

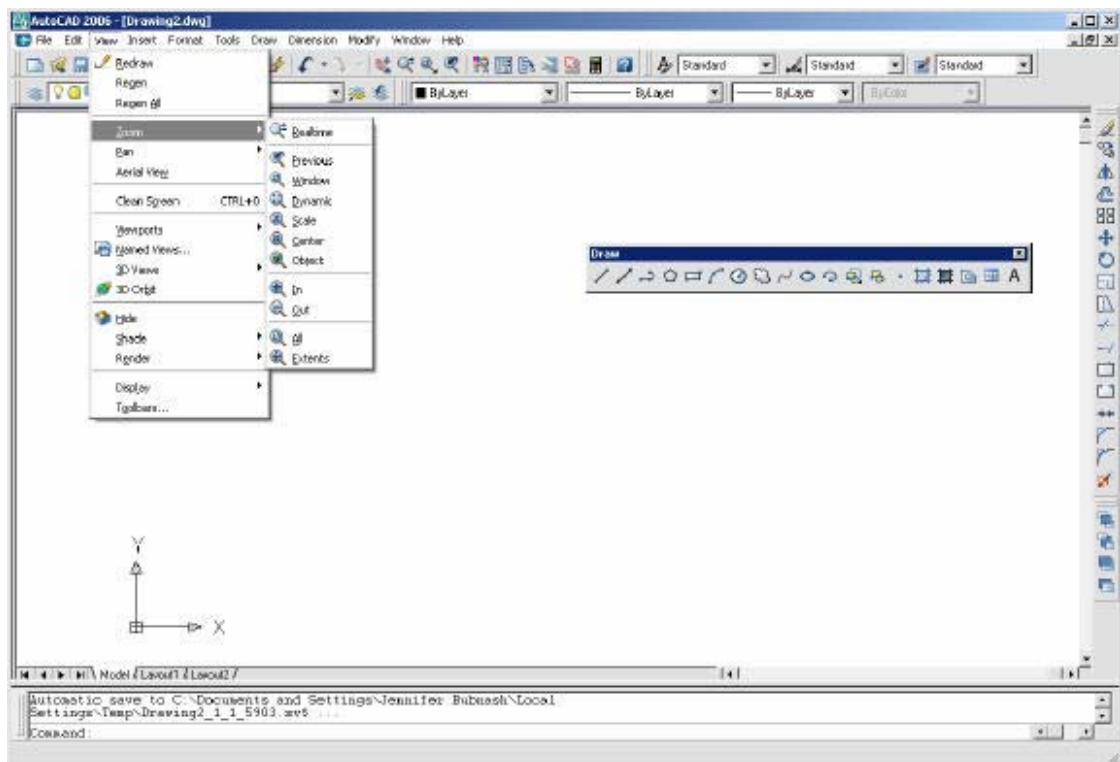
AutoCAD 2D Tutorial

Chapter 1 **Introduction to AutoCAD**

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Browsing the AutoCAD Interface

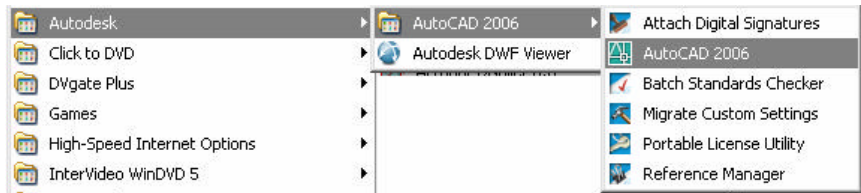
When you first launch AutoCAD, you will see the main body of the screen, known as the Graphics Screen. This is where a drawing will be displayed and edited. The rest of the AutoCAD interface is how you access and enter AutoCAD commands and change settings in the AutoCAD drawing.



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1.1 Launching AutoCAD

1. **Choose** Start from the Windows program manager.
2. **Choose** Programs, Autodesk ,AutoCAD 2004.
3. **Click** the AutoCAD 2004 for Windows icon.



4. **Choose** the **AutoCAD 2004 icon** from the desktop.

