

# VCarve Pro Keyboard Shortcuts

## Quick Keys

Various values can be typed in while dragging out shapes. In most cases, the left mouse button must be pressed in order to input a value (i.e. Dragging to create a circle, dragging a vector to move it, or dragging one of the rotating / scaling points around a vector to rotate / scale it).

The exception to this is the polyline tool and the arc tool. Once the first point is entered the Quick Keys can be used without having to depress the left mouse key. Entering values defines the next end-point.

## Space

Pressing Space re-opens the last vector creation form you used. This is very useful when using other forms in between each shape / text / dimension you create.

## General Shortcut Keys

<b>Ctrl + A</b>	Select All vectors
<b>Esc</b>	Deselect all vectors
<b>Select Right to Left</b>	Selects all vectors inside and touching selection rectangle
<b>Select Left to Right</b>	Only selects vectors fully inside selection rectangle
<b>N</b>	Toggles between <a href="#">Selection</a> and <a href="#">Node Editing</a> modes
<b>Esc</b>	Switches to Selection Mode (exits Node editing or Transform mode)
<b>T</b>	Opens the Scale form for Transforming the vectors
<b>M</b>	Opens the Move form
<b>R</b>	Opens the Rotate form
<b>J</b>	Opens the Join Vectors form
<b>9</b>	Rotates selected object <b>45°</b> counterclockwise
<b>0</b>	Rotates selected object <b>45°</b> clockwise
<b>Esc</b>	Exits vector drawing and editing tools and closes the data entry form
<b>Right mouse click</b>	Exits vector drawing and editing tools and closes the data entry form
<b>Space-bar</b>	Re-opens the last vector creation form you used. This is very useful when using other forms in between each shape / text / dimension you create
<b>Z</b>	Zoom - click top left and bottom right corners to zoom
<b>Esc</b>	Exits zoom mode returning to Selection mode
<b>Ctrl + F</b>	Zoom to fit Job
<b>F</b>	Zoom to fit Material
<b>F6</b>	Zoom to fit Material
<b>F1</b>	Opens the Help File
<b>F2</b>	Opens the <b>2D</b> Drawing window
<b>F3</b>	Opens the <b>3D</b> Preview window
<b>F4</b>	Opens the Snap Settings form
<b>F5</b>	Refreshes the <b>2D</b> window
<b>F6</b>	Scales <b>2D</b> view to fit material
<b>F8</b>	Toggles between the Drawing and Modeling Tab
<b>F9</b>	Center selected object in view
<b>F10</b>	Opens the Alignment Tools form
<b>F11</b>	Toggle Drawing Tab on
<b>F12</b>	Toggle Toolpath Tab on
<b>Right Mouse Click</b>	Opens context sensitive menus

## General Shortcut Keys

<b>Ctrl + Z</b>	Edit Undo
<b>Ctrl + Y</b>	Edit Redo
<b>Ctrl + C</b>	Copy the selected vectors
<b>Ctrl + V</b>	Paste the selected vectors
<b>Ctrl and Drag</b>	Pastes a copy of the selected vectors each time the left mouse button is released
<b>Ctrl + X</b>	Cut the selected vectors
<b>Alt and Drag</b>	Moves the object either horizontally or vertically aligned with its original position
<b>Ctrl + Alt and Drag</b>	Creates a copy of the original object horizontally or vertically aligned to its original position
<b>Ctrl + N</b>	Create New file
<b>Ctrl + O</b>	Open an Existing file
<b>Ctrl + S</b>	Save file
<b>Ctrl + I</b>	Import file
<b>Page Up</b>	Vertically tiles the <b>2D</b> View and the <b>3D</b> View window so you can see them both simultaneous. Currently Selected window is on the left - typically best to select the <b>2D</b> View first when doing this
<b>Page Down</b>	Horizontally tiles the <b>2D</b> View and the <b>3D</b> View window so you can see them both simultaneous. Currently Selected window is at the top - typically best to select the <b>2D</b> View first when doing this

## (Quick Keys)

<b>Ctrl + M</b>	Opens Measure tool form
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## Tab Navigation

<b>F11</b>	Toggle Drawing Tab on
<b>F12</b>	Toggle Toolpath Tab on
<b>Ctrl + L</b>	Open the Layers Tab
<b>Ctrl + D</b>	Open the Drawing Tab
<b>F8</b>	Toggles between the Drawing and Modeling Tab

