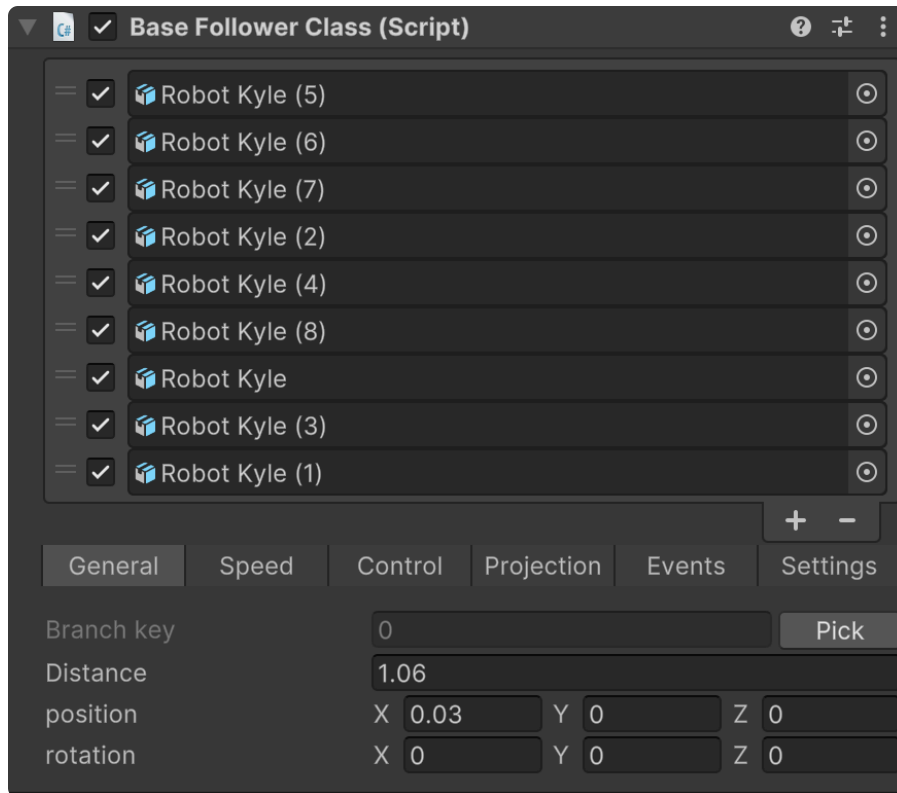# Complex Follower Inspector

The **Complex Follower** inspector allows you to configure and manage the properties of followers in the Spline Plus system. This modifier is similar to Base Followers but controls multiple unit followers simultaneously, making it ideal for scenarios like train-like behaviors. Below is a detailed explanation of the available tabs and fields within the inspector.

Complex Follower

All the properties bellow will affect the complex follower object.

Unit Followers List

- **Unit Followers Management:**
  The list displays all the unit followers controlled by the Complex Follower. You can add, remove, or reorder the unit followers using the **+** and **-** buttons. Each unit follower represents an individual GameObject that will follow the spline based on the settings configured in the inspector.

- **Branch Key:**
  Helps setting all the unit followers branch key at one go.

- **Step:**
  represents the spacing value between each unit follower.

Unit Follower

All the properties bellow will affect the selected unit follower from the unit followers list.
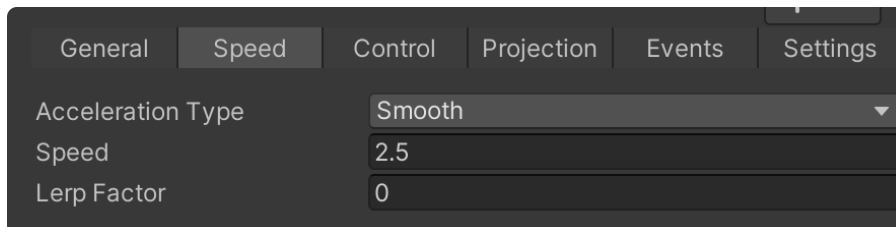
General Tab

General	Speed	Control	Projection	Events	Settings
Branch key	0				Pick
Distance	3.18				
position	X 0.03	Y 0		Z 0	
rotation	X 0	Y 0		Z 0	

This tab provides general settings related to the Complex Follower, including branch key, step, distance, position, and rotation.

- **Distance:**
  Indicates the distance of the Complex Follower along the spline.

- **Position:**
  Shows the Complex Follower's offset in the X, Y, and Z axes.

- **Rotation:**
  Displays the Complex Follower's local rotation in the X, Y, and Z axes.
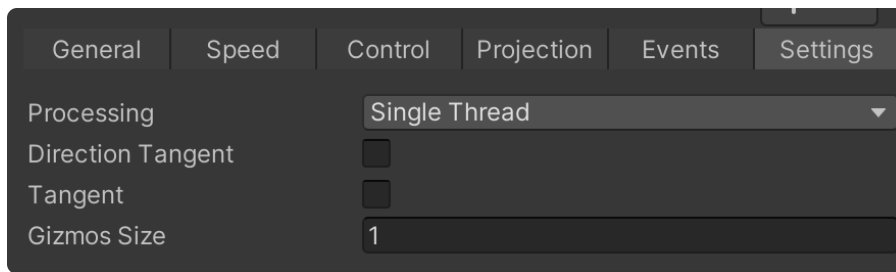
Speed Tab

General	Speed	Control	Projection	Events	Settings
Acceleration Type	Smooth				▼
Speed	2.5				
Lerp Factor	0				

Configure the speed settings for the Complex Follower.