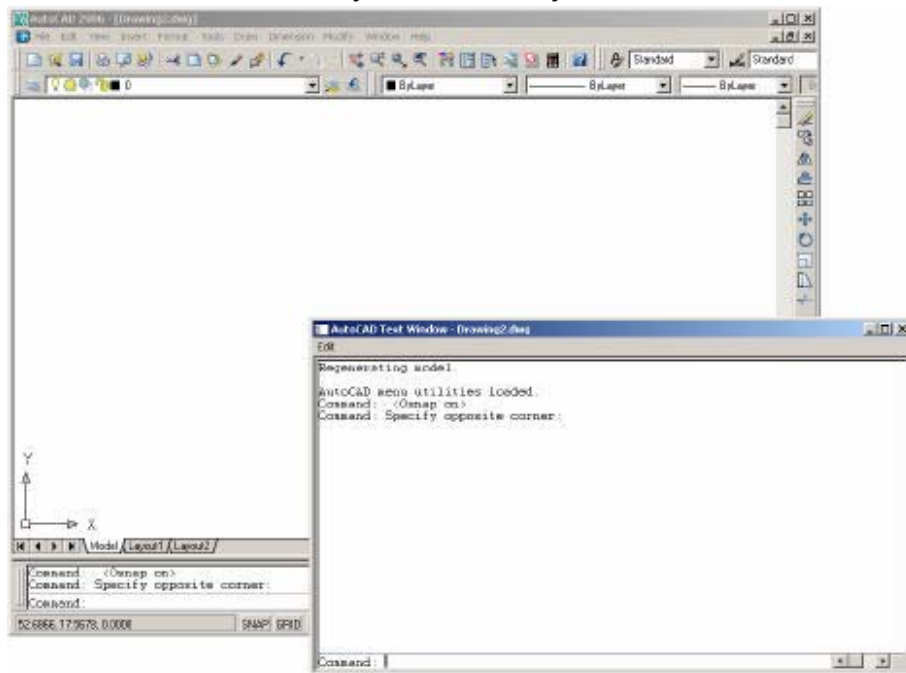


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1.2 Text and Graphics Screens

The graphics screen and the text screen are two different screens available in the drawing editor.

1. **Press** Function key **F2** on the keyboard.



TIPS:

Be sure the Model Tab is highlighted at the bottom of the drawing window. "Layouts" will be covered in a later session.

The Cursor must be in the drawing window in order to select objects.

Maximize the AutoCAD windows to be full screen. This will make the drawings bigger and easier to read.

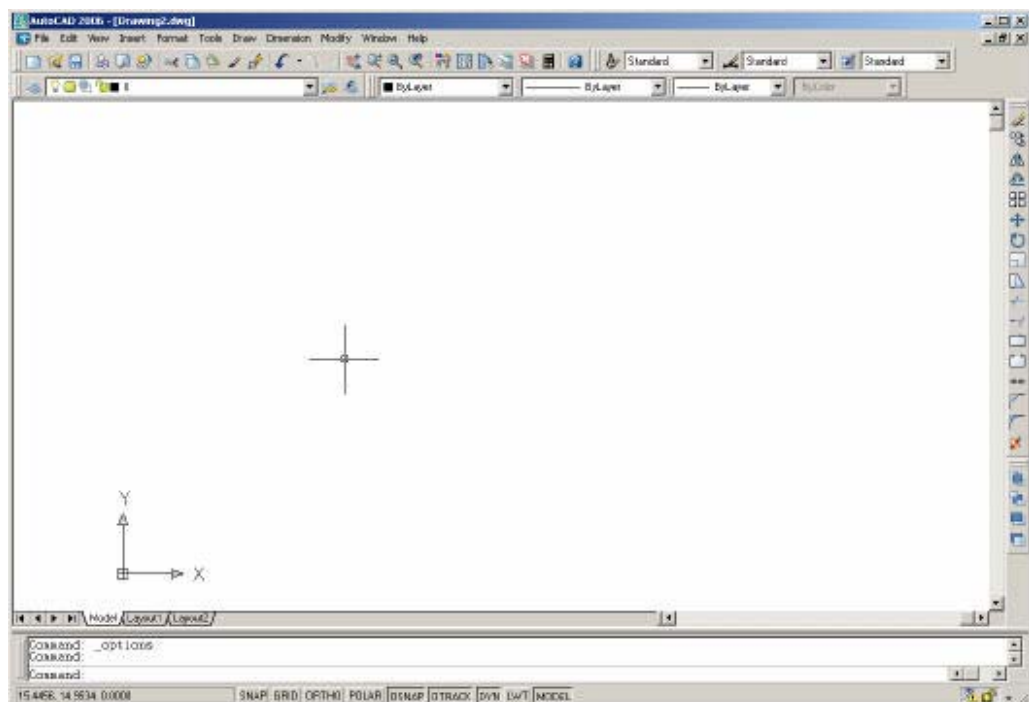
Use ALT + TAB to move between Windows applications.