## Double Sided Job Setup

<b>1</b>	Toggle Top Side on
<b>2</b>	Toggle Bottom Side on
<b>=</b>	Toggle Multi-Sided View On

## Mirror

<b>H</b>	Mirror Horizontally
<b>Ctrl + H</b>	Create Mirror Copy Horizontally
<b>Shift + H</b>	Mirror Horizontally, around center of material
<b>Ctrl + Shift + H</b>	Create Mirror Copy Horizontally, around center of material
<b>V</b>	Mirror Vertically
<b>Ctrl + V</b>	Create Mirror Copy Vertically
<b>Shift + V</b>	Mirror Vertically, around center of material
<b>Ctrl + Shift + V</b>	Create Mirror Copy Vertically, around center of material

Alignment	
<b>F9</b>	Moves selected object to the center of the material
<b>F10</b>	Opens the Alignment Tools form

Groups	
<b>G</b>	Group the selected objects
<b>U</b>	Ungroup the selected objects to their original layers, sub-groups remain grouped
<b>Ctrl + U</b>	Ungroup the selected objects to the group's layer, sub-groups remain grouped
<b>Shift + U</b>	'Deep' ungroup the selected objects to their original layers. Sub-groups are also ungrouped
<b>Ctrl + Shift + U</b>	'Deep' ungroup the selected objects to the group's layer. Sub-groups are also ungrouped

Arrow Keys (Nudge selected vectors using the Arrow Keys)	
Hold <b>Ctrl</b>	Reduce the nudge distance
Hold <b>Shift</b>	Increase the nudge distance
Hold <b>Ctrl + Shift</b>	Nudge by the Fixed Nudge Distance which is specified in the Snap Settings ( <b>F4</b> )

Node Editing Keys (Available while in the node editing mode)	
<b>I</b>	Insert a Point
<b>D</b>	Delete Point / Span
<b>S</b>	Smooth / Unsmooth Point
<b>C</b>	Cut Vector opens the vector
<b>B</b>	Convert span to Bezier
<b>A</b>	Convert span to Arc
<b>L</b>	Convert span to Line
<b>P</b>	Makes the selected node the Start Point for machining
<b>X</b>	1. Displays a single node's <b>X</b> and <b>Y</b> Location properties
<b>X</b>	2. Changes the <b>X</b> coordinate position of selected nodes to the first one (when more than one selected )
<b>Y</b>	Changes the <b>Y</b> co-ordinate position of selected nodes to match the position of the first one (when more than one selected)
<b>H</b>	Enter horizontal mirror mode (press again to exit)
<b>V</b>	Enter vertical mirror mode (press again to exit)
<b>K</b>	Toggle Keep Bezier Tangency mode, which will fix the start and end directions of Bezier curves when they are being dragged directly
<b>J</b>	Join two selected open vectors (at two end nodes if also selected)
<b>Right mouse click</b>	Opens context sensitive menus

Node Quick Keys (Available while in the node editing mode) - (Drag Node when using Quick Keys)	
Value then Enter	Moves node from original position by that amount in direction of cursor. <b>Equivalent to: Value L</b>
[Value] then [,] then [Value] then [Enter]	Move the node by that amount relative to its current position. <b>Equivalent to: Value D Value W</b>
Value <b>X</b> then Value <b>Y</b>	Moves node to the absolute position <b>X</b> and <b>Y</b>

<b>Moving Object</b> (Drag Object when using Quick Keys)	
Value then Enter	Moves object the <b>L</b> Value from original position in direction of cursor. <b>Equivalent to: Value L</b>
[Value] then [,] then [Value] then [Enter]	Moves object relative to its position by <b>X</b> and <b>Y</b> <b>Equivalent to: Value D Value W</b>
Value then <b>X</b> then Value then <b>Y</b>	Moves object to the absolute position <b>X</b> and <b>Y</b>

<b>Rotating Object</b> (Drag rotation handle when using Quick Keys)	
Value then Enter	Rotate the selection by <b>R</b> degrees counterclockwise

