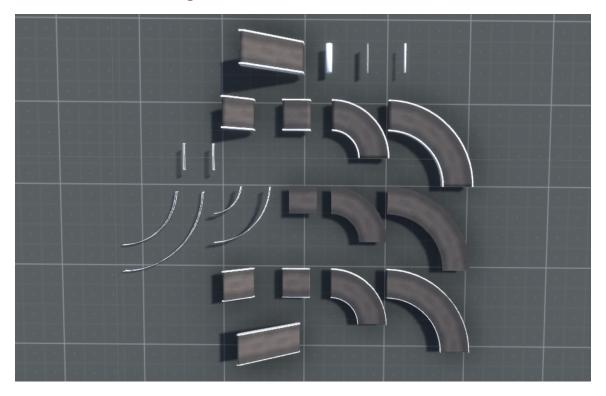
Modular Conveyor Tools

Documentation

A Quick Thank You

I just wanted to put a quick thank you for your support. I try to keep the price as low as possible within reason because of people like you! This project was the result of a few days of planning and work. If you find any issues with the project or have suggestions of how to improve it do not hesitate to contact me at wbarteck@gmail.com. Can't wait to see how this and all my other projects get used.

What's in the Package?



The package consists of 3 different styles of conveyor belts with the basic parts needed to build any configuration.

- Flat
- Thin (.125 units in diameter)
- Thick (.25 units diameter)

These objects are mainly meant to showcase the scripts in the package but can be used in any commercial application. They are all carefully modelled and unwrapped to work flawlessly with the shader and physics.

There are 3 types of conveyor currently, I'll go into detail describing how they work and what you need to do to make your own.

Linear Conveyor

The most basic of all conveyors. This script uses any object with a collider, attaches a rigidbody, and moves it in a special way to apply physics in one direction (transform.forward). This comes with an editor that allows any update to the speed value to also update the shader speed.

If you update the speed at runtime through a script you should call the ChangeSpeed function of the conveyor so that it updates the material as well.

Important Note: If you notice the shader speed does not match the physics speed check that if it is an instanced material, or if it shares a common speed value with the other non-instanced conveyors.

Radial Conveyor

Similar to the linear conveyor this rotates an object in a special way to only apply physics in one direction. The important thing to note about radial conveyors is that the rotate around the pivot point that is NOT the center of the mesh. The pivot point is located at the metaphorical center of the radius of the conveyor. Look at the example meshes to understand what this means.

Note: If you make your own radial conveyor, make sure you UV unwrap the model in a linear way so that it all lays flat in one line. The shader will not work otherwise. Also, to reduce UV issues in Unity you can add a few loop cuts along the center of the conveyor, this helps with UV distortion.

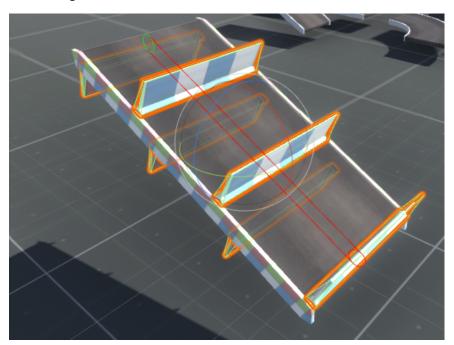
Extruded Conveyor

This is the more unique conveyor type in the pack. It can be used in tandem with a linear conveyor. This script uses offset gameObjects that rotate around a conveyor to act as flaps, bins, or treads. A practical application of this is in the demo scene.

When setting up the type of conveyor, you need to have a prefab of your flap object with Y direction as the up vector.

It is recommended to create an empty object and attach an Extrude wizard script to it. The wizard script is an easy way to setup multiple flaps.

Note: the green circle is the front





Length: the length of the conveyor (just in one dimension, don't think of this as perimeter)

Radius: the radius of the conveyor ends, this should not be 0 but who's stopping you, I don't see any cops

Speed: should match the speed of the underlying conveyor

Note: This extruded conveyor root does NOT have to be a child or parent of any linear conveyor, it is a separate object made to follow a similar path.

Again, thank you for your support, and do not hesitate to contact me.

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