



Controlling the Big Wheel

Open the **Big Wheel** mimic and explore what it can do by clicking on the outputs in the Status Panel.

Red, Yellow and **Blue** are lights embedded into the frame of the wheel structure. **Wheel** is the motor which controls the wheel's rotation.

When the Wheel motor is running, look closely at the triangle on the steps under the wheel. Whenever one of the cars is directly above



the steps, the triangle turns yellow and the **Steps** input is switched on. This is a **virtual input**, controlled by the mimic itself. Notice that clicking on the **Steps** input on the Status panel has no effect.

Now click on the gate on the mimic window with the left mouse button. The gate closes, click again to open it. When the gate is closed, the **Gate** input is on and is represented by the yellow light at the top of the gatepost.

Flowcharts to Construct

1. To attract the crowd, use **Button 1** to control the lighting effects on the wheel. This might be a simple on/off routine, but flashing sequences are more exciting (use subroutines).
2. Use **Button 2** to control a simple start/stop movement of the wheel. Consider using motor power control to speed up and slow down the wheel.
3. For safety, include a check on the **Gate** switch so that the gate must be closed before the wheel starts to move. The wheel should stop if either the gate is opened, or **Button 2** is turned off.

