## **Asymetrix 3D F/X Help Contents**

Press F1 for assistance on Help.



#### Using Asymetrix 3D F/X

Step-by-step instructions to help you complete your tasks.



#### **Examples**

Examples of snapshots and animations created using Asymetrix 3D F/X.



#### **Reference Information**

Answers to common questions; concepts; and guides to terminology, commands, and the interface.



#### **Technical Support**

Support options you can access to get the most from your Asymetrix product.



# Using Asymetrix 3D F/X Click a category below to see related topics.

- **Concepts**
- Scene elements
- Scene and model basics
- Fine-tuning a scene
- Animating models
- Advanced projects
- Asymetrix 3D F/X and OLE



#### **Concepts**

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About Asymetrix 3D F/X

About camera perspective
About color in Asymetrix 3D F/X

About color palette shift

About creating 3D graphics with Asymetrix 3D F/X

About editing scenes in a container application

About imported models

About object linking and embedding (OLE)

About simple models

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About text and picture models

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#### Scene elements

- Scene and model basics
- Fine-tuning a scene
- **Animating models**
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- Asymetrix 3D F/X and OLE



### Concepts

### Scene elements

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Imported model

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Scene Preview window

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- Concepts
- Scene elements
- Scene and model basics

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Adding a preset model

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Selecting models

Working in Asymetrix 3D F/X

- Fine-tuning a scene
- **Animating models**
- **Advanced projects**
- Asymetrix 3D F/X and OLE

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# Using Asymetrix 3D F/X

Click a category below to see related topics.

- Concepts
- Scene elements
- Scene and model basics
- Fine-tuning a scene

Adding a texture to a model's surface

Adding shadows to a scene

Applying a digital video file as a surface

Changing a snapshot's color depth or size

Generating a 32-bit snapshot

Generating complex or large snapshot

Making a color surface appear transparent

Making a model a sub-part of another model

Making a solid material surface transparent

Making a surface reflect a bitmap

Making a surface reflective

Making all models in a scene reflect a bitmap

Modifying a backdrop

Modifying a light

Modifying a model's surface

Modifying a simple model's shape

Modifying an imported model

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Warping a model

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Generating an animation

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Staggering when models enter a scene

### **Advanced projects**

# Asymetrix 3D F/X and OLE

- Concepts
- Scene elements
- Scene and model basics
- Fine-tuning a scene
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- **Advanced projects**

Adding a wall or floor

Creating a "glass" surface

Creating a reflection or environment map of a scene

Creating and modifying a Catalog

Creating models that appear to be lights Including only a model's shadow in a scene

Making a scene and backdrop appear smoky Making a scene and backdrop appear snowy

Submerging a model in "water"

### Asymetrix 3D F/X and OLE

- Concepts
- Scene elements
- Scene and model basics
- Fine-tuning a scene
- **Animating models**
- **Advanced projects**
- Asymetrix 3D F/X and OLE

Displaying a scene or icon in a container application

Displaying a snapshot or animation in a container application

Editing embedded or linked Asymetrix 3D F/X scenes

Embedding a new scene

Embedding or linking an existing scene

Playing a linked or embedded animation Updating your OLE registration database



# **Examples**

The bitmaps and <u>AVI files</u> described below were created in Asymetrix 3D F/X. For details about how an example was created, click its image.



<u>Eight ball snapshot</u> This snapshot was created using a sphere model with a bitmap surface and reflection map applied, then generated using a realistic generating style.



<u>Patterned ring snapshot</u> This snapshot was created using a ring model with a tiled bitmap surface and a plane model with a reflective surface, then generated using a ray traced generating style.



<u>Switching text animation</u> This animation was created using two text models. We applied animation paths to the text models to make them appear to replace each other onscreen, then generated the animation using a realistic generating style.



<u>Water molecule animation</u> This animation was created using text, sphere, and cylinder models. We positioned the models, then made them all sub-parts of one of the spheres. We applied an animation path to the parent sphere, then generated the animation using a realistic generating style.



<u>Helicopter with moving background animation</u> This animation was created using an imported model from the Catalog, and a plane model as a background. We applied animation paths to the plane, the helicopter's rotors, and the entire helicopter, then generated the animation using a realistic generating style.



