

INTRODUCTION

About this workbook

Beginning AutoCAD® 2013, Exercise Workbook is designed for classroom instruction or self-study. There are 30 lessons. Each lesson starts with step-by-step instructions followed by exercises designed for practicing the commands you learned within that lesson.

You may find the order of instruction in this workbook somewhat different from most textbooks. The approach I take is to familiarize you with the drawing commands first. After you are comfortable with the drawing commands, you will be taught to create your own setup drawings. This method is accomplished by supplying you with a drawing, "**2013-Workbook Helper.dwg**". This drawing is preset and ready for you to open and use. For the first 8 lessons you should not worry about settings, **you just draw.**

Important

How to get the drawing listed above?

The file "2013-Workbook Helper" should be downloaded from our website:
www.shrockpublishing.com

Printing

The exercises in the workbook have been designed to be printed on any **8-1/2 X 11 (Letter size) printer**. You will be able to print your exercises and view your results as you progress through the lessons. If you would like to configure a large format printer refer to **Appendix-A to "Add a Printer / Plotter"**.

About the Author

Cheryl R. Shrock is a recently retired Professor and Chairperson of Computer Aided Design at Orange Coast College in Costa Mesa, California. She is also an Autodesk® registered author. Cheryl began teaching CAD in 1990. Previous to teaching, she owned and operated a commercial product and machine design business where designs were created and documented using CAD. This workbook is a combination of her teaching skills and her industry experience.

The author can be contacted for questions or comments at: learnacad@yahoo.com

"Sharing my industry and CAD knowledge has been the most rewarding experience of my career. Students come to learn CAD in order to find employment or to upgrade their skills. Seeing them actually achieve their goals, and knowing I helped, is a real pleasure. If you read the lessons and do the exercises, I promise, you will not fail."

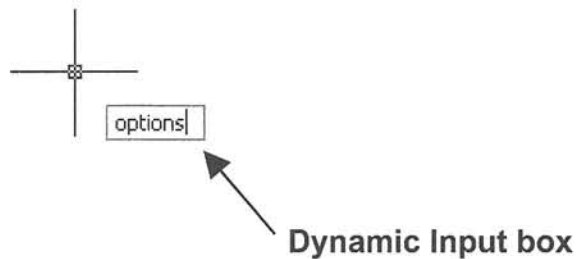
Cheryl R. Shrock

CONFIGURING YOUR SYSTEM

AutoCAD® allows you to customize its configuration. While you are using this workbook it is necessary for you to make some simple changes to your configuration so our configurations are the same. This will ensure that the commands and exercises work as expected. The following instructions will guide you through those changes.

1. Start AutoCAD®
 - a. To start AutoCAD, follow the instructions on page 1-2. Then return to this page and go to step 2.
2. Type: **options** then press the <enter> key. (not case sensitive)

The text that you type will appear in the Dynamic Input box, as shown below



NOTE:

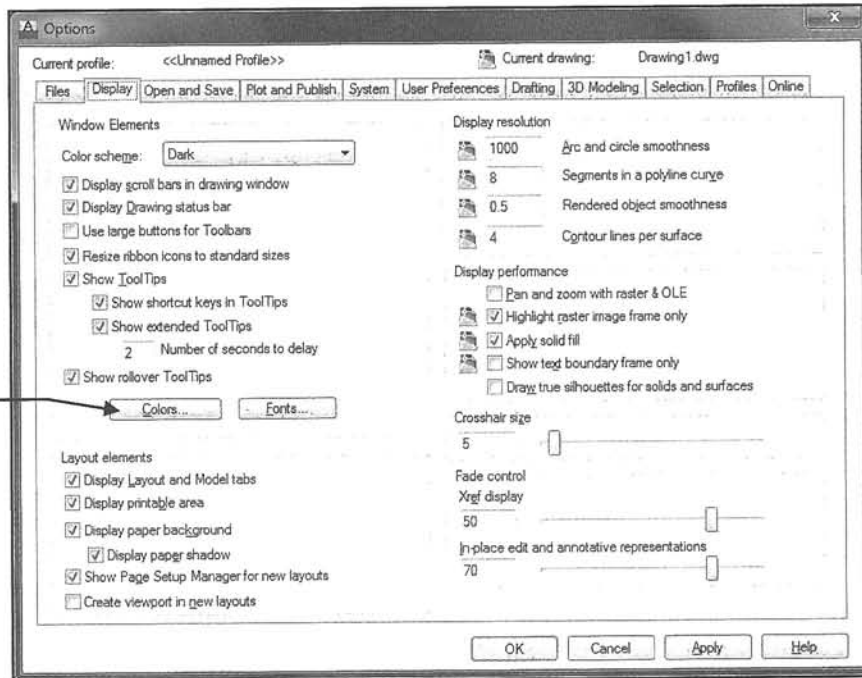
AUTOCAD LT USERS:

You may find that some of the settings appear slightly different. But they are mostly the same.

