User Guide

Gizmo

The move, rotate, scale gizmo features are activated by pressing the hotkeys ERT. Icons will be shown after you press the hotkeys, indicating the mode you are in. However, to activate the actual gizmo, you need to select an object that you want to transform first. Also note that scale gizmo is designed to be only used on objects that have the "obstacle designer shape" type.

To Activate & Use Gizmo

1. Enter gizmo mode directly

Press E to enter Move gizmo mode,

Select an object

A yellow highlight will be shown when you *hover* over the gizmo

Drag the arrows in three dimensions to move objects

Drag the squares at the bottom of the gizmo to move the objects in two dimensions at a time

or

Press R to enter Rotation gizmo mode,

Select an object

A yellow highlight will be shown when you *hover* over the gizmo

Drag the circles in three dimensions to rotate objects

Hold Left Ctrl and **drag** the gizmo to snap your rotation by 15° (the angle can be adjust easily in the hierarchy, see <u>RTGAPP</u> Section for more details)

or

Inside obstacle designer, Press T to enter Scale gizmo mode,

Select an object (you can only use scale gizmo for objects inside the obstacle designer category; if you click on other objects, it will disable gizmo)

A yellow highlight will be shown when you *hover* over the gizmo

Drag the arrows in three dimensions to scale objects

Drag the cube in the middle of the gizmo to scale objects in three dimensions at a time

2. In gizmo mode, *Toggle* between different modes by toggling between the different keys ERT

Note that you can only toggle to scale gizmo inside obstacle designer **AND** the object selected is an object inside the obstacle designer category.

To Exit Gizmo

1. Exit gizmo mode with the same keys

Press E to exit Move gizmo mode

Press R to exit Rotation gizmo mode

Inside obstacle designer, Press T to exit Scale gizmo mode

2. Exit gizmo with the universal X

Press X to exit all the modes, including move, rotate, scale gizmo.

3. Exit gizmo by clicking on the environment or the catalog

Clicking on the screen or UI will exit gizmo as well.

Ctrl Multi-select in Gizmo

Inside any gizmo modes, you can use the left control key to select/deselect multiple objects

Hold Left Ctrl and Click on an object to select/deselect

Multi-Selection Drag Box

The drag-selection box is activated by the hotkey Q. When the user presses Q, an icon will be shown to indicate they are in drag-select mode. After the user selects objects, they enter multiple objects selected mode, where the user can do a series of multi functions described below.

To Activate & Use drag-selection box

Press Q to enter drag-selection box mode

Drag and select objects

The selected objects will be highlighted

Click on any object selected to sticky move all the objects selected together

To Exit Drag-Selection Box or Multiple Objects Selected Mode

1. Exit gizmo mode with the same key

Press Q to exit both modes.

2. Exit gizmo with the universal X

Press X to exit all the modes.

3. Exit both modes by clicking on the catalog

Clicking on UI will exit gizmo

Note that you cannot exit multi-select mode by clicking on screen

Multi-Gizmo

Multi-gizmo is a combined feature that allows the user to use drag-selection box, ctrl-select/deselect and gizmo together.

To Activate multi-gizmo

1. Enter gizmo mode directly

In multiple objects selected mode,

Press E to enable multi-Move gizmo

The move gizmo will show up directly, and you can still use all the functionalities in single gizmo mode.

or

Press R to enable multi-Rotation gizmo

The rotation gizmo will show up directly, and you can still use all the functionalities in single gizmo mode.

or

Inside obstacle designer, Press T to enable multi-Scale

The scale gizmo will show up directly, and you can still use all the functionalities in single gizmo mode.

In multi-gizmo mode, *Toggle* between different modes by toggling between the different keys ERT

Note that you can only toggle to scale gizmo inside obstacle designer **AND** the object selected is an object inside the obstacle designer category.

To Exit Gizmo mode inside multi-gizmo

1. Exit gizmo mode with the same keys

Press E to exit Move gizmo mode

Press R to exit Rotation gizmo mode

Inside obstacle designer, Press T to exit Scale gizmo mode

To Exit multi-gizmo mode

1. Exit multi-gizmo with the same key

Press Q to exit multi-gizmo.

2. Exit multi-gizmo with the universal X

Press X to exit all the modes, including all the gizmo modes and multiple objects selected mode.

Exit multi-gizmo by clicking on the catalog

Clicking on the UI will exit multi-gizmo as well.

Note that you cannot exit multi-gizmo mode by clicking on screen

Ctrl Multi-select in multi-Gizmo

Inside multi-gizmo, you can use the left control key to select/deselect multiple objects.

Inside multi-gizmo mode,

Hold Left Ctrl and Click on an object to select/deselect

Multi-Deletion

Multi-deletion is a feature inside the multiple objects selected mode. You can delete all the multiple objects at the same time by pressing delete inside the multi-mode.

Press Delete inside multi-mode.

The multiple objects selected will have a red highlight indicating the objects that you selected and want to delete.

Click on one of the objects selected to delete all.

Multi-Duplication

Multi-duplication is a feature inside the multiple objects selected mode. You can duplicate multiple objects by pressing alt and clicking on one of the objects.

Press Alt and **click** on the multiple selected objects.

(The duplicated objects will be in the original objects position and the original objects will move with the mouse. This will be discussed in the known issue)

Multi-Mirror mode

Multi-mirror mode is a feature newly implemented inside the multiple objects selected mode. It still needs some testing so we put it inside a side branch (changeset 3627). You can mirror the objects' position by pressing M.

Press M when having multiple objects selected. This will move them to the mirrored position using The Center Lane as the mirror. Obstacles will have their internal scale flipped.

Press M + (left or Right)*Ctrl* when having multiple objects selected. This will move them to the mirrored position using the line going through the multiple selected object average center as the mirror, therefore making them rotate around their own position.

Obstacles will have their internal scale flipped.

UI minimize windows

To minimize the windows

Click on the arrow buttons on the side of the windows. The left arrow button controls all the windows on the left.

The right arrow button will minimize the ChunkID window and the Preview/Listen window. The obstacle designer window and the position/rotation/scale window will move together to the right when you minimize the right windows.

2. The minimize all windows button on the top right corner will minimize all the windows except the obstacle designer window.

To re-open the windows

Click on the arrow buttons on the side of the windows.