

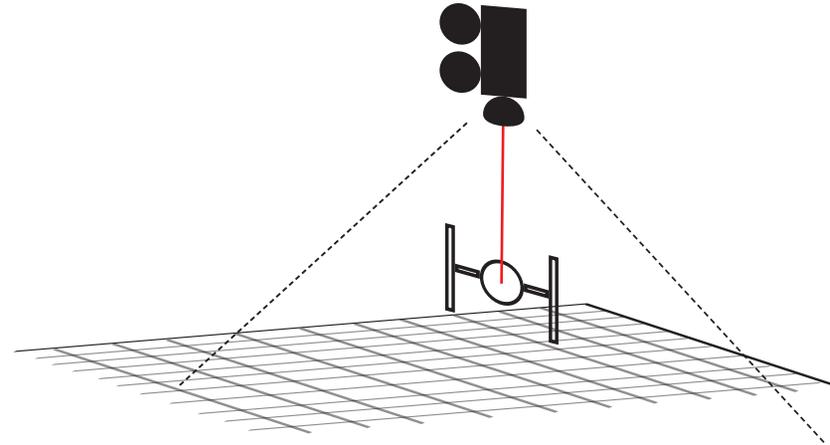
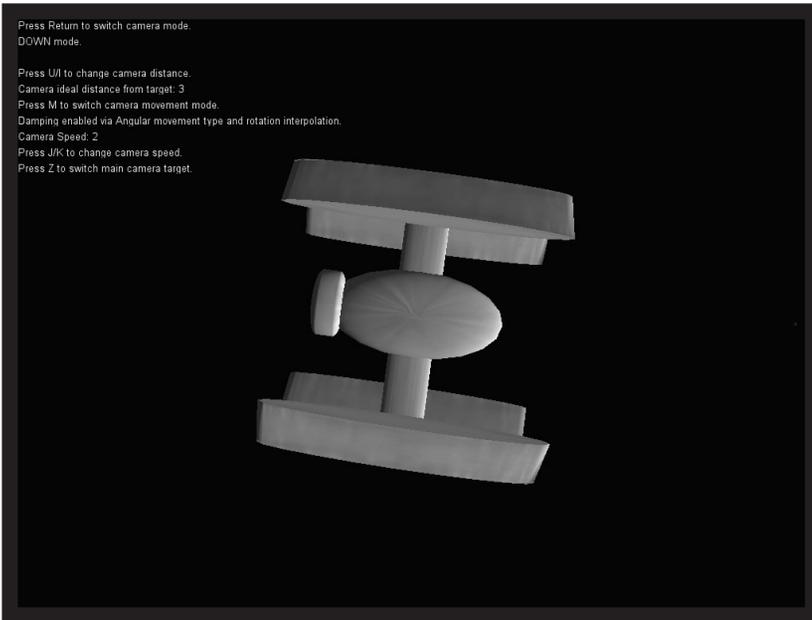