#### Reference Information

Click a topic or menu name below for more information.

#### Screen map and shortcuts

Map of screen elements
Keyboard and mouse shortcuts

#### Menu command reference

To view an alphabetic list of commands, see Alphabetic command reference.

- File menu
- Edit menu
- View menu
- Tools menu
- Models menu
- Scene menu
- Window menu
- Help menu



Click a topic or menu name below for more information.

#### Screen map and shortcuts

Map of screen elements Keyboard and mouse shortcuts

#### Menu command reference

To view an alphabetic list of commands, see Alphabetic command reference.



#### File menu

<u>New</u>

**Open** 

Scene Specialist

Close

Save

Save As

New Catalog

**Print** 

<u>Send</u>

1 <Filename>

<u>Exit</u>

Exit & Return



Edit menu



View menu



Tools menu



Models menu



Scene menu



Window menu





Click a topic or menu name below for more information.

#### Screen map and shortcuts

Map of screen elements

Keyboard and mouse shortcuts

#### Menu command reference

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File menu



Edit menu

<u>Undo</u>

<u>Cut</u>

Copy

<u>Paste</u>

Clear

**Duplicate** 

Select All Reset Position

Reset Orientation

Reset Size



View menu



Tools menu



Models menu



Scene menu



Window menu





Click a topic or menu name below for more information.

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Map of screen elements
Keyboard and mouse shortcuts

#### Menu command reference

To view an alphabetic list of commands, see Alphabetic command reference.



File menu



Edit menu



View menu

Boxes
Wireframes
Solid Models
Backdrop
On Camera Area
Scene Contents
Catalog

Catalog
Position Palette
Animation Palette

Toolbar Status Bar

Main Status Bar



Tools menu



Models menu



Scene menu



Window menu





Click a topic or menu name below for more information.

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Map of screen elements
Keyboard and mouse shortcuts

#### Menu command reference

To view an alphabetic list of commands, see Alphabetic command reference.



File menu



Edit menu



View menu



Tools menu

Convert Snapshot
Arrange Catalog Entries
Bitmap Editor
Palette Editor
Wave File Editor
Photo CD Converter



Models menu



Scene menu



Window menu





Click a topic or menu name below for more information.

#### Screen map and shortcuts

Map of screen elements
Keyboard and mouse shortcuts

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To view an alphabetic list of commands, see Alphabetic command reference.



File menu



Edit menu



View menu



Tools menu



Models menu

Create Text Model

Create Picture Model

Create Simple Model

Import Model

Modify 3D

Modify Model

Modify Surface & Color

**Modify Animation** 

Modify Warp



Scene menu



Window menu





Click a topic or menu name below for more information.

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Map of screen elements
Keyboard and mouse shortcuts

## Menu command reference

To view an alphabetic list of commands, see Alphabetic command reference.



File menu



Edit menu



View menu



Tools menu



Models menu



Scene menu

Snapshot & Animation Settings

Camera Perspective

Modify Backdrop

**Modify Lights** 

Modify Soundtrack

Preview Snapshot

**Preview Animation** 

Preview All Frames

Generate Snapshot

Generate Animation



Window menu





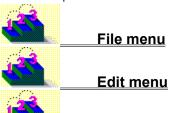
Click a topic or menu name below for more information.

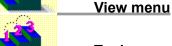
#### Screen map and shortcuts

Map of screen elements
Keyboard and mouse shortcuts

#### Menu command reference

To view an alphabetic list of commands, see Alphabetic command reference.





Tools menu



Models menu



Scene menu



Window menu

Cascade
Tile Horizontally
Tile Vertically
Arrange Main Windows
Arrange Icons
1 < Window Name>





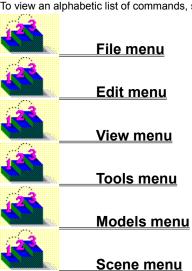
Click a topic or menu name below for more information.

#### Screen map and shortcuts

Map of screen elements
Keyboard and mouse shortcuts

#### Menu command reference

To view an alphabetic list of commands, see Alphabetic command reference.