- **Acceleration Type:**
  Select the type of acceleration for the Complex Follower. Options include:
  - **Immediate:** The Complex Follower accelerates to the target speed instantly.
  - **Smooth:** The Complex Follower accelerates to the target speed smoothly using the lerp factor, which represents how fast the transition to the target speed will be.
- **Speed:**
  Set the speed at which the Complex Follower moves along the spline.

- **Lerp Factor:**
  Define how fast the transition from the current speed to the target speed will be. A small value means the transition will be very slow.

Settings Tab

General	Speed	Control	Projection	Events	Settings

Processing	Single Thread ▼
Direction Tangent	☐
Tangent	☐
Gizmos Size	1

Access additional settings related to the Complex Follower's behavior and appearance in the scene.

- **Processing:**
  Choose between single-threaded or multithreaded processing for Complex Follower animations:

  - **Single Thread:** Processes the animation on a single thread.
  - **Multithread:** Allows for better performance by utilizing multiple threads.

- **Direction Tangent:**
  Enable this option to display the direction tangent of the Complex Follower in the scene view. Useful for debugging navigation at node intersections.
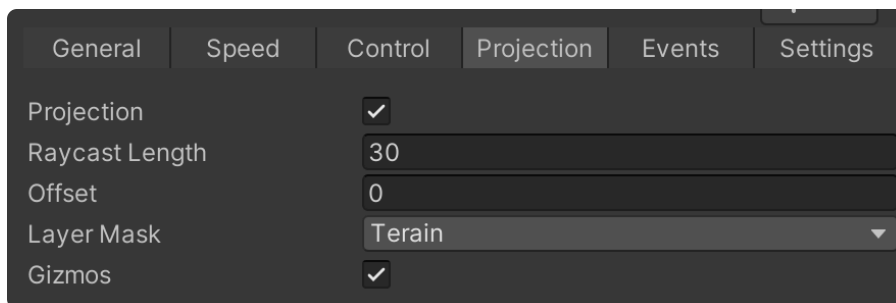
- **Tangent:**
  Enable this option to display the tangent of the Complex Follower in the scene view. Useful for debugging navigation at node intersections.

- **Gizmos Size:**
  Adjust the size of the gizmos used to visualize the Complex Follower's position and rotation in the scene view.

Projection Tab

General	Speed	Control	Projection	Events	Settings

Projection	✓
Raycast Length	30
Offset	0
Layer Mask	Terain ▼
Gizmos	✓

Access additional settings related to the projection of the complex follower in the scene. Please note that Projection.

- **Projection**:
  Enable or disable the projection feature. When enabled, the complex follower will project its unit followers positions onto a surface using raycast.

- **Raycast Length**:
  Set the length of the raycast used for projection. This determines how far the ray will extend from the unit follower's current position to find a surface to project onto.

- **Offset**:
  Adjust the offset of the unit follower's position relative to the surface it is projected onto. This can be useful for ensuring the unit follower hovers above the surface or maintains a specific distance from it.

- **Layer Mask**:
  Select the layer(s) that the raycast should interact with. This allows you to control which surfaces the complex follower can be projected onto, such as Terrain, Roads, or other layers defined in your scene.

- **Gizmos**:
  Toggle the display of gizmos related to projection in the scene view. When enabled, you can visualize the projection's raycast.

Events Tab

Manage and configure event triggers associated with the Complex Follower's movement along the spline. Note that the events system is part of the Spline Plus Animation package and is not included in the free Core package. Please visit the events (../Events/Introduction.html) section for detailed documentation.

Control Tab
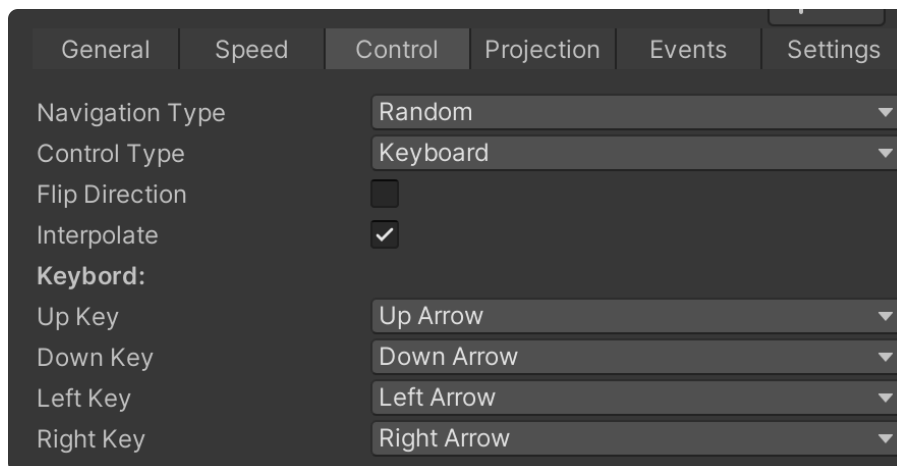
Adjust control parameters, such as the control type and interpolation factor.

- **Navigation Type:**
  Select the navigation type for intersections:

  - **Random:** The Complex Follower randomly chooses a path at intersections.
  - **Keyboard:** Navigation is controlled via keyboard input.

- **Control Type:**
  Choose the control type for the Complex Follower:

  - **Auto:** The Complex Follower is automatically controlled.
  - **Keyboard:** The Complex Follower is controlled using the keyboard.

- **Interpolate:**
  Enable this option to smoothly interpolate the Complex Follower's movement between spline vertices. This requires more processing than interpolation off but results in smoother animation.

- **Keyboard:**
  Configure the keys used for controlling the Complex Follower:

- **Up Key:** Set the key for moving the Complex Follower upwards.
- **Down Key:** Set the key for moving the Complex Follower downwards.
- **Left Key:** Set the key for moving the Complex Follower left.
- **Right Key:** Set the key for moving the Complex Follower right.