Dynamic Camera

A VERSATILE, ALL-PURPOSE CAMERA
FOR THE UNITY3D GAME ENGINE

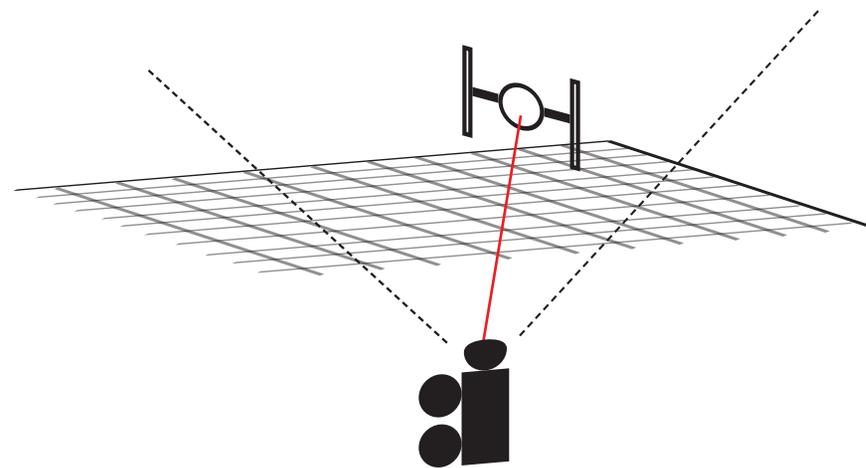
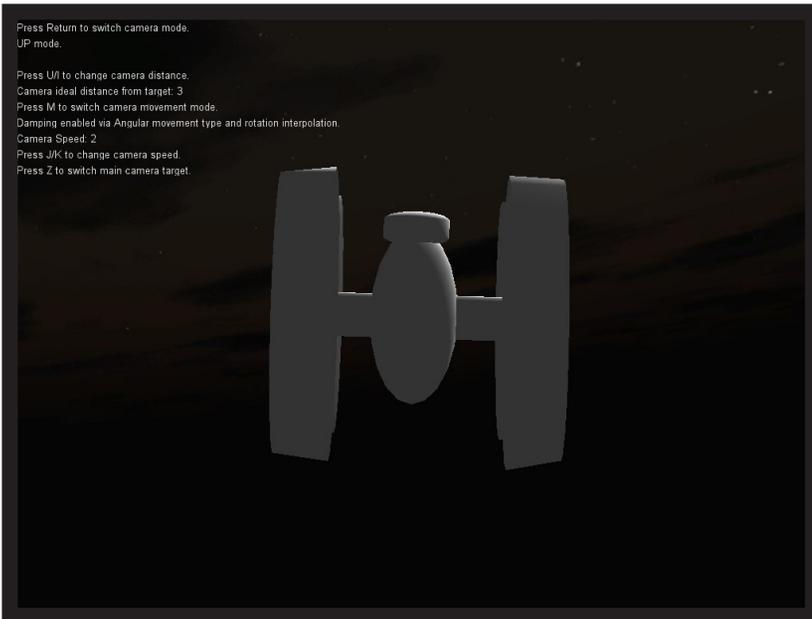
Nimbus Garden

Camera Mode: Down



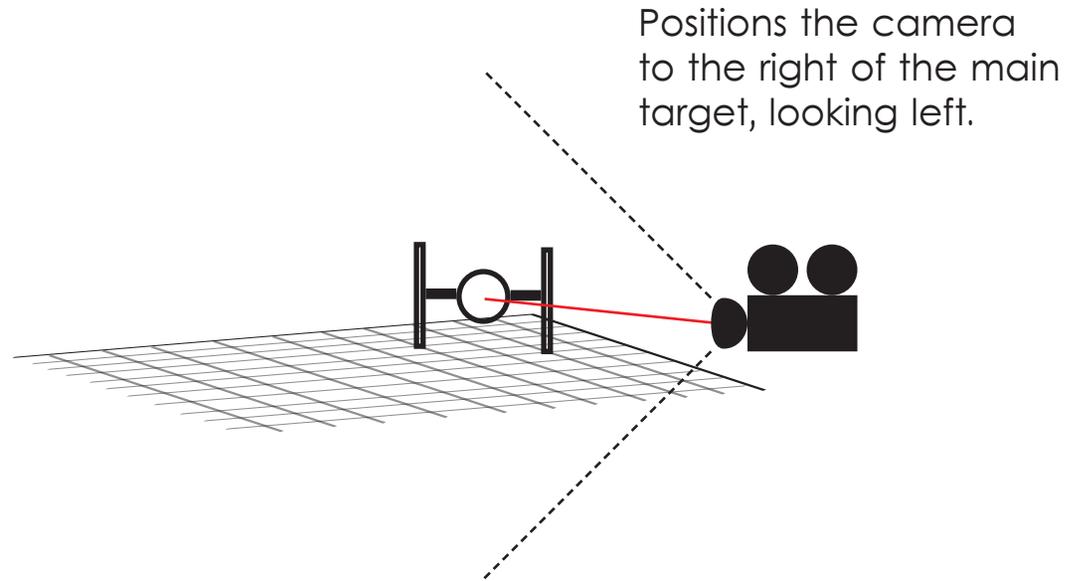
Positions the camera above the main target, looking down.