Window menu

Help menu

Contents
Search For Help On
Startup Assistant
Examples
Technical Support
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# **Alphabetic command reference**

Click a letter to display commands.

To view commands by menu name, see Menu command reference.

1

Α

В

D

E F

G H

J

K L M N O P

R

S

1 <Filename> 1 < Window Name>

### Α

About Asymetrix 3D F/X Animated Surface (dialog box) **Animation Palette Arrange Catalog Entries** Arrange Icons Arrange Main Windows Asymetrix 3D F/X Startup (dialog box)

#### В

Backdrop Gradient (dialog box) **Backdrop** 

#### **Bitmap Editor**

**Boxes** 

#### C

Camera Perspective

Cascade

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Create Directional Light

Create Picture Model

Create Simple Model

Create Text Model

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### **D** - **F**

**Duplicate** 

**Examples** 

**Exit** 

Exit & Return

#### **G** - **H**

**Generate Animation** 

**Generate Snapshot** 

#### I - L

Import Graphic (dialog box)

**Import Model** 

Imported Model Surface (dialog box)

#### M

Main Status Bar

Modify 3D

**Modify Animation** 

**Modify Backdrop** 

Modify Cube (dialog box)

Modify Cylinder (dialog box)

Modify Imported Model (dialog box)

Modify Letter Model (dialog box)

**Modify Lights** 

Modify Name (dialog box)

Modify Picture Model (dialog box)

Modify Ring (dialog box)

Modify Soundtrack

Modify Sphere (dialog box)

Modify Sub-part

Modify Surface & Color

Modify Text Model (dialog box)

**Modify Warp** 

#### Ν

New

**New Catalog** 

#### 0

On Camera Area

<u>Open</u>

**Options** 

### Ρ

Palette Editor

<u>Paste</u>

Photo CD Converter

Picture Options (dialog box)

Position Palette

Preview All Frames

**Preview Animation** 

Preview Snapshot

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**Reset Orientation** 

**Reset Position** 

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## S

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Save

**Scene** 

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**Snapshot & Animation Settings** 

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### Т

**Technical Support** 

Tile Horizontally

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**Toolbar** 

Trace Options (dialog box)

### U

<u>Undo</u>

#### V

Video Compression (dialog box)

### **W** - **Z**

Wave File Editor

Wireframes



# Asymetrix 3D F/X Startup (dialog box) Tools menu / Options / File tab

See also...

Use to create a new scene, open an existing scene, or open the Scene Specialist to create a new scene.

Option	Description
New Scene	Creates a new scene.
Open Scene	Opens an existing scene.
Scene Specialist	Runs the Scene Specialist, a short program to help you build a new scene.

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Step by step Building a scene Command **Options** Asymetrix 3D F/X User Manual Chapter 1, "The basics"



## New

File menu See also...

Keyboard: Ctrl+N

Toolbar:

Creates a new scene.

If another scene is currently open, Asymetrix 3D F/X asks whether to save your changes, then closes it before creating a new scene.

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Step by step Building a scene Command **Options** Asymetrix 3D F/X User Manual Chapter 1, "The basics"



# **Open or Import**



You can use the Open, Import Graphic, Import Model, Choose File To Print, and Modify Soundtrack dialog boxes in similar ways to select and access a particular type of file. For details, click a command or dialog box name below.

- Choose File To Print (dialog box)
  Import Graphic (dialog box)
- Import Model
- Modify Soundtrack
- <u>Open</u>



Step by step
About imported models
Adding a soundtrack to an animation
Creating a picture model
Importing a model

Asymetrix 3D F/X User Manual Chapter 1, "The basics"



Open
File menu or Browse button



Keyboard: Ctrl+O

Toolbar:



Use to open an existing scene, Catalog, snapshot, or animation.

If another scene is currently active, Asymetrix 3D F/X asks whether to save your changes, then closes the existing scene before opening a new scene. If another Catalog, Snapshot, or Animation window is currently open, Asymetrix 3D F/X leaves it open, and opens a second Catalog, Snapshot, or Animation window.