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1.3 Cursor

Controls the size of the crosshair. The allowable range is from 1 to 100 percent of the total screen. At 100% the ends of the crosshair are never visible. When the size is decreased to 99% or below, the crosshairs have a finite size, and the crosshairs' ends are visible when moved to the edge of the graphics area. The default size is 5%.

1. **Choose** Tools, Options...
2. **Click** the Display TAB.
3. **Drag** the slider bar in the lower left corner of the dialog to set the cursor size.



1.4 Canceling a Command

1. Press the **ESCAPE (ESC)** key on the keyboard.



TIP: Pressing ESC twice clears nested commands.

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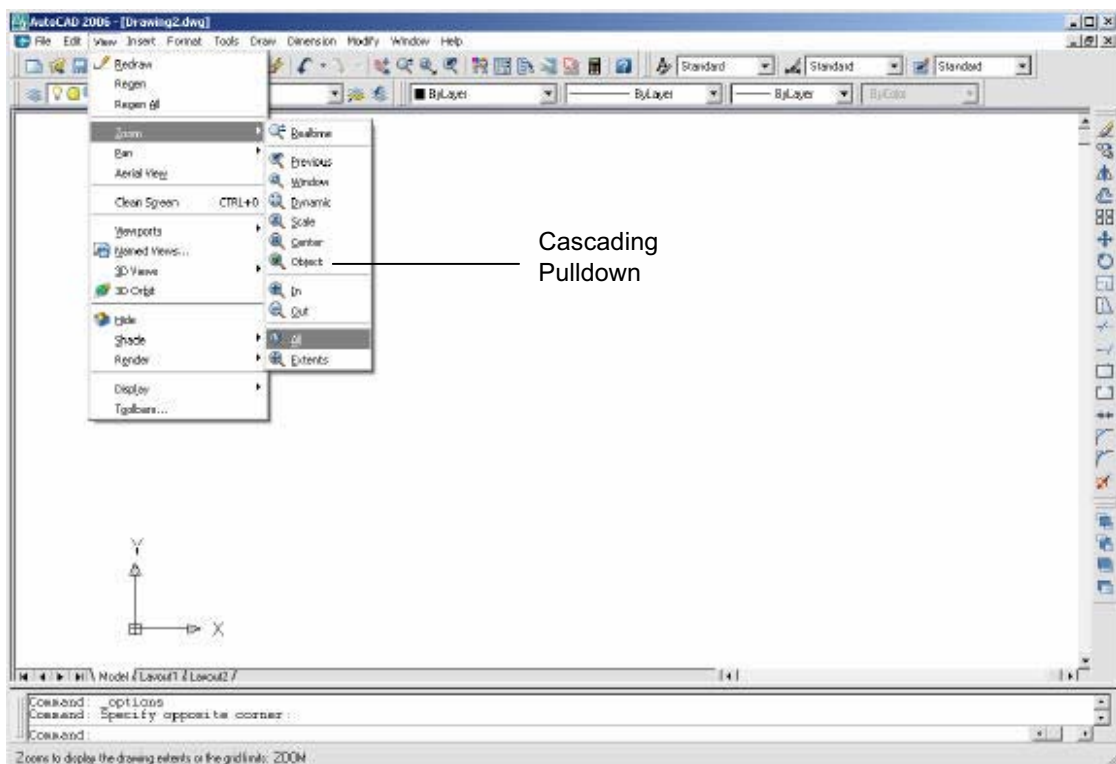
1.5 Menus and Colors

Pulldown Menus

1. **Click** On the desired Pulldown menu.
2. **Click** On the command to be executed from the pulldown.