Camera Mode: Up

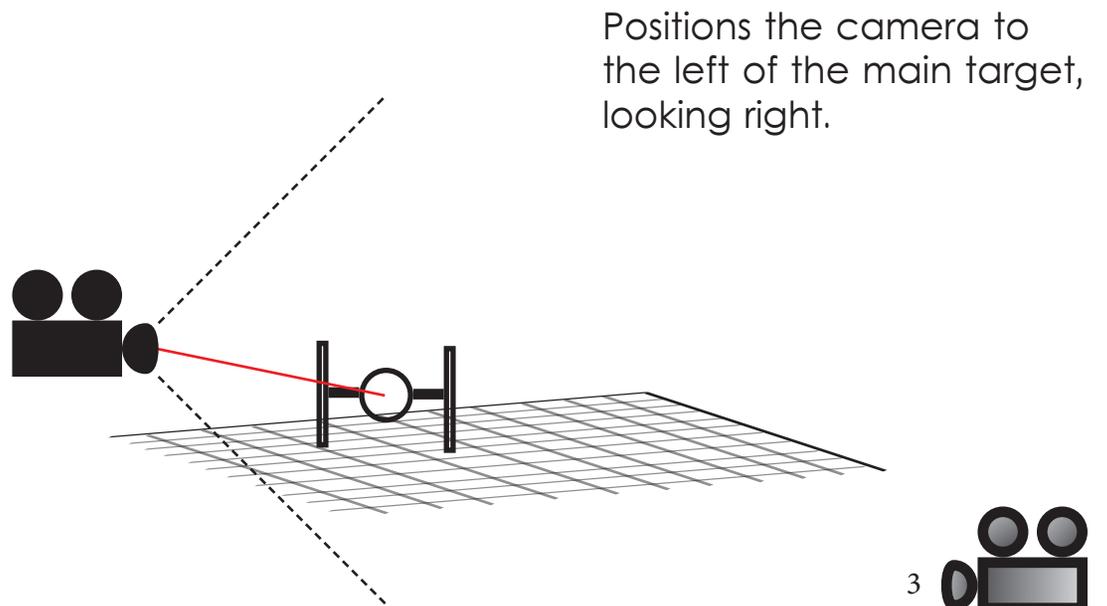


Positions the camera below the main target, looking up.

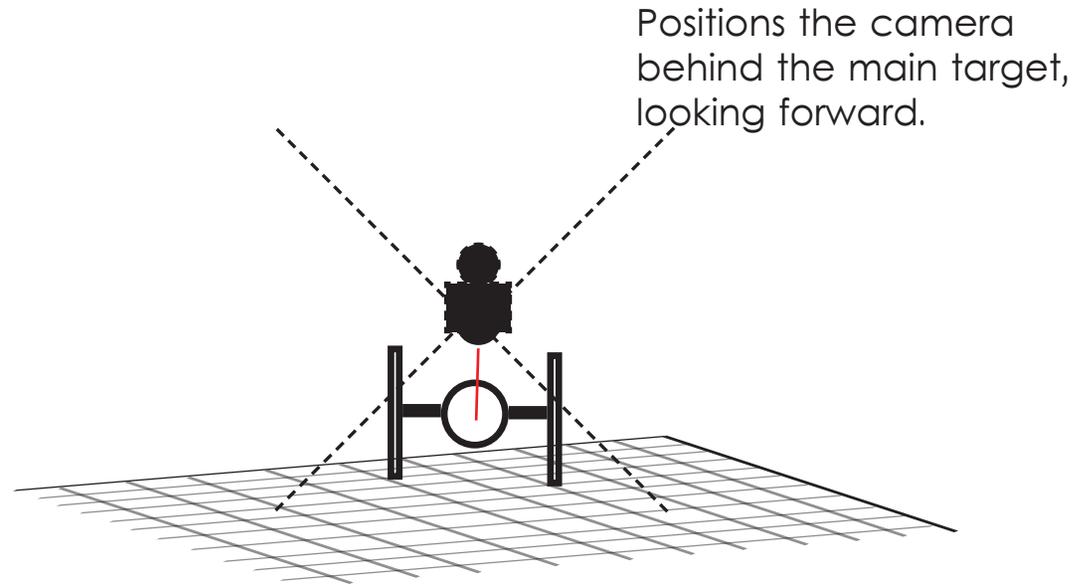
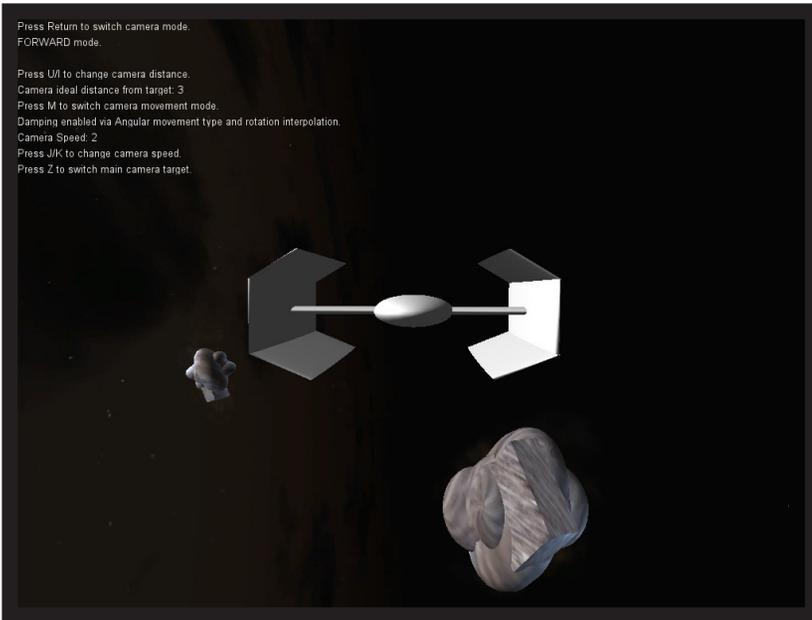
Camera Mode: Left