Option	Description
File Name	Lists all files in the current default directory with the default file extension for the selected file format. A file selected from this list replaces the contents of the File Name box.
List Files Of Type	Indicates the default file extension. The drop-down list includes all other available file types.
Directories	Displays the default path. Change the directory by selecting a new path from the Directories box, which lists all directories available on the current drive. To change the drive, make a selection in the Drives box.
Drives	Lists the available drives. Selecting a new drive changes the contents of the Directories box.
Network	Available if your system is connected to a network and you are running Windows for Workgroups. Opens the Network dialog box from which you can choose additional drives and directories.



Commands Import Graphic (dialog box)
Import Model
Modify Soundtrack

Asymetrix 3D F/X User Manual Chapter 1, "The basics"



# **Scene Specialist**

File menu



Runs the Scene Specialist, a short program to help you build a new scene or edit an existing scene. Using the Scene Specialist, you can create scenes that contain text, graphics, or both. You can run the Scene Specialist in one of two ways:

Each time you enter Asymetrix 3D F/X, click Scene Specialist in the Asymetrix 3D F/X Startup dialog box.

From the File menu, choose Scene Specialist.

You can run the Scene Specialist to create a scene from which you can generate any of the following types of snapshots or animations:



Snapshot of a graphic



Snapshot of text



Snapshot of graphic and text



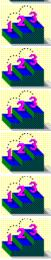
Snapshot of black-and-white graphic



Animation of a spinning graphic



Animation of spinning text



Animation of text flying in and out of the scene



Animation of text and graphic rotating

You can also run the Scene Specialist to help you with scenes you've already created. If your scene contains a graphic or text, the Scene Specialist will open an appropriate screen so that you can modify it.



Step by step
Building a scene
Creating and modifying a Catalog
Commands
New
Options



Keyboard: Ctrl+W

Closes the active window ( $\underline{Snapshot}$ ,  $\underline{Animation}$ , or  $\underline{Catalog}$ ). If an open snapshot or Catalog has not yet been saved, Asymetrix 3D F/X asks whether to save the file before closing.



Command <u>Open</u>

Asymetrix 3D F/X User Manual Chapter 1, "The basics"



Keyboard: Ctrl+S





Saves the active window (<u>Scene Preview</u>, <u>Snapshot</u>, <u>Catalog</u> or <u>Animation window</u>) under the current name. If an open scene, snapshot, or Catalog has not been named and saved, Asymetrix 3D F/X opens the <u>Save As</u> dialog box

**Tip** Saving a file deselects any selected objects in a scene.



### Command

Save As

Asymetrix 3D F/X User Manual
Chapter 1, "The basics"
Chapter 3, "Creating snapshot and animation files"



Saves a new <u>scene</u>, <u>snapshot</u>, or <u>Catalog</u> under a specific file name. An existing scene, snapshot, or Catalog or <u>animation</u> file can be saved under the current or a new file name.

Option	Description
File Name	Specifies the file name under which a scene, snapshot, Catalog, or animation file will be saved. By default, Asymetrix 3D F/X adds the file extension .SCN to scene names, .BMP to snapshot names, .CAT to Catalog names, and .AVI to animation files.
	If the scene, snapshot, Catalog or animation file has been named and saved, the existing file name appears in the File Name box. Change the file name by entering a new name in the box.
Save File As Type	Indicates .SCN, .BMP, .CAT or .AVI is the default file extension. The drop-down list includes all other available file types.
Directories	Displays the default path. Change the directory by selecting a new path from the Directories box, which lists all directories available on the current drive. To change the drive, make a selection in the Drives box.
Drives	Lists the available drives. Selecting a new drive changes the contents of the Directories box.
Network	Available if your system is connected to a network and you are running Windows for Workgroups. Opens the Network dialog box from which you can choose additional drives and directories.



### Command

<u>Save</u>

Asymetrix 3D F/X User Manual
Chapter 1, "The basics"
Chapter 3, "Creating snapshot and animation files"



## New Catalog



Creates a new <u>Catalog</u>. If an existing Catalog is currently open, Asymetrix 3D F/X leaves it open, and creates a new Catalog.



