












































Introduction to AutoCAD Commands






Command	Keystroke	Icon	Menu	Result
Line	Line / L		<u>D</u> raw > <u>L</u> ine	Draw a straight line segment from one point to the next
Circle	Circle / C		<u>D</u> raw > <u>C</u> ircle > Center, <u>R</u> adius	Draws a circle based on a center point and radius.
Erase	Erase / E		<u>M</u> odify > <u>E</u> rase	Erases an object.
Print	Print / Plot Cntl+P		<u>F</u> ile > <u>P</u> rint	Enables the Print/Plot Configuration Dialog Box
Undo	U (Don't use 'Undo' for now)		<u>E</u> dit > <u>U</u> ndo	Undoes the last command.
Rectangle	RECTANGLE / REC		<u>D</u> raw > Rectangle	Draws a rectangle after you enter one corner and then the second.
Multi Lines	MLINE / ML	No Icon	<u>D</u> raw > <u>M</u> ultiline	Draw parallel lines based on the parameters you define.
Trim	TRIM / TR		<u>M</u> odify > <u>T</u> rim	Trims objects to a selected cutting edge.
Extend	EXTEND / EX		<u>M</u> odify > <u>E</u> xtend	Extends objects to a selected boundary edge.
Offset	OFFSET / O		<u>M</u> odify > <u>O</u> ffset	Offsets an object (parallel) by a set distance.
Object Snaps	OSNAP / OS / F3	CLICK 	<u>T</u> ools > Object <u>S</u> nap Settings	Brings up the OSNAP dialog box.


ICON	SETTING		ICON	SETTING
	Endpoint			Perpendicular
	Midpoint			Tangent
	Center			Nearest
	Node			Apparent Intersection
	Quadrant			Parallel
	Intersection			None
	Extension			Osnap Setting
	Insertion Point			Temporary Tracking Point
				Snap From



RIGHT TO LEFT	CROSSING SELECTION	GREEN (with a dotted outline)	SELECTIONS ANY OBJECT THAT EITHER CROSSES THE BOUNDARY OR IS INSIDE IT
LEFT TO RIGHT	WINDOW SELECTION	BLUE	SELECTIONS ON OBJECTS THAT ARE COMPLETELY WITHIN THE BOX

Command	Keystroke	Icon	Menu	Result
Move	Move / M		<u>M</u> odify > M <u>o</u> ve	Moves an object or objects
Copy	Copy / CP		<u>M</u> odify > C <u>o</u> py	Copies object(s) once or multiple times
Stretch	Stretch / S		<u>M</u> odify > S <u>t</u> retch	Stretches an object after you have selected a portion of it
Mirror	Mirror / MI		<u>M</u> odify > M <u>i</u> rror	Creates a mirror image of an object or selection set
Rotate	Rotate / RO		<u>M</u> odify > R <u>o</u> tate	Rotates objects to a certain angle
Fillet	Fillet / F		<u>M</u> odify > F <u>i</u> llet	Creates a round corner between two lines
Chamfer	Chamfer / CHA		<u>M</u> odify > C <u>h</u> amfer	Creates an angled corner between two lines
Array	Array / AR		<u>M</u> odify > A <u>r</u> ray	Creates a repeating pattern of the selected objects
Layer	Layer / LA		<u>F</u> ormat > L <u>a</u> yer	Starts the Layer and Linetype property dialog box
Text	Text	No Icon	<u>D</u> raw > S <u>i</u> ngle Line T <u>e</u> xt	Creates a single line of text
Dimension	Dim	Many	<u>D</u> imension > (<i>pick one</i>)	Dimensions previously drawn objects
Scale	Scale / SC		<u>M</u> odify > S <u>c</u> ale	Proportionately resizes (or scales) objects