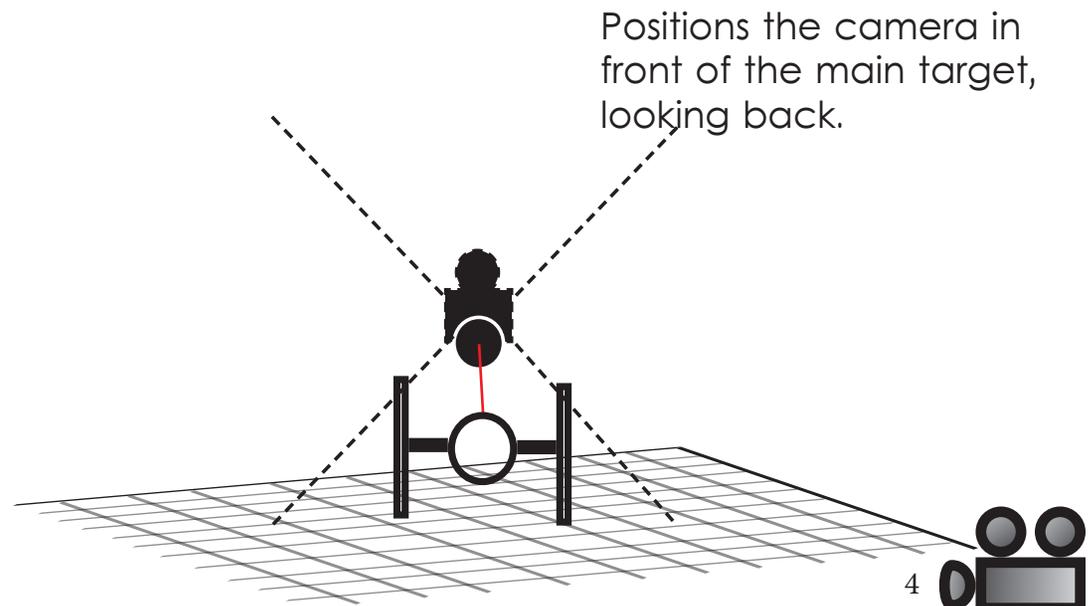
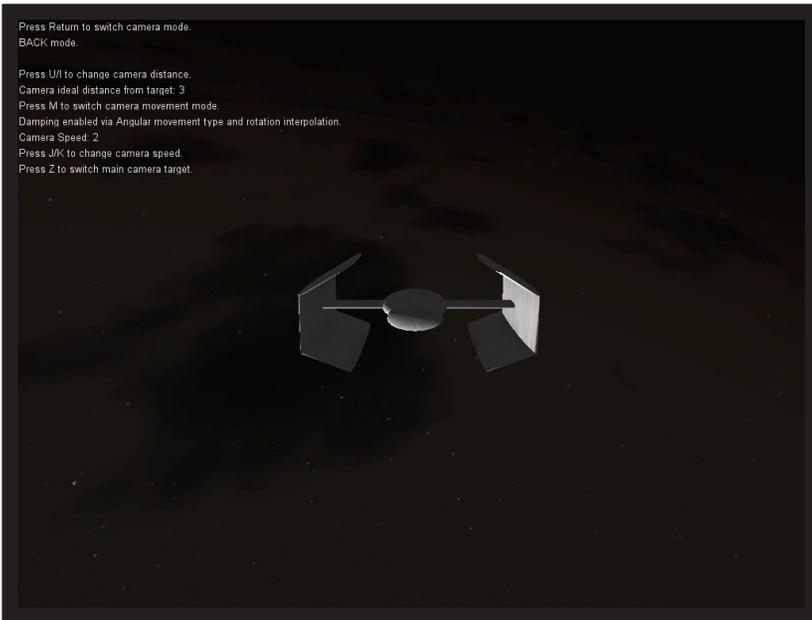
Camera Mode: Right