Step by step
Building a scene
Creating and modifying a Catalog
Commands
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Asymetrix 3D F/X User Manual Chapter 1, "The basics"



Keyboard: Ctrl+P

Prints the contents of the active <u>Snapshot</u>, <u>Animation</u>, or <u>Scene Preview</u> window.

Option	Description
Printer	Displays the current printer or output device and the connected port.
Print Contents Of Active Window	Prints the active window.
Print From File	Specifies a file to print.
	File. Specifies a file to print. Enter the name of a file. Clicking Browse opens the <u>Choose File To Print</u> dialog box, in which you can choose a file to print.
Number Of Copies	Specifies the number of copies to print.
Margins	Specifies margins used when printing. Disabled if printing from a file.
	Print Actual Size. Prints the image at actual size.
	Scale To Fit Printer Margins. Prints the image as large as the printer allows, while maintaining the image's proportions.
	Scale To Fit Custom Margins. Prints using margins you specify.
Printer (button)	Opens the Print Setup dialog box.



Step by step
Printing a frame of an animation
Printing a scene or snapshot

Asymetrix 3D F/X User Manual
Chapter 3, "Creating snapshot and animation files"



# Choose File To Print (dialog box) File menu / Print / Browse



Use to select a <u>scene</u> or <u>snapshot</u> to print from a file.

Option	Description
File Name	Lists all files in the current default directory with the default file extension for the selected file format. A file selected from this list replaces the contents of the File Name box.
List Files Of Type	Indicates the default file extension. The drop-down list includes all other available file types.
Directories	Displays the default path. Change the directory by selecting a new path from the Directories box, which lists all directories available on the current drive. To change the drive, make a selection in the Drives box.
Drives	Lists the available drives. Selecting a new drive changes the contents of the Directories box.
Network	Available if your system is connected to a network and you are running Windows for Workgroups. Opens the Network dialog box from which you can choose additional drives and directories.



Step by step
Printing a frame of an animation
Printing a scene or snapshot

### Command

<u>Print</u>

Asymetrix 3D F/X User Manual
Chapter 3, "Creating snapshot and animation files"



## Print Setup (dialog box) File menu / Print / Printer



Displays the available printers and their assigned ports.

Option	Description
Printer	Determines the printer used.
	Default Printer. Lists the default printer and its assigned port.
	Specific Printer. Lists available printers and their assigned ports.
Orientation	Sets paper orientation to portrait (taller than wide) or landscape (wider than tall).
Paper	Specifies paper size and tray.
Options	Opens the Options dialog box in which you can set additional printer options.
Network	Available if your system is connected to a network and you are running Windows for Workgroups. Opens the Network dialog box from which you can choose additional drives and directories.

**Tip** If the printer you want is not displayed, or if the assigned port is incorrect, change the printer information through the Windows Control Panel. For details, refer to the <u>Microsoft Windows User's Guide</u>.



Step by step
Printing a frame of an animation
Printing a scene or snapshot

### Command

<u>Print</u>

Asymetrix 3D F/X User Manual
Chapter 3, "Creating snapshot and animation files"



## Send File menu

Sends the current file (if saved) using a MAPI (Messaging Application Programming Interface) compliant application, such as Microsoft Mail. Asymetrix 3D F/X prompts you to save the file you want to send.





# 1 <Filename> (most recently used files)



Opens a recently used file. Asymetrix 3D F/X lists the four most recently used files.



### Command

<u>Open</u>



Keyboard: Alt+F4

Ends the current session and exits Asymetrix 3D F/X. If you have not saved your work, Asymetrix 3D F/X asks whether to save your changes. If more than one instance of Asymetrix 3D F/X is running, Exit closes only the active instance.



Command

Close

Asymetrix 3D F/X User Manual "Welcome"



## **Exit & Return**

File menu

Ends the current session of Asymetrix 3D F/X and returns to the OLE  $\underline{\text{container application}}$ . If you have not saved your work, Asymetrix 3D F/X asks whether to save your changes.



#### Command

<u>Exit</u>

Asymetrix 3D F/X User Manual
Chapter 2, "Linking or embedding scenes"

### Edit menu





Keyboard: Ctrl+Z or Alt+Backspace





Undoes or redoes the effect of your last action in the current instance of Asymetrix 3D F/X, if that action can be undone or redone.