Cascading Pulldown Menus

1. **Click** On a command that has a cascading menu (menus with an arrow to the right of the menu)
2. **Click** On the command to be executed.



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1.6 Toolbars

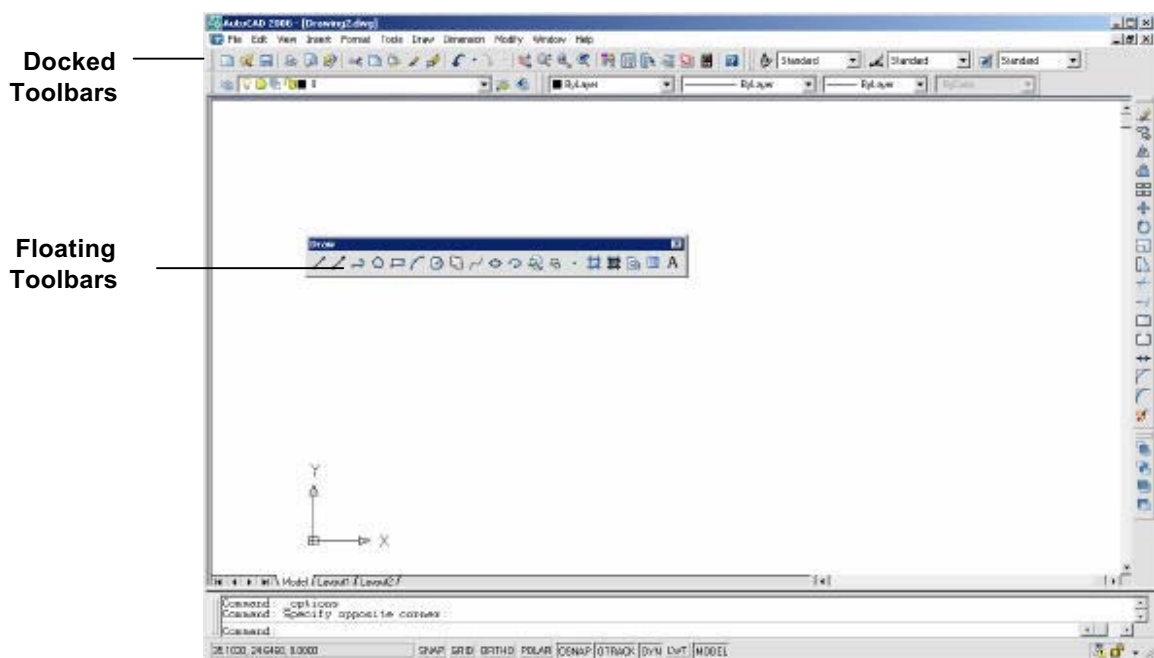
Toolbars can be docked on the screen or they can float about the screen.

To Float a Toolbar:

1. **Choose** the gray border surrounding each tool.
2. **Drag** the toolbar to any area on the screen.

To Dock a Toolbar:

1. **Choose** the title or gray border of the toolbar.
2. **Drag** the toolbar to the top, bottom, left, or right area of the graphics display.



Docked
Toolbars

Floating
Toolbars



TIPS:

- Holding the CTRL key while dragging will prevent docking.
- Toolbars are often a faster way of accessing a command.
- Clicking on an icon with the right mouse button will show a list of all available toolbars.

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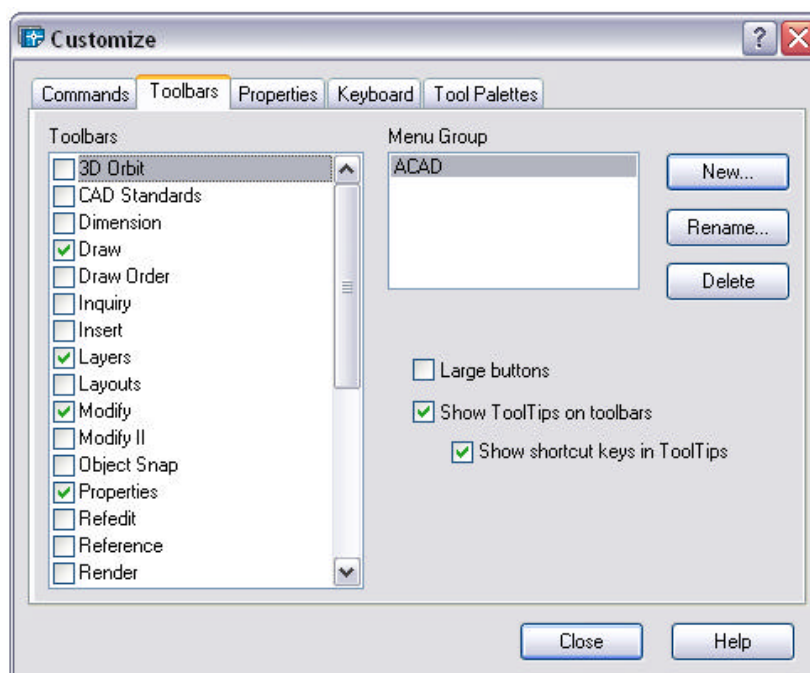
Help Tooltips

