Arduino Double Decker Robot Instructions

This is the instruction sheet for controlling the robot. Currently I have a Comcast remote mapped to the robot, so this is the only television remote that can control it. I am currently looking into an implementation that will allow any infrared remote control to be mapped to the robot dynamically. For the time being, I will be describing the controls with this particular remote.

**Movement**

You can make the robot move forward, backwards, left, and right by hitting the corresponding arrow on the remote. You can hit the “Ok/Select” button to make the robot stop. Avoid hitting the buttons in quick succession, as this may cause the signal reading to work incorrectly.The robot has two switches on the front and if these switches are triggered by hitting an object or wall, the robot will back up automatically and make a beeping noise.

**Playing Music**

The “A”, “B”, and “C” buttons have each been mapped to play a preset song.

**Control Servo Speed**

The servos have been coded to move at a particular speed, however, you can adjust the speed with a sequence of commands. First, hit the “TV/VCR” button. Next, you can use the number buttons to enter the desired speed. I’ve limited the input to a range of [30, 60]. You can then hit “HD Zoom” button to finalize the speed change. If you enter a number outside of the range, you will have to hit the “HD Zoom” button and repeat the process.