#### Commands

Clear Copy Cut Duplicate Paste





Keyboard: Ctrl+X or Shift+Del

Toolbar:



Removes the selection and places it on the Windows Clipboard, replacing the previous Clipboard contents. If nothing is selected, the command is dimmed on the menu.



#### Commands

Clear Copy Duplicate Paste Undo/Redo



Keyboard: Ctrl+C or Ctrl+Insert





Places a copy of the selection on the Windows Clipboard, replacing the previous Clipboard contents. If nothing is selected, the command is dimmed on the menu.



#### Commands

Clear
Cut
Duplicate
Paste
Undo/Redo



Keyboard: Ctrl+V or Shift+Ins





Pastes the contents of the Windows Clipboard into the current <u>scene</u>. If the Clipboard is empty or its contents cannot be pasted, the Paste command is dimmed on the menu.



#### Commands

Clear
Copy
Cut
Duplicate
Undo/Redo



Keyboard: Del

Removes the current selection without placing it on the Windows Clipboard. If nothing is selected, the command is dimmed on the menu.

To reverse this action, choose <u>Undo</u> from the Edit menu before you do anything else.



#### Commands

Copy
Cut
Duplicate
Paste
Undo/Redo



Keyboard: Ctrl+D

Makes an exact duplicate of the selected <u>model</u> without using the Windows Clipboard.



#### Commands

Clear Copy Cut Paste Undo/Redo



Keyboard: Ctrl+A

Selects all models in the current scene.

To cancel the selection, click anywhere away from the selection.



Step by step Selecting models



## **Reset Position**



Resets a model's position to the center of the scene.



Step by step
Arranging a model in a scene
Resetting a model's location, rotation, or scale

Commands
Reset Orientation
Reset Size

Asymetrix 3D F/X User Manual Chapter 1, "The basics"



## **Reset Orientation**



Resets a model to a flat orientation.



Step by step
Arranging a model in a scene
Resetting a model's location, rotation, or scale

Commands
Reset Position
Reset Size

Asymetrix 3D F/X User Manual Chapter 1, "The basics"



Resets a model's size to the size in which it was created.



Step by step
Arranging a model in a scene
Resetting a model's location, rotation, or scale

Commands

Reset Orientation
Reset Position

Asymetrix 3D F/X User Manual Chapter 1, "The basics"

### View menu







Displays <u>models</u> in the <u>Scene Preview window</u> as the shapes of the boxes that bound them. Asymetrix 3D F/X works fastest in this mode because it does not have to recalculate as much information for each change you make to models in the <u>scene</u>.



Step by step About Asymetrix 3D F/X

Commands

Options
Solid Models
Wireframes



### **Wireframes**

View menu



Toolbar:



Displays <u>models</u> in the <u>Scene Preview window</u> as line drawings without color, <u>surface</u>, or <u>shading</u> information. When moving, <u>rotating</u>, or sizing, this view displays just the bounding box, then redraws the model when it is dropped. The Wireframes view draws changes to a <u>scene</u> more slowly than the <u>Boxes</u> view, but more quickly than the Solid Models view.



Step by step About Asymetrix 3D F/X

Commands

Boxes Options Solid Models



# **Solid Models**

View menu







Displays  $\underline{\text{models}}$  in the  $\underline{\text{Scene Preview window}}$  as 3D objects with rough  $\underline{\text{surface}}$  and  $\underline{\text{shading}}$  effects from  $\underline{\text{lights}}$ . The  $\underline{\text{Solid Models}}$  view is the slowest of the views to draw changes to a  $\underline{\text{scene}}$ .



Step by step About Asymetrix 3D F/X

Commands

Boxes Options Wireframes



# On Camera Area submenu View menu / On Camera Area



Enlarges or reduces the working area of the <u>Scene Preview window</u>.



Step by step About Asymetrix 3D F/X About camera perspective Setting the camera perspective

Asymetrix 3D F/X User Manual Chapter 1, "The basics"



Keyboard: F4

Displays or hides the <u>scene's</u> backdrop in the <u>Scene Preview window</u>.