1. **Move** The mouse to the toolbar but do not pick the button.



Loading Toolbars

1. **Choose** View, Toolbar...
or
2. **Type** TOOLBAR at the command prompt
Command: **TOOLBAR**
3. **Choose** the desired toolbar to load.



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1.7 Filedia

Some commands evoke dialog boxes which are typically used to enter information or change settings. The filedia command suppresses display of the file dialog boxes.

1. **Type** FILEDIA at the command prompt.
Command: **filedia**
2. **Enter** new value for FILEDIA <1>: **0**

0 Dialog boxes are not displayed. You can still request a file dialog box to appear by entering a tilde (~) in response to the command's prompt.

- | | |
|---|-------------------------|
| 1 | Turns on dialog boxes. |
| 0 | Turns off dialog boxes. |



TIPS:

-Menu choices that are followed by three dots (...) typically invoke a dialog box. For example **View, Toolbars...** calls a dialogue box.

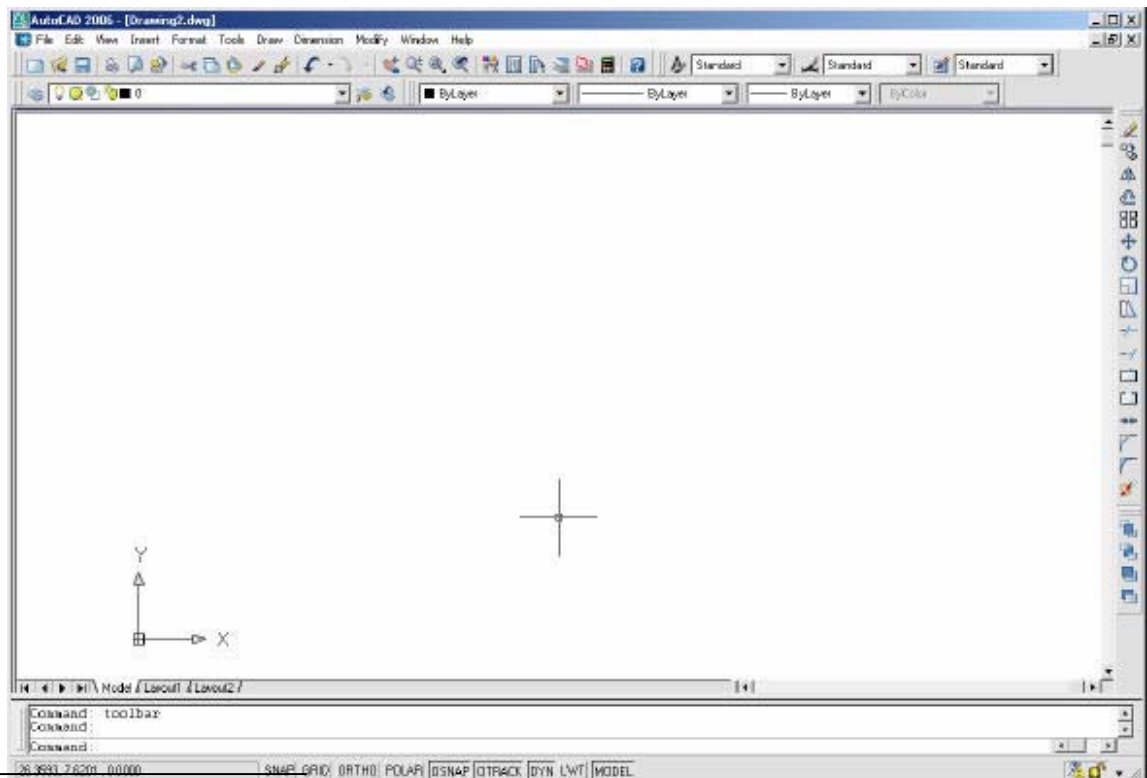
-To use the command line version of a dialog box command, enter minus (-) in front of the command.

