

Quick guide to the Photoshop pen tools

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In the tables "point" by itself means *anchor point*.

Pen tool (Auto Add/Delete OFF)				
	Not on curve	On selected curve	On point on selected curve	On terminal point on curve
Normal	1st point or further on new curve; <u>drag out control points</u> . [See note 1]			Drag out control point for upcoming segment.
Ctrl	Deselect curve(s) or draw marquee to select points.	Select curve; move selected points; move segment	Move point or <u>control point(s)</u>	Move point or <u>control point(s)</u>
Alt	Affects control point operations; see Note 2			
Alt (only)			Drag out control points/collapse control points Move one control point	Drag out control point for upcoming segment/collapse that control point Move one control point
Shift	(With control point actions) Constrain angle of direction lines to 45° increments			

Pen tool (Auto Add/Delete ON) [Cells different from above shaded]				
	Not on curve	On selected curve	On point on selected curve	On terminal point on curve
Normal	1st point or further on new curve; drag out control points [See note 1]	Add point, drag out control points	Delete point	Drag out control point for upcoming segment.
Ctrl	Deselect curve(s) or draw marquee to select points.	Select curve; move selected points; move segment	Move point or control point(s)	Move point or control point(s)
Alt	Affects control point operations; see Note 2			
Alt (only)			Drag out control points/collapse control points Move one control point	Drag out control point for upcoming segment/collapse that control point Move one control point
Shift	(With control point actions) Constrain angle of direction lines to 45° increments			

The function in bold is the “named function” of the tool.

Freeform pen tool	
Normal	Draw freeform curve
Shift	Not on curve: deselect curve(s); draw marquee to select points. On curve: select curve.

Add anchor point tool			
	Not on curve	On curve	On point (on selected curve)
Normal	Deselect curve(s); draw marquee to select points.	Add point; drag to move its control points	Move point or control point
Ctrl	Deselect curve(s); draw marquee to select points.	Select curve; move selected points; move segment	Move point or control point
Shift	(With control point actions) Constrain angle of direction lines to 45° increments		
Alt	Affects control point operations; see Note 2		
Alt (only)		Select all points; drag duplicate of curve	Delete point

Delete anchor point tool			
	Not on curve	On curve	On point (on selected curve)
Normal	Deselect curve(s); draw marquee to select points.	Select curve; move selected points; move segment	Delete point Move control point
Ctrl	Deselect curve(s); draw marquee to select points.	Select curve; move selected points; move segment	Move point or control point
Shift	(With control point actions) Constrain angle of direction lines to 45° increments		
Alt	Affects control point operations; see Note 2		
Alt (only)		Add point, drag to move control points	Select curve; drag duplicate of curve

Convert point tool			
	Not on curve	On curve	On point (on selected curve)
Normal	Deselect curve(s); draw marquee to select points.	Select curve; move segment	Drag out both control points/ collapse them (On control point) Move control point
Ctrl	Deselect curve(s); draw marquee to select points.	Select curve; move segment	Move point or control point
Shift	(With other relevant actions) Constrain angle of direction lines to 45° increments		
Alt	Affects control point operations; see Note 2		
Alt (only)		Select curve; drag duplicate of curve	Drag out downstream control point/ collapse it (On control point) Move control point

Note 1: If a terminal point of the existing curve is selected and has an “upcoming segment” control point, a click (anywhere) will deposit a further point on this curve.

Note 2: For control point drag out or move, Alt controls whether, when we move one control point, the other one moves as well, in a slightly complicated way, thus:

- If the two control points are still in their initial state (direction lines coupled in-line), so that if we move one control point the other one swings to follow, then Alt allows us to move one control point without moving the other one. Once we do that and release the mouse button, the two stay decoupled.
- If the two control points are decoupled, Alt will couple them while we move one (so the other swings to follow); if we press Alt after a move has begun, the coupling is applied retroactively: the second point jumps to match the relative angles of the two direction lines when the move was begun.

None of this applies to control point operations that require Alt to make.

If the tool is not on a control point (or in a situation to drag them out), the above is not pertinent, and any other effect of Alt on the function of the tool prevails.