<b>Scaling Objects</b> (Drag scaling handle when using Quick Keys)	
Value then Enter	<b>Default when dragging edge scale nodes only.</b> Set the width or height of the object to 'Value' (depending on which handle is being dragged). <b>Equivalent to: Value L</b>
[Value] then [,] then [Value] then [Enter]	<b>Default when dragging corner scale nodes only.</b> Set the width and height of the object to the given values <b>Equivalent to: Value D Value W</b>
Value <b>S</b>	Scale the object by a factor

<b>Polyline Tool</b>	<b>Once the first point is entered the Quick Keys can be used without having to depress the left mouse key. Entering values defines the next end-point.</b>
Value then Enter	Places next point <b>Value</b> away from the last point in the direction of cursor. <b>Equivalent to: Value L</b>
[Value] then [,] then [Value] then [Enter]	Place the next point offset by that amount relative to the last point's position. <b>Equivalent to: Value D Value W</b>
Value then <b>X</b> then Value then <b>Y</b>	Places the next point at position <b>X</b> and <b>Y</b>
Value then <b>A</b> then Value then <b>L</b>	Creates a line with an angle of <b>A°</b> and a length <b>L</b>

<b>Draw Circle</b> (Quick Keys can be used while creating (left mouse button depressed))	
Value then Enter	Create a circle with the given <b>radius</b> <b>Equivalent to: Value R</b>
Value then <b>D</b>	Create a circle of Diameter <b>D</b>

<b>Draw Ellipse</b> (Quick Keys can be used while creating (left mouse button depressed))	
Value then Enter	Create a circle with the given <b>diameter</b> . <b>Equivalent to: Value L</b>
[Value] then [,] then [Value] then [Enter]	Create an ellipse with width and height. <b>Equivalent to: Value W Value H</b>
Value then <b>X</b>	Create an ellipse with width <b>X</b> and use the current height
Value then <b>Y</b>	Create an ellipse with height <b>Y</b> and use the current width

<b>Draw Rectangle</b> (Quick Keys can be used while creating (left mouse button depressed))	
Value then Enter	Create a square with the given <b>side length</b> <b>Equivalent to: Value L</b>
[Value] then [,] then [Value] then [Enter]	Create a rectangle with given width and height <b>Equivalent to: Value W Value H</b>
Value then <b>X</b>	Create a rectangle with width <b>X</b> and use the current height
Value then <b>Y</b>	Create a rectangle with height <b>Y</b> and use the current width
Value then <b>R</b> then Value then <b>X</b>	Create a rectangle with a radius <b>R</b> and width <b>X</b> , using current height
Value then <b>R</b> then Value then <b>Y</b>	Create a rectangle with a radius <b>R</b> and height <b>Y</b> , using current width
Value then <b>W</b> then Value then <b>H</b>	Create a rectangle with width <b>W</b> and height <b>H</b>
[Value] then [,] then [Value] then [Enter]	Create a rectangle with <b>width</b> and <b>height</b>

<b>Draw Polygon</b> (Quick Keys can be used while creating (left mouse button depressed))	
Value then Enter	Create a polygon inscribed on circle with the given <b>radius</b> . <b>Equivalent to: Value R</b>
Value then <b>D</b>	Creates a Polygon with diameter <b>D</b>
Value then <b>S</b> then Value then <b>R</b>	Create a polygon with number of sides <b>S</b> and radius <b>R</b>
Value then <b>S</b> then Value then <b>D</b>	Create a polygon with number of sides <b>S</b> and diameter <b>D</b>

<b>Draw Star</b> (Quick Keys can be used while creating (left mouse button depressed))	
Value then Enter	Create a star with the given <b>radius</b> <b>Equivalent to: Value R</b>
Value then <b>D</b>	Create a star with diameter <b>D</b>
Value then <b>P</b> then Value then <b>R</b>	Create a star with number of points <b>P</b> and radius <b>R</b>
Value then <b>P</b> then Value then <b>D</b>	Create a star with number of points <b>P</b> and diameter <b>D</b>
Value then <b>P</b> then Value I then Value <b>R</b>	Create a star with number of points <b>P</b> , Internal Radius % <b>I</b> and radius <b>R</b>
Value then <b>P</b> then Value I then Value <b>D</b>	Create a star with number of points <b>P</b> , Internal Radius % <b>I</b> and diameter <b>D</b>