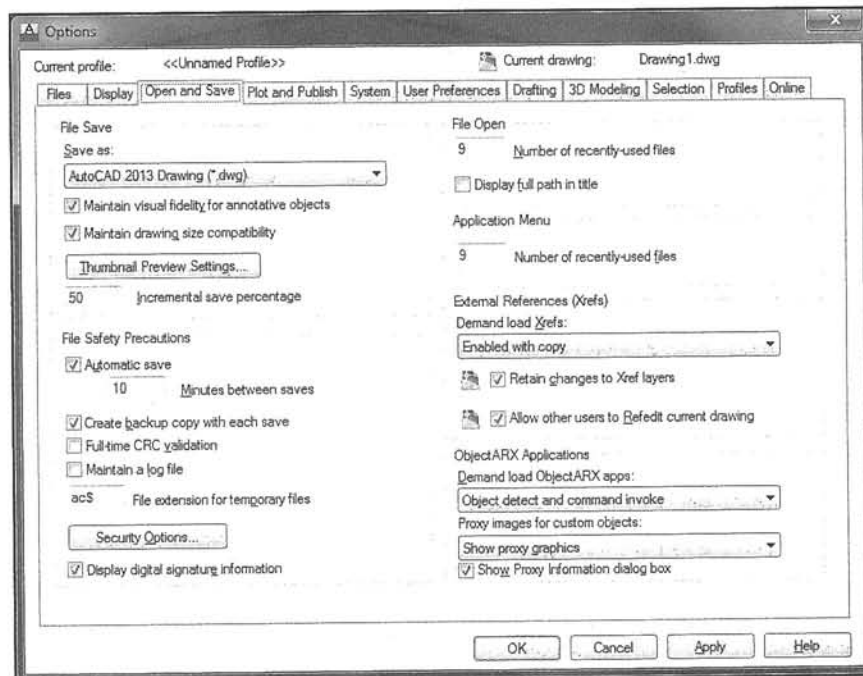
Configuration Settings

3. Select the **Display** tab and change the settings on your screen to match the dialog box below.

You may select different colors for your display

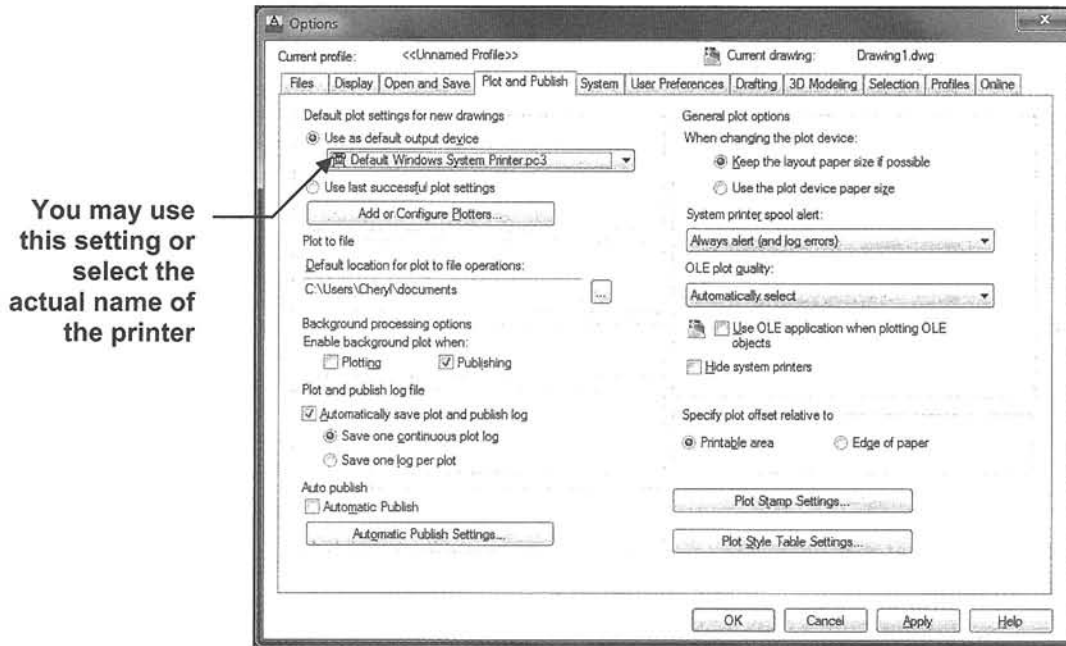


4. Select the **Open and Save** tab and change the settings on your screen to match the dialog box below.