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1.8 Status Bar

The Status Bar is the area below the command line that shows messages as well as coordinates, modes, and the current time.

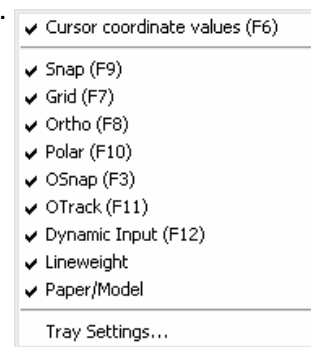
To activate SNAP, GRID, ORTHO, OSNAP, MSPACE, PSPACE, and TILE, you must double-click on the mode to change.



Status Bar

TIP:

- Right click on the status bar to see the options.



AutoCAD 2D Tutorial

1.9 Pointing Device (Mouse)

AutoCAD uses either a mouse or digitizing tablet to select objects in a drawing.

Left Mouse Button

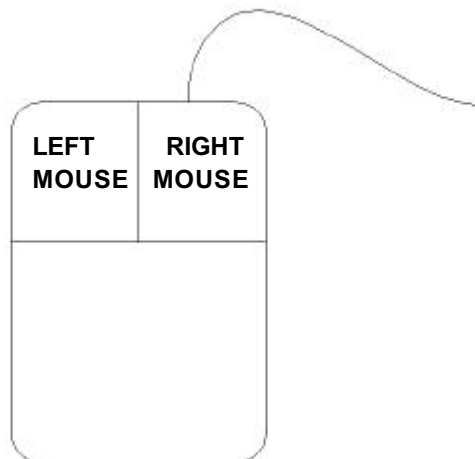
Used to pick or select objects

1. **Click** the left mouse button to select an object area in the drawing.
2. **Press** ESC twice to deselect an object (or to cancel a command).

Right Mouse Button

Used to enter a command, repeat last command, or access shortcut menus.

1. **Click** the right mouse button.



TIPS:

- SHIFT + the right mouse button brings up the object snap menus.
- Various screen locations for the mouse brings up different menus.

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1.10 Command Prompt

Typing a Command

All AutoCAD commands can be typed in at the command line. Many commands also have one or two letter aliases that can also be typed as shortcuts to the commands.

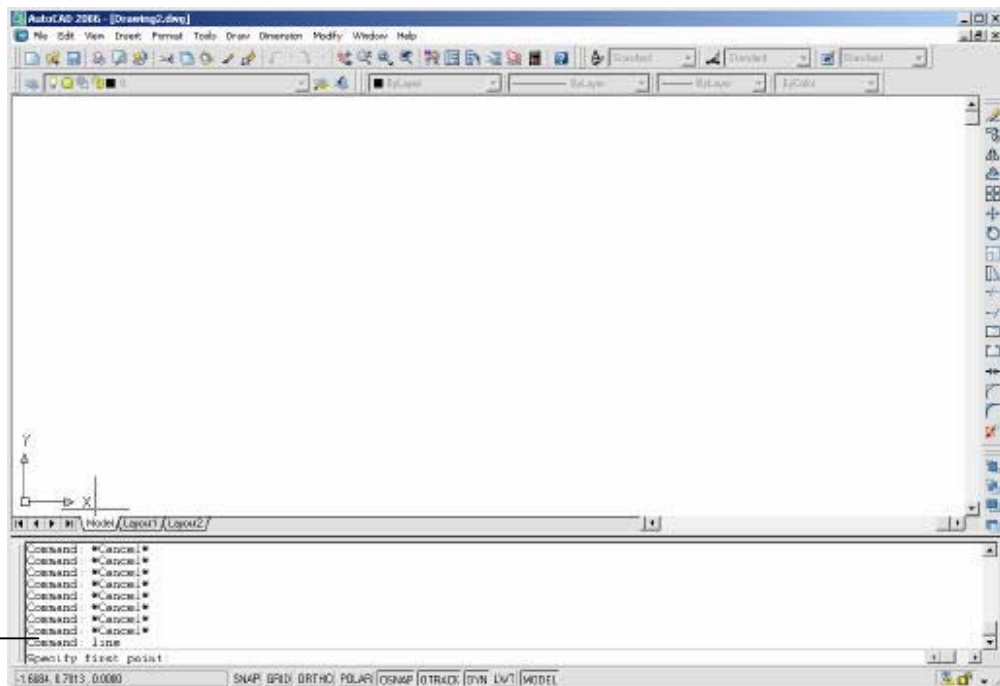
1. **Type** the desired command at the command prompt.
Command : **LINE**
or
2. **Type** the command's alias.
Command: **L**
3. **Press** **ENTER**.
4. **Type** an option at the command prompt.



