

# Waypoints Free

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## Description

Waypoints Free provides easy-to-use waypoint management and object-waypoint traversal with a minimal learning curve. This asset is best suited to prototype projects requiring basic waypoint traversal.

Quick Overview:

- Easy To Use
- Waypoint positions constrained on XYZ, XY, or XZ axes.
- Endpoint options: Stop, Loop, Ping-Pong
- Translation: Basic Lerp or Forward Translation
- Editable Movement Speed
- Editable LookAt Speed

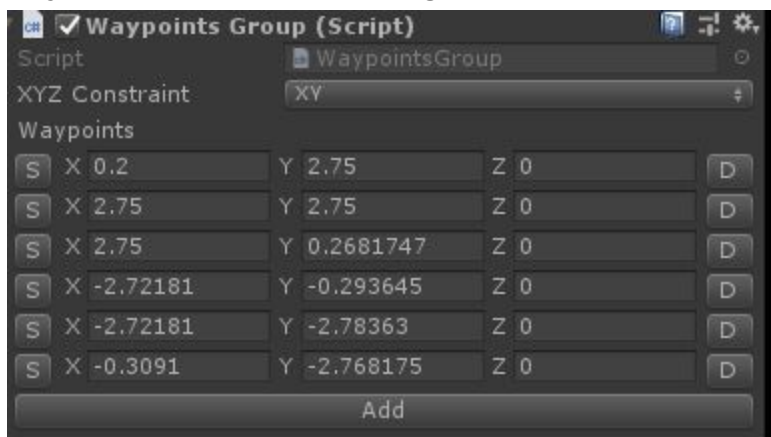
## Adding / Editing Waypoints

Waypoint creation, editing, and deletion all take place within the editor through the WaypointsGroup game-object component.

Workflow:

- Add a WaypointsGroup: GameObject -> WaypointsFree -> Create Waypoints Group
- Select newly created Waypoints group game object (In scene hierarchy)
- Press the ADD button several times to create waypoint entries.
- Set XYZ values or Drag waypoints in the Editor Scene View.
- **NOTE: If the MOVE TOOL is selected in Unity, it may be difficult to select a waypoint without actually grabbing the WaypointsGroup object. Current Workaround: Select a different tool (i.e.: Hand Tool)**

## WaypointsGroup Editor Settings



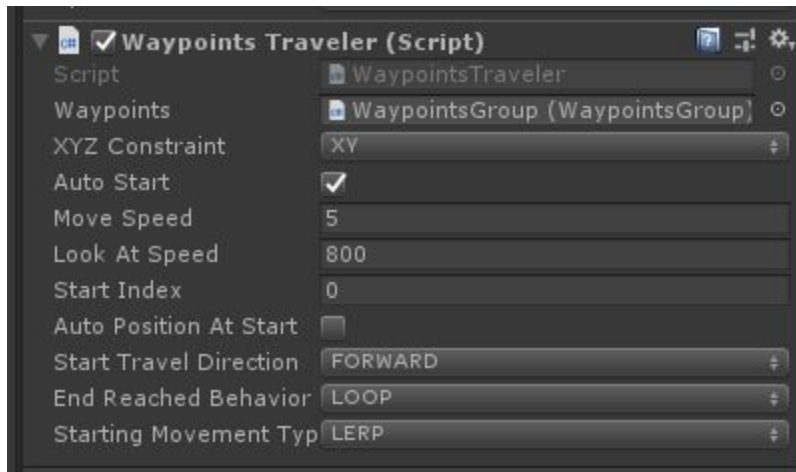
- XYZ Constraint: Constrain the waypoint position to the selected axes. XYZ, XY, or XZ

- Waypoints List: List of current waypoints. Press S to select, D to Delete; edit waypoint XYZ values directly.
- Add Button: Press to add waypoints

## Waypoint Travelers

In order for gameobjects to travel along the waypoint path, attach the WaypointTraveler script/component. Then, drag/drop the appropriate WaypointsGroup into the WaypointTraveler "Waypoints" attribute.

### WaypointTraveler Editor Settings



- Waypoints: The WaypointsGroup game object the traveler will follow
- Auto Start: When true, gameobject will immediately begin traversing the waypoints
- Move Speed: Speed of travel; experiment for best values based on waypoint configuration, camera sizing, etc. Valid values are 0 - MaxFloat
- Look At Speed: How quickly to rotate the object to "look at" the next waypoint. Valid values are 0 - MaxFloat. 0 = no rotation (only when Starting Movement Type is LERP)
- Start Index: The index of the Waypoint to begin movement
- Auto Position At Start: When true, the traveler will start traversing waypoints from the Start Index waypoint, otherwise, the traveler will move toward Start Index Waypoint at Move Speed.
- Start Travel Direction: Forward or Reverse -- direction of waypoint travel
- Endpoint Reached Behavior (action to take when the traveler reaches the 0 index or last index waypoint):
  - Stop : Stop traveling
  - Loop: Continue movement
  - Ping Pong: Turn around, and traverse the waypoints in reverse
- Starting Movement Type: Lerp or Forward\_Translate.
  - Lerp: Move from one way point to the next using the Vector3 Lerp method. Look At Speed set to 0 will not rotate the gameobject; > 0 the game object is rotated to Look At the waypoint over time
  - Forward\_Translate: Translates the game object using a "forward" vector (XYZ/XZ - forward, XY - up). Note: Forward\_Translate Look At Speed Values: 1-MaxFloat
- Via Code, start / Stop the traveler with Move( true | false)
  - Reset starting position / rotation with: ResetTraveler()

## Support

Send all support questions, bug reports, and general inquiries to: [support@runefire.com](mailto:support@runefire.com)

## Attributions

Attributions to authors:

2D/3D Assets from KenneyNL

## Change Log

Version	Date	Notes
1.0		Initial Release
1.0.1	06/2019	Updated to Unity 2019.1