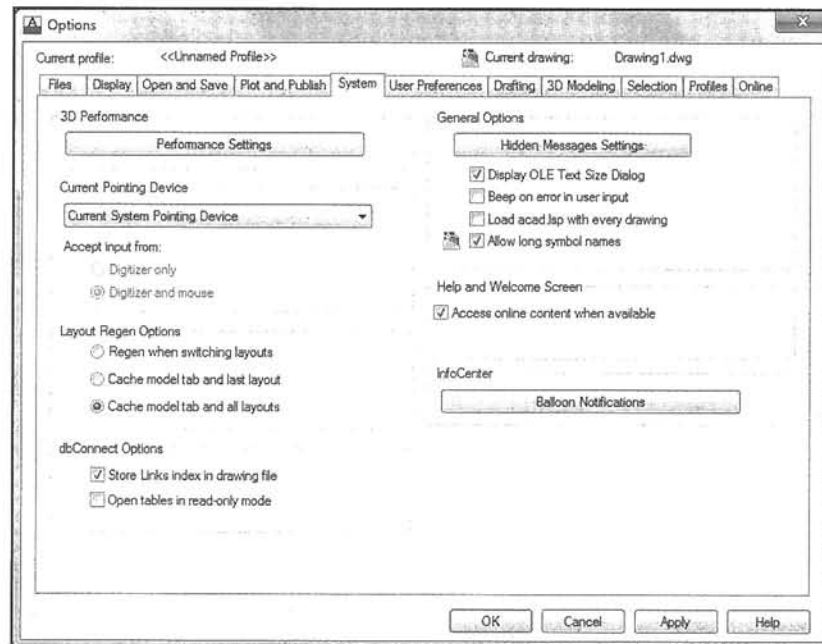


Configuration Settings

5. Select the **Plot and Publish** tab and change the settings on your screen to match the dialog box below.



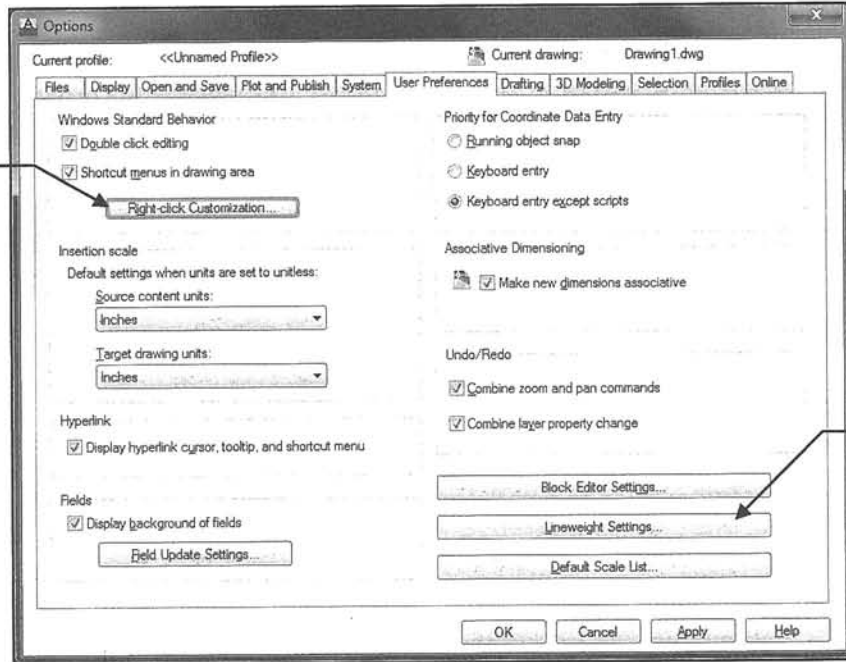
6. Select the **System** tab and change the settings on your screen to match the dialog box below.



