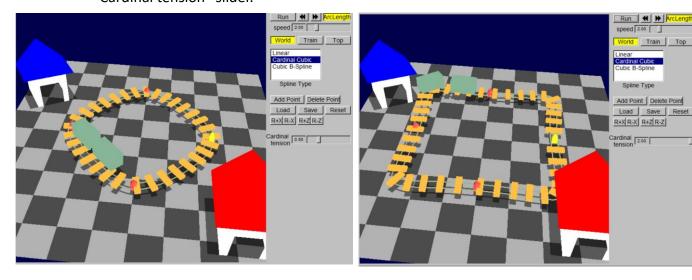
There are three types of track curve you can choose, "Linear", "Cardinal Cubic", and "Cubic B-spline".





Train Top

Choosing the Cardinal cubic curve, you can adjust the tension of the curve using the "Cardinal tension" slider.



"Add point" and "Delete point" buttons allow you to increase and decrease the number of the control points.

"Load" and "Save" buttons allow you to load track from a .txt file and save it as well.

"Reset" button sets the control points and track back to its original look.

"R+X", "R-X', "R+Z", "R-Z" allow you to rotate your control points.