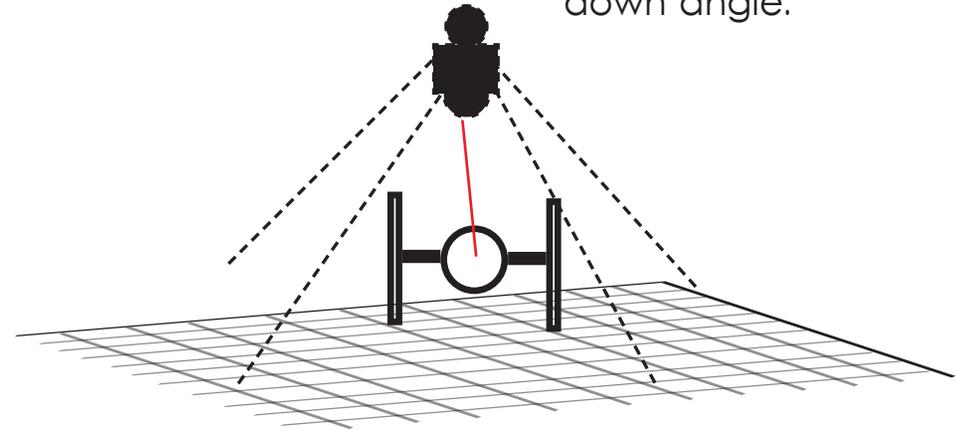
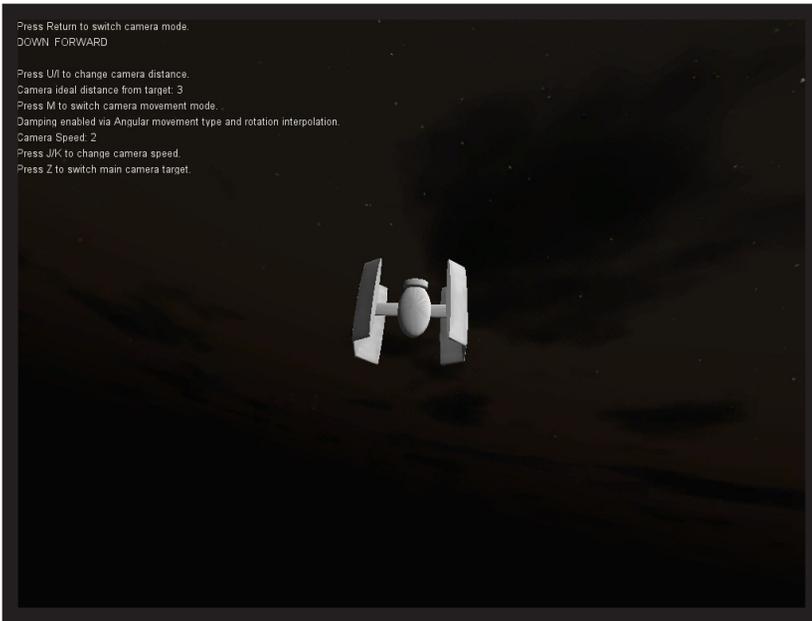
Camera Mode: Forward