Configuration Settings

7. Select the **User Preferences** tab and change the settings on your screen to match the dialog box below.

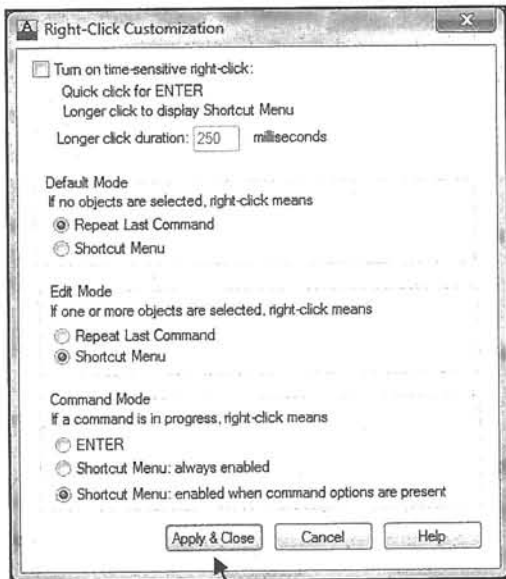
Rt-click Cust.
Select this button and change the settings shown below



LW settings.
Select this button and change the settings shown below

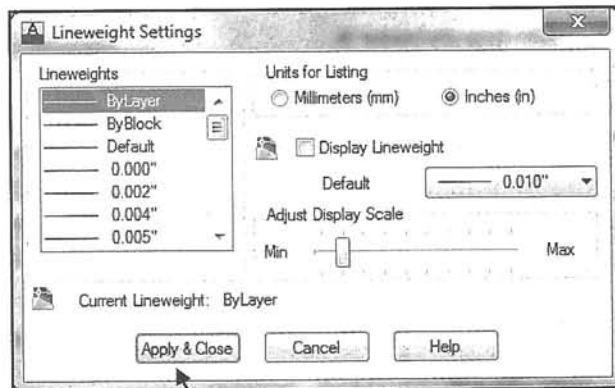
8. After making the setting changes shown below select **Apply & Close** button.

