Chapter 6 3D Orbit Commands

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Introduction to 3D Orbit Command 6.1

Controls Interactive 3D Viewing

- 1. **Type** 3DORBIT at the command prompt. Command: **3dorbit** OR
- 2. Choose View, 3D Orbit. The 3D Orbit Arcball appears.
- 3. **Click** on one of the 3D Orbit arcball locations.

Inside the Arcball - Allows movement in any direction



D Orbit Command, Pan & Zoom

Outside the Arcball - Moves View about an axis that extends through the center (acts like twist)



Inside one of the small circles to the left/right - Rotates around the "Y" axis through the center.



Inside one of the small circles to the top/bottom - Rotates around the "X" axis through the center.



Pan and Zoom in 3D Orbit 6.2

- 1. **Click** with the right mouse button while in the 3D Orbit command.
- 2. Choose PAN or ZOOM from the pop-up menu.



Projections, Shading & Visual Aids

Projection Mode 6.3

- 1. **Click** with the right mouse button while in the 3D Orbit command.
- 2. Choose Projection.
- 3. Choose Parallel or Perspective.

Parallel

Displays objects so that two parallel lines in a drawing never converge at a single point. The shapes in your drawing always remain the same and do not appear distorted when they are closer.

Perspective

Displays objects in perspective so that all parallel lines converge at one point. Objects appear to recede into the distance, and parts of the objects appear larger and closer to you. The shapes are some what distorted when the object is very close. This view correlates more closely to what your eye sees.



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Shading 6.4

- 1. **Click** with the right mouse button while in the 3D Orbit command.
- 2. Choose Shading.
- 3. **Choose** one of the shade options.



Adjusting Camera

Camer Swivel and Distancea 6.5

Simulates the effect of turning the camera. Changes the target of the view.

- 1. **Click** with the right mouse button while in the 3D Orbit command.
- 2. Choose More.
- 3. Choose SwivelCamera.
- 4. **Choose** a location in the view to change the camera.



Projections, Shading & Visual Aids

Visual Aids 6.6

- 1. **Click** with the right mouse button while in the 3D Orbit command.
- 2. Choose Visual Aids.
- 3. **Choose** one of the visual aids options.

Compass Option







TIP: Use GRIDUNIT to change the spacing of the grid units.





Clipping Planes

Clipping Planes

Clipping Planes 6.7

- 1. **Click** with the right mouse button while in the 3D Orbit command.
- 2. Choose More.
- 3. **Choose** one of the clipping planes options.

NOTE: If you have clipping planes ON when you exit the 3D Orbit command, they will remain ON.

Clipping Plane Options



Adjusting Clipping Planes in the Clipping Plane Window



Continuous Orbit

Continuous Orbit 6.8

1.	Click	with the right mouse button while in the 3D Orbit command.

- 2. Choose More.
- 3. Choose Continuous Orbit.
- 4. **Click** and drag to start the continuous 3D Motion.

This movement controls the direction and speed of the orbit.



Continuous Motion (Rt Click to change options)