Camera Mode: Back

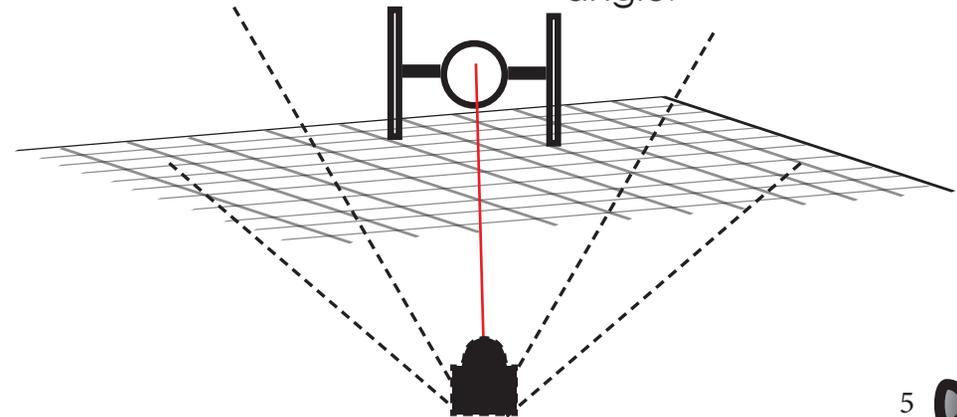
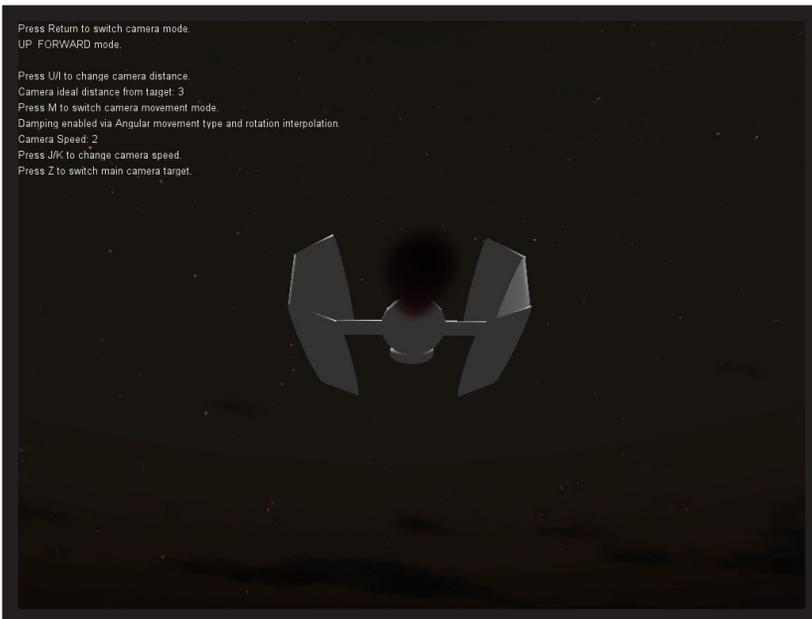