COMMAND OPTION	ICON	DESCRIPTION
Zoom <u>A</u> ll		This option causes AutoCAD to display the whole drawing as far as its drawing <u>limits</u> or drawing <u>extents</u> (whichever is the greater of the two).
Zoom <u>C</u> enter		This option requires two things: a point that is to be the <u>center</u> of the new display and a value to be its <u>new height in drawing units</u> . The existing height is the default for the new height to allow for panning across the drawing. If the new height value is followed by "X" (eg. 2x), then it is taken as a magnification factor relative to the current height. If followed by "XP", then it is taken as a scale factor relative to paper space and can be used for scaling the contents of paper space viewports.
Zoom <u>D</u> ynamic		This is a very useful ZOOM option once it is understood. It permits very quick movement around the drawing. Once selected, this option redraws the graphics area of the screen and displays two rectangles. The larger box shows the extents of the current drawing. The smaller box shows the current view with an "X" in the middle. This moves with the mouse. This view box should be positioned so that its lower left corner is at the lower left corner of the view required. By pressing the left button on the mouse, the "X" is replaced by an ">" pointing to the right side of the view box. This allows you to change the magnification. As the mouse is moved, the view box shrinks and expands so that the size of the required view can be set. The left mouse button toggles between PAN "X" and ZOOM ">" mode so that fine adjustments can be achieved. When the view required has been selected, press <ENTER> or right click to cause AutoCAD to display it.
Zoom <u>E</u> xtents		This option will display all the graphics that are contained in the drawing (referred to as the <i>drawing extents</i>) with the largest image possible.
Zoom <u>P</u> revious		This option restores the displayed view prior to the current one. For the purpose of this option, up to 10 views are saved so that the last ten views can be recalled. This option includes every time you use the scroll bar, which is one reason to avoid the scroll bars for panning a lot in your drawing.
Zoom <u>S</u> cale		This is a 'hidden' default option. You do <u>not</u> have to type "S" to choose this option. It simply requires the entry of a number that represents a magnification factor. Note that the factor is applied to the entire drawing (as defined by the drawing's limits). Numbers less than 1 will reduce the displayed size of the drawing, while numbers greater than 1 will enlarge it. If "X" is inserted after the number (eg. 0.8x) then the factor is applied to <i>the current view</i> . If "XP" is inserted after the scale factor, then the view is scaled relative to paper space. This is useful for zooming a view within a paper space viewport to a specific scale, for example, "1/48XP" will produce a view of model space at a scale of 1/4" = 1' relative to paper space.

COMMAND OPTION	ICON	DESCRIPTION
<u>Z</u> oom <u>W</u> indow		This option (also a 'hidden' default) prompts the user to pick two corners of a box on the existing view in order to enlarge that area to fill the display.
<u>Z</u> oom <u>R</u> ealtime		<p>Zoom Realtime provides interactive zooming capability. Pressing <ENTER> (after entering zoom) on the command line automatically places you in Realtime mode. Hold the left mouse button down at the midpoint of the drawing and move the cursor vertically to the top (positive direction) of the window to zoom in up to 100% (2x magnification). Hold the left mouse button down at the midpoint of the drawing and move the cursor vertically to the bottom (negative direction) of the window to zoom out to 100% (.5x magnification). <i>You cannot zoom out beyond the extents of the current view.</i></p> <p>When you release the pick button, zooming stops. You can release the pick button, move the cursor to another location in the drawing, and then press the pick button again and continue zooming from that location. To exit Realtime Zoom mode, press <ENTER> or (ESC).</p>
Aerial View command: DSVIEWER	None	Aerial View is a zooming tool that displays a view of the drawing in a separate window so that you can quickly move to that area. If you keep the Aerial View window open as you work, you can zoom and pan without choosing a menu option or entering a command. You can change the view by creating a new view box in the Aerial View window. To zoom in to the drawing, make the view box smaller by left clicking a rectangle. To zoom out of the drawing, make the view box larger. As you zoom in or out of the drawing, a real-time view of the current zoom location is displayed in the graphics area. The screenshot shows how the view box looks. Right click in the box and you can move the box to where you want to zoom to.
<u>Z</u> oom <u>O</u> bject		This option asks you to select an object or objects, then press <ENTER> and the screen will zoom to those objects only. This is great for when you want to work on object.
<u>Z</u> oom <u>I</u> n		Clicking this icon will zoom in to the drawing by about 50%. This option is only available as an icon and cannot be invoked by the command line.
<u>Z</u> oom <u>O</u> ut		Similar to 'Zoom In' - this icon will zoom out of your drawing and allow you to see about 50% more of your drawing space.
Mouse Scroll	-	If you have a scrolling wheel on your mouse, you can use it to zoom in and out of your drawing. Scroll towards you to zoom out and away from you to zoom in. You have the option to change the amount of zoom per wheel click with the Zoomfactor system variable . Keep in mind that you will zoom in and out using your mouse location as a 'centre point'.

COMMAND OPTION	ICON	DESCRIPTION
PAN		Panning allows you to quickly move around the drawing area at the same magnification you currently have set. Type in PAN (or P) <ENTER> and a hand will appear on the screen. Left click and hold to move around your drawing.

Command	Keystroke	Icon	Menu	Result
Boundary Hatch	Bhatch / H		Draw > Hatch	Covers an area with a predefined pattern
Hatch Edit	HatchEdit / HE		Modify > Object > Hatch...	Edits an existing Hatch