Right-click Customization



8

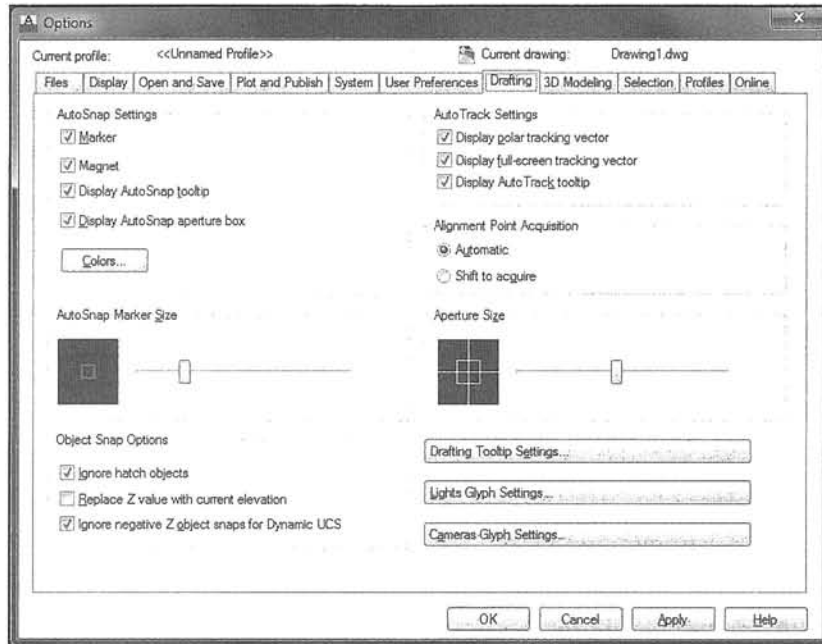
Lineweight Settings



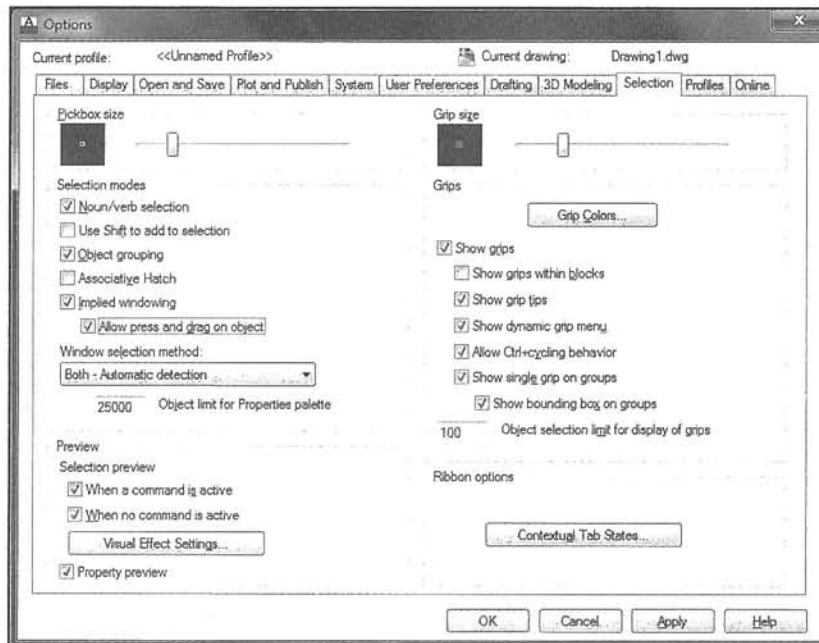
8

Configuration Settings

9. Select the **Drafting** tab and change the settings on your screen to match the dialog box below.

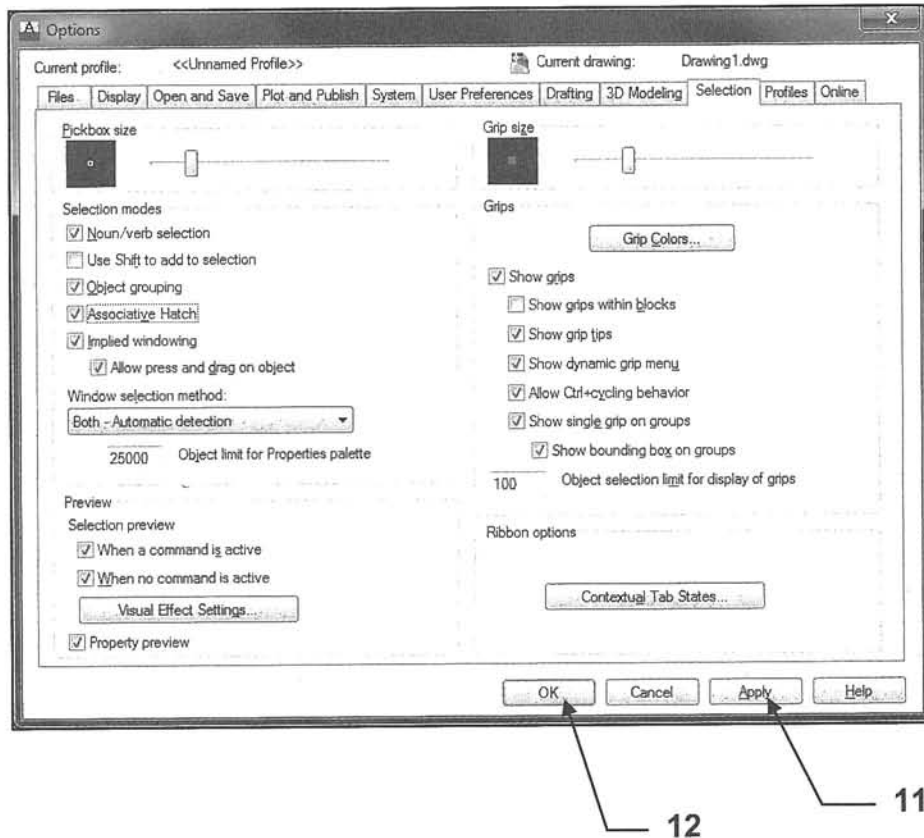


10. Select the **Selection** tab and change the settings on your screen to match the dialog box below. (Note: 3D Modeling tab was skipped)



Configuration Settings

11. Select the **Apply** button.
12. Select the **OK** button.



13. Now you should be back to the AutoCAD screen. But there is one more step.

It is important that you configure your AutoCAD software to only allow one drawing open on the screen at one time. It will be less confusing for now. When you progress to the Advanced Workbook you will configure AutoCAD to allow multiple drawings on the screen. But for now please do the following:

1. Type **SDI** and press **<enter>**
2. Type **1** and press **<enter>**

Note: If the command line says "Invalid", you have multiple files already open. Close all but one and try again.