Camera Mode: Overhead



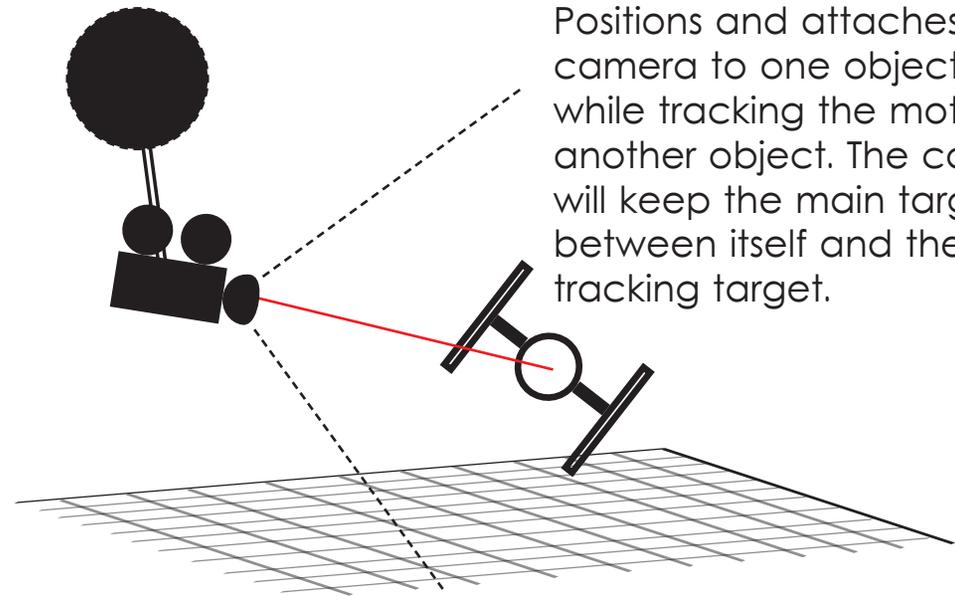
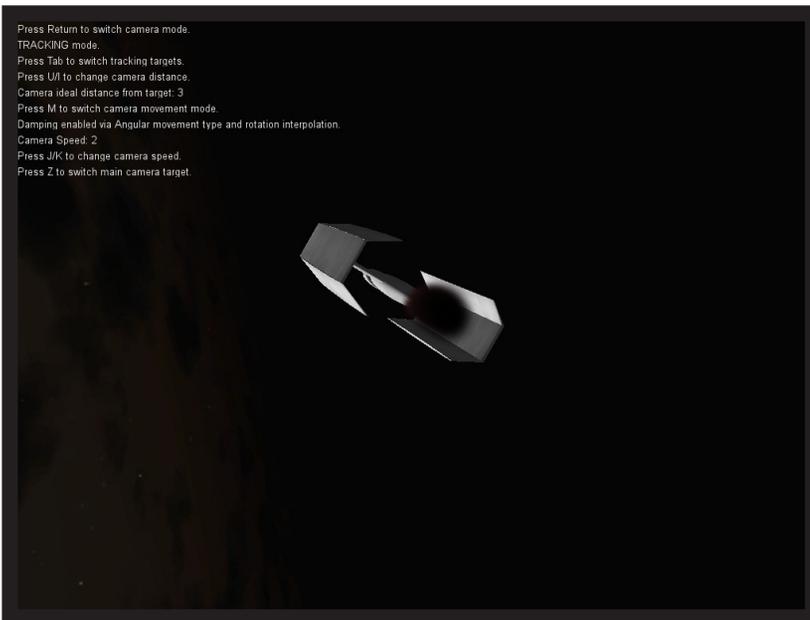
Positions the camera behind and above the main target, looking at a 45° forward/down angle.

Camera Mode: Underneath



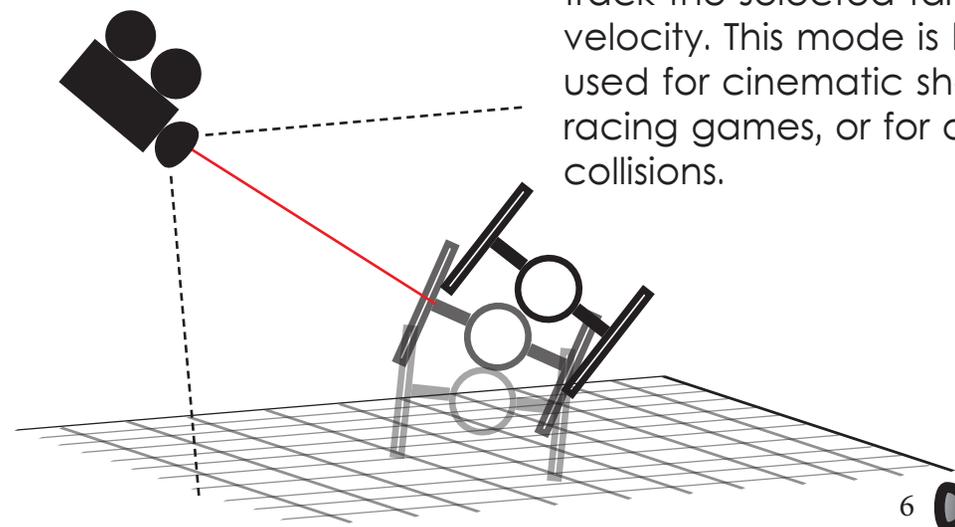
Positions the camera behind and below the main target, looking at a 45° forward/up angle.

