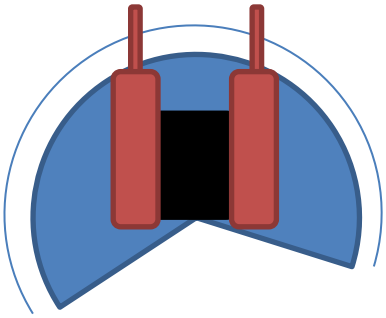
Turret Setup Readme

To setup a turret simply follow this guide:

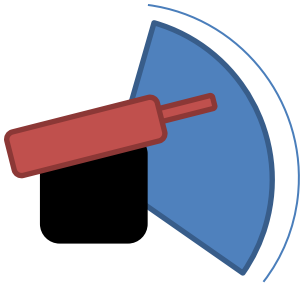
Create your turret, ensuring the hierarchy of the turret is setup to account for pitch and yaw movements. This essentially means that you must account for rotations on the y axis at the “torso” of the object, and rotations on the x axis at the “arms” of the object. These parts should be nested in their hierarchy, starting with the base, then the torso, then the arms, and finally any gun barrels.

For Example:



Torso Rotation (Yaw)

Top Down View



Arm Rotation (Pitch)

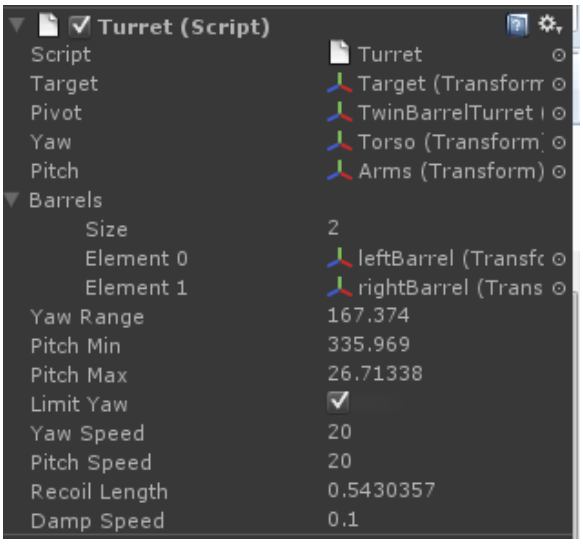
Side View

Once the object is imported into Unity, drag it into a scene and add the “Turret” component.

Now setup the turret by filling out the values of pivot, yaw and pitch in the component. This can be accomplished by selectively dragging the respective transforms of your turret to the respective component fields.

More specifically, the pivot variable should be mapped to the main pivot of the turret, its base transform or the top of its hierarchy. Secondly the yaw value should be mapped to the “torso” of the object, the part at which rotations on the y axis will occur. Thirdly the pitch value should be set to the “arms” of the turret, the part at which x rotations will occur. Then, add the barrels of the turret, these are the parts at which a recoil effect will be applied to. Lastly, assign the target of the turret.

For example:



After setting the transform variables, you can now tune the limits of the turret. These are defined in the

Pitch Min: Minimum pitch which can be achieved by the turret. This will define the minimum rotation that the arms of the barrel will rotate to.

Pitch Max: Maximum pitch which can be achieved by the turret. This will define the maximum rotation that the arms of the barrel will rotate to. The turret will be able to target its target between the Pitch Min and Pitch Max range.

Limit Yaw: If enabled, the turret will have a limited Yaw, i.e. Rotation on the y axis.

Yaw Speed: The speed at which the turret’s torso will rotate on the y axis toward its target.

Pitch Speed: The speed at which the turret’s arms will rotate on the x axis to target its target.

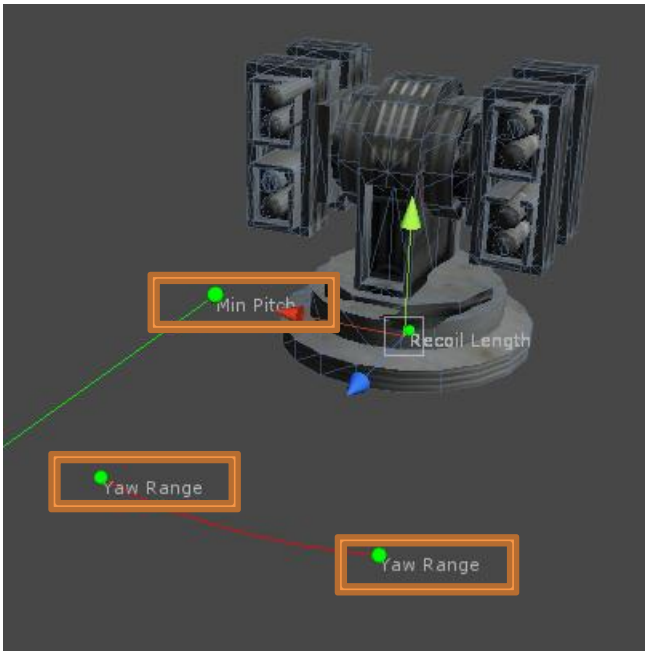
Recoil Length: The amount of recoiled movement from the barrels of the turret.

Damp Speed: The amount of smoothing applied to the rotations of the turret.

These values can be either manually edited or by using the sliders now visible in the scene.

To use these sliders, simply click and drag the spheres at the starting point of each line, recognised by their label.

For Example:



By clicking and dragging these points, the values of the corresponding variables will be adjusted, making it simple to setup these limits for each turret.

To test the recoil of the turret, simply attach the “Turret Test” component, press play, and a GUI button will appear. Clicking this button will cause the Turret to fire, revealing its recoil distance.

For any help regarding the function of the script, or to report any bugs, simply email:

support@differentmethods.com