Step by step About Asymetrix 3D F/X Adding a backdrop

Modifying a backdrop

Commands

Backdrop Gradient (dialog box) Modify Backdrop

Asymetrix 3D F/X User Manual Chapter 1, "The basics"



### **Scene Contents**

View menu



Keyboard: F2

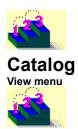
Toolbar:



Displays or hides the Scene Contents window, which lists all scene attributes such as backdrop, lights, and soundtrack; and all models and their attributes such as surfaces, warps, and animation paths.



Step by step
About Asymetrix 3D F/X
Asymetrix 3D F/X User Manual
Chapter 1, "The basics"







Displays or hides the Catalog, a window that contains preset <u>scene</u> elements such as <u>models</u>, <u>surfaces</u>, <u>lights</u>, <u>paths</u>, scenes, and <u>backdrops</u>. You can <u>drag</u> scene elements from the Catalog and <u>drop</u> them into the <u>Scene Preview</u> or <u>Scene Contents</u> window.



Step by step
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# **Position Palette**

View menu



Keyboard: F8

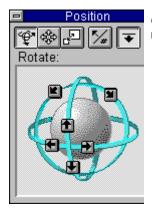
Toolbar:

Displays or hides the Position palette, which you can use to <u>rotate</u>, <u>move</u> or <u>scale</u> a <u>model</u> in the <u>Scene Preview</u> window.

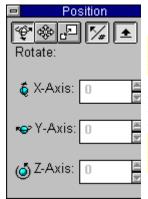
#### **Button/Keyboard Description**

<b>*</b>	Changes cursor to with which you can rotate a model. Press Shift to rotate around depth (Z) axis. Press Ctrl to constrain
F9	rotation to a single axis.  If palette is expanded, displays graphical or numerical rotation controls.
<del>4</del> \$\$	Changes cursor to with which you can move a model left, right, up, or down. Press Shift to move model forward and back in
F10	3D space. If palette is expanded, displays <u>graphical</u> or <u>numerical</u> movement controls.
	Changes the cursor to with which you can scale (resize) a model. Press Shift to scale only width. Press Ctrl, then drag the
F11	mouse up or down to scale only height. Press Ctrl, then drag the mouse left or right to scale only depth.  If palette is expanded, displays graphical or numerical scaling controls.
₹	Expands the Position palette to display additional controls.
F12	Toggles expanded Position palette from graphical to numerical controls.





Graphical controls. Clicking an arrow rotates the model in the direction indicated.

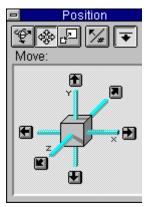


Numerical controls. Sets precise values for a model's rotation.

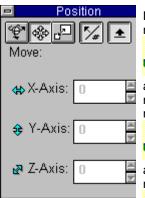
X-Axis: Modifies model's rotation around its X or horizontal axis (rotates model front to back). A positive value rotates model away from the camera; a negative value rotates model toward the camera.

Y-Axis: Modifies model's rotation around its Y or vertical axis (rotates model side to side). A positive value rotates model to the left; a negative value rotates model to the right.

Z-Axis: Modifies model's rotation around its Z or depth axis (rotates model in a circle). A positive value rotates model to the left; a negative value rotates model to the right.



Graphical controls. Clicking an arrow moves the model in the direction indicated.

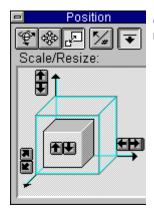


Numerical controls. Sets precise values for a model's position.

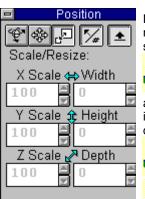
X-Axis: Modifies model's position along its X or horizontal axis. A positive value moves model to the left; a negative value moves model to the right.

Y-Axis: Modifies model's position along its Y or vertical axis. A positive value moves model down; a negative value moves model up.

Z-Axis: Modifies model's position along its Z or depth axis. A positive value moves model back; a negative value moves model forward.



Graphical controls. Clicking an arrow scales the model in the direction indicated.



Numerical controls. Sets precise values for a model's scale (percentage of its initial size) and size.