Camera Mode: Target Tracking



Positions and attaches the camera to one object, while tracking the motion of another object. The camera will keep the main target between itself and the tracking target.

Camera Mode: Velocity Tracking



Positions the camera to track the selected target's velocity. This mode is best used for cinematic shots, racing games, or for object collisions.

How To: Using the Dynamic Camera

Attaching and Targeting the Dynamic Camera

To begin using your **Dynamic Camera**, you will need to attach the **Dynamic Camera script** to your camera object within Unity. Then you will need to target the camera by selecting a game object for the camera to track and follow.

- 1) Import the Nimbus Garden Dynamic Camera package into your workspace.
- 4) After setting up your game object's behavior, attach the **Dynamic Camera** script to your camera object by dragging and dropping the script onto the camera.
- 3) Next, set the **Main Target** option within the Dynamic Camera script to the game object you want to have the camera follow and track.
- 4) Under **Mode Settings**, you can adjust the angle at which the camera views the game object. These options include FORWARD, BACK, UP, DOWN, LEFT, RIGHT, OVERHEAD, BENEATH, TARGET TRACKING, VELOCITY TRACKING, and MANUAL.
NOTE: The Tracking Target option only applies to the camera behavior if Target Tracking or Velocity Tracking modes are enabled. If so, designate the Tracking Target in the same way you designated the Main Target.
NOTE: Your Tracking Target CANNOT be the same as your Main Target. Doing so will cause the camera mode to revert back to the FORWARD setting.
- 5) If the MANUAL camera mode is designated, you can adjust the camera's angle through the **Manual Angle** options. The camera angle will be automatically normalized while in use. Camera distance is still designated through the Ideal Distance option under Movement Settings.
- 6) Finally, choose whether you want the camera to keep the target within the camera frame or if the target is allowed to roam outside of the camera frame using the **Target In Frame** option. Enabling this option will place the camera in a 3rd person perspective behind the current game object in focus and will not allow the game object to leave the camera's frame. Disabling this option will place the camera in a 1st person perspective in front of the current game object and will allow the object to travel in and out of the camera's frame.

How To: Using the Dynamic Camera

Adjusting and Fine-Tuning Camera Behavior

After attaching and targeting your camera, you can begin fine tuning the distance your camera stays from an object, the amount of sway your camera is allowed to move, the speed of the camera, and the mode in which you want your camera to move while following its target.

1) First, establish how you want the camera to track your target by designating a pathing style within the **Movement Mode** option.

NOTE: When adjusting the Movement Mode, please note that...

INSTANT is a non-dampening movement mode, and will cause the camera to move to the ideal position instantly with no travel time footage shown.

LINEAR is a dampening movement mode that will move to the ideal position in a straight line.

ANGULAR is a dampening movement mode that will move to the ideal position on a curved line.

2) Next, set the distance you want your camera to be from the game object being targeted by adjusting the **Ideal Distance** option. You can also set the amount of camera sway by adjusting the **Lower Derivation** and the **Upper Derivation**, or by setting the **Minimum Distance** and **Maximum Distance**.

NOTE: The Lower/Upper Derivation and the Maximum/Minimum Distance options accomplish the same effect in two different ways. This is to help accommodate for different ways in visualizing camera movement. When adjusting these settings, it is advised that only one of the two sets are adjusted. The other set will be adjusted automatically to match.

3) Finally, set the **Move Speed** option to control the rate at which the camera will follow the game object being targeted. Then set the **Rotation Mode** and the **Rotation Speed** the camera will use to swivel and follow the target.

NOTE: When adjusting the Rotation Mode, please note that...

INSTANT will cause the camera to immediately look at the targeted object without using the rotational settings.

INTERPOLATED will cause the camera to look at the targeted object while adjusting its rotation according to the rotation speed specified.

Nimbus Garden

Dynamic Camera

Questions, comments, or further discussion can be posted at:

<http://nimbusgarden.com/forums/index.php>

