

3.2.5.8.2 Editors - 3D View - Transforms - Transform Controls - Precision

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Precision

Reference
Mode: <i>Object</i> and <i>Edit</i> modes
Hotkey: <code>Ctrl</code> and/or <code>Shift</code>

Description

Holding `Ctrl` during a transform operation (such as grab, rotate or scale) will toggle Transform Snapping. When the Snap Element is set to *Increment*, this allows the transformation to be performed in fixed amounts.

Holding `Shift` during a transform operation will transform the object at 1/10th the speed, allowing much finer control.

The magnitude of the transformation can be viewed in the 3D window header in the bottom left hand corner. Releasing `Ctrl` or `Shift` during the transformation will cause the movement to revert back to its normal mode of operation.

Note
The snapping behaviors described on this page only apply when Increment Snap is selected.

Read more about Window Headers

Usage

With hotkeys

Press `G`, `R` or `S` and then hold either `Ctrl`, `Shift` or `Ctrl-Shift`.

With the Transform Manipulator

Hold **Ctrl**, **Shift** or **Ctrl-Shift** and click on the appropriate manipulator handle. Then move the mouse in the desired direction. The reverse action will also work i.e. clicking the manipulator handle and then holding the shortcut key for precision control.

Read more about the Transform Manipulator

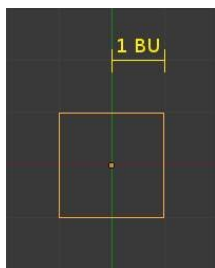
Tip

Combining with other controls

All of the precision controls detailed on the page can be combined with the *Axis Locking* controls and used with the different *Pivot Points*.

Holding CTRL

Grab/move transformations



1 Blender Unit - shown at the default zoom level.

For grab/move operations at the default zoom level, holding **Ctrl** will cause your selection to move by increments of 1 Blender Unit (1 BU) (i.e. between the two light grey lines). Zooming in enough to see the next set of grey lines will now cause **Ctrl** movements to occur by 1/10 of a BU. Zooming in further until the next set of grey lines becomes visible will cause movement to happen by 1/100 of a BU and so on until the zoom limit is reached. Zooming out will have the opposite effect and cause movement to happen by increments of 10, 100 etc BU.

Read more about Zooming

Rotation transformations

Holding **Ctrl** will cause rotations of 5 degrees.

Scale transformations

Holding **Ctrl** will cause size changes in increments of 0.1 BU.

Note

Snapping modes

Note that if you have a Snap Element option enabled, holding **Ctrl** will cause the selection to snap to the

nearest element.

Read more about Snapping

Holding SHIFT

Holding `Shift` during transformations allows for very fine control that does not rely on fixed increments. Rather, large movements of the mouse across the screen only result in small transformations of the selection.

Holding CTRL and SHIFT

Grab/move transformations

For grab/move operations at the default zoom level, holding `Ctrl-Shift` will cause your selection to move by increments of 1/10 Blender Units. Holding `Ctrl-Shift` at any zoom level will cause the transformation increments to always be 1/10 of the increment if you were only holding `Ctrl`.

Rotation transformations

Holding `Ctrl-Shift` will cause rotations of 1 degree.

Scale transformations

Holding `Ctrl-Shift` will cause size changes in 0.01 BU increments.

```
var DOCUMENTATION_OPTIONS = {
```

```
    URL_ROOT: '../..../..../',
```

```
    VERSION: '2.76',
```

```
    COLLAPSE_INDEX: false,
```

```
    FILE_SUFFIX: '.html',
```

```
    HAS_SOURCE: true
```

```
};
```

```
jQuery(function () {
```

```
    SphinxRtdTheme.StickyNav.enable();
```

```
});
```