AutoCAD 2013 System Requirements

Description	Requirement
<p>Operating System</p>	<p>Service Pack 2 (SP2) or later of the following:</p> <p>32-bit only Microsoft® Windows® XP Home</p> <p>64-bit Microsoft® Windows® XP Professional Microsoft Windows 7® Enterprise Microsoft Windows 7® Ultimate Microsoft Windows 7® Professional Microsoft Windows 7® Home Premium</p>
<p>Browser</p>	<p>Internet Explorer® 7.0 or later</p>
<p>Processor</p>	<p>32-bit <u>Windows XP</u> Intel® Pentium® 4 or AMD Athlon™ Dual Core, 1.6 GHz or Higher with SSE2 technology</p> <p><u>Windows Vista or Windows 7</u> Intel Pentium 4 or AMD Athlon™ Dual Core, 3.0 GHz or Higher with SSE2 technology</p> <p>64-bit AMD Athlon™ 64 with SSE2 technology AMD Opteron™ 64 with SSE2 technology Intel Xeon® with Intel EM64T support and SSE2 technology Intel Pentium® 4 with Intel EM64T support and SSE2 technology</p>
<p>Memory</p>	<p>2 GB Ram (8GB Recommended)</p>
<p>Display Resolution</p>	<p>1024 X 768 with True Color</p>
<p>Disk Space</p>	<p>Installation 2.0 GB</p>

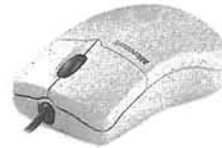
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AutoCAD 2013 System Requirements...continued

Description	Requirement
Pointing Device	MS-Mouse Compliant
Media (DVD)	Download and Installation from DVD
.NET Framework	.NET Framework Version 4.0

Additional Requirements For 3D Modeling	
Processor	32-bit Intel Pentium® 4 processor or AMD Athlon™, 3.0GHz or greater or Intel or AMD Dual Core processor, 2.0 GHz or greater.
Ram	2 GB Ram or more 2 GB free hard disk available not including installation requirements
Graphics Card	1280 X 1024 True color video display adapter with 128 MB (recommended: 256 MB for normal images and 512 MB for medium Image Material Library images), Pixel Shader 3.0 or greater. Direct3D® capable workstation class graphics card.

Customizing your Wheel Mouse



A Wheel mouse has two or more buttons and a small wheel between the two topside buttons. The default functions for the two top buttons and the Wheel are as follows:

Left Hand button is for **input** and can't be reprogrammed.

Right Hand button is for **Enter** or the **shortcut menu**.

The Wheel may be used to Zoom and Pan or Zoom and display the Object Snap menu. You will learn more about this later.

The following describes how to select the Wheel functions. After you understand the functions, you may choose to change the setting.

To change the setting you must use the **MBUTTONPAN** variable.

MBUTTONPAN setting 1: (Factory setting)

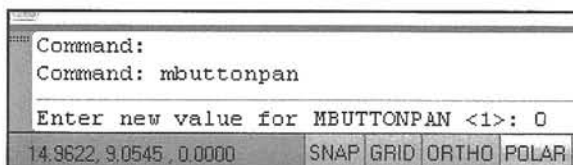
- ZOOM** Rotate the wheel forward to zoom in
Rotate the wheel backward to zoom out
- ZOOM EXTENTS** Double click the wheel to view entire drawing
- PAN** Press the wheel and drag the mouse to move the drawing on the screen.

MBUTTONPAN setting 0:

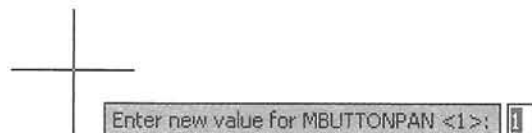
- ZOOM** Rotate the wheel forward to zoom in
Rotate the wheel backward to zoom out
- OBJECT SNAP** Object Snap menu will appear when you press the wheel

To change the setting:

1. Type: **mbuttonpan** <enter>
2. Enter **0** or **1** <enter>



Command Line



Dynamic Input