TIP:

Many AutoCAD commands require you to press ENTER to complete the command. You know you are no longer in an AutoCAD command when you see a blank command line.

Command Prompt



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Reissuing the Last Command


The last used AutoCAD command can be re-entered by one of the following three methods of ENTER. The ENTER key on the keyboard will always act as ENTER, the SPACEBAR and RIGHT MOUSE will act as enter most of the time (exceptions include placing TEXT).

1. **Press** the ENTER key on the keyboard
 or
2. **Press** the Space bar on the keyboard.
 or
3. **Click** the right mouse button.

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1.11 Undo

Reverses the last action.

1. **Choose** Edit, Undo.
or
2. **Click** the Undo icon. 
or
3. **Press** CTRL + Z.
4. **Type** U at the command prompt to undo the last command.
Command: **U**

Redo

Reverses the effects of a single UNDO or U command.

1. **Choose** Edit, Redo.
or
2. **Click** the Redo icon. 
or
3. **Type** REDO at the command prompt to redo the last undo command.
Command: **REDO**



TIPS:

-UNDO has no effect on some commands and system variables, including those that open, close, or save a window or a drawing, display information, change the graphics display, regenerate the drawing, or export the drawing in a different format.

-REDO must immediately follow the U or UNDO command.

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1.12 Function Keys

Keyboard shortcuts predefined in AutoCAD

F1	Online Help
F2	Flipscreen
F3	Osnap ON/OFF
F4	Tablet On/Off
F5	Isoplane Toggle
F6	Coords On/Off
F7	Grid On/Off
F8	Ortho On/Off
F9	Snap On/Off
F10	Polar On/Off
F11	Object Snap Tracking ON/OFF

AutoCAD 2D Tutorial

1.13 Accelerator Keys

Press	CTRL + A to turn GROUPS on/off.
Press	CTRL + B to turn SNAP on/off.
Press	CTRL + C to COPYCLIP
Press	CTRL + D to turn COORDS on/off.
Press	CTRL +E to Toggle Isoplane settings.
Press	CTRL +F to turn Osnaps ON/OFF
Press	CTRL + G to turn GRID on/off.
Press	CTRL + K for Hyperlinks
Press	CTRL + L to turn ORTHO ON/OFF
Press	CTRL + N to create a NEW drawing.*
Press	CTRL + O to OPEN an existing drawing.*
Press	CTRL + P to PLOT a drawing.*
Press	CTRL + S to qsave a drawing.*
Press	CTRL + T to turn the digitizing tablet on/off.
Press	CTRL + X to cut to Clipboard.*
Press	CTRL + Z to UNDO

Typical in any Microsoft Windows application.

TIPS:

You can define your own shortcut keys (or accelerator keys). The following is a short example of an Accelerators section in an MNU file.

***ACCELERATORS


ID_Line [SHIFT+CONTROL+"L"]

[CONTROL+"Q"]^C^C_quit

[CONTROL+SHIFT+"Z"]^C^Czoom extents

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1.14 On-Line Help

1. Choose Help, AutoCAD Help.
or
2. Click the Help icon. 
- or
3. Type HELP at the command prompt
Command: **HELP**
or
4. Press Function Key F1