X Scale: Modifies model's scale along its X (horizontal) axis. A value over 100 increases the model's size; a value below 100 decreases the model's size.

Width: Modifies model's width.

Y Scale: Modifies model's scale along its Y (vertical) axis. A value over 100 increases the model's size; a value below 100 decreases the model's size.



Height: Modifies model's height.

Z Scale: Modifies model's scale

along its Z (depth) axis. A value over 100 increases the model's size; a value below 100 decreases the model's size.



Depth: Modifies model's depth.

Step by step
About Asymetrix 3D F/X
About the Position palette
Arranging a model in a scene
Resetting a model's location, rotation, or scale

Asymetrix 3D F/X User Manual Chapter 1, "The basics"



# **Animation Palette**

View menu







Displays or hides the Animation palette, which you can use to preview the  $\underline{\text{animation}}$  defined by the  $\underline{\text{animation}}$  paths of all  $\underline{\text{models}}$  in a  $\underline{\text{scene}}$ .

Button	Description
	Previews the animation paths of all models in the scene at actual speed, dropping <u>frames</u> if they can't be <u>generated</u> quickly enough.
	Previews the animation paths of all models in the scene, but does not play frames at actual speed.
11	Stops or resumes playing a stopped animation from the current frame.
K	Returns to first frame of all animation paths.
<b>4</b> 1	Backs up one frame.
	Advances one frame.
M	Advances to last frame of all animation paths.



#### Step by step

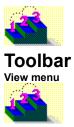
Animating a model Generating an animation Modifying a model's animation path Previewing an animation
Printing a frame of an animation

#### Commands

**Modify Animation** Preview Animation
Preview All Frames

#### Asymetrix 3D F/X User Manual

Chapter 1, "The basics"
Chapter 3, "Creating snapshot and animation files"



Toggles the toolbar on or off the screen.



#### Screen map

Map of screen elements



Toggles the status bar on or off the active window.



#### Screen map

Map of screen elements



# **Main Status Bar**

View menu

Toggles the status bar on or off the main Asymetrix 3D F/X window.



#### Screen map

Map of screen elements



### **Convert Snapshot (Colors tab)**

Tools menu



Converts a generated snapshot to a different size or color palette.

Note Click a tab below to see its options.

Colors	<u>S</u> ize
Option	Description
Original Image	Lists number of colors available on current system and snapshot's <u>color depth</u> in bits per pixel.
New Image	Sets snapshot to use a new color palette and dithering options:
	Colors. Sets snapshot's color depth and palette.
· · · · ·	Monochrome (1-bit): Dithers the image to a black-and-white palette.

16 Colors (4-bit): Dithers the image to the standard Windows palette.

256 Colors (8-bit): Dithers the image to the default Asymetrix 3D F/X palette.

Best 256 colors (8-bit): Counts how often each color occurs, then creates a palette of the 236 most common colors in the image and the 20 Windows colors and dithers the image to it.



65,536 Colors (16-bit): Recreates the image's colors precisely (does not impose a

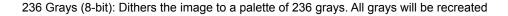
palette).



16 million (24-bit): Recreates the image's colors precisely (does not impose a palette).

16 Grays (8-bit): Dithers the image to a palette of 16 grays.

precisely



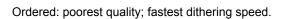
256 Grays (8-bit): Dithers the image to a palette of 256 grays. Some grays may not be

recreated precisely

Compel Palette (8-bit): Dithers the image to the standard Asymetrix Compel palette. File. Sets the snapshot to use a color palette file (.PAL), or the palette of a specific bitmap. Clicking Browse opens the Open dialog box, in which you can import a palette. Dithering. Sets how Asymetrix 3D F/X blends the available colors to approximate those

specified in the snapshot.







Diffuse: best quality; slower dithering speed.

Cluster: average quality; medium dithering speed.



None: no dithering. Only available for 16-bit or higher images.



Step by step Changing a snapshot's color depth or size

#### Commands

Generate Animation Generate Snapshot

Options Snapshot & Animation Settings

# Asymetrix 3D F/X User Manual Chapter 4, "Advanced projects"



# Convert Snapshot (Size tab)



Converts a generated snapshot to a different size or color palette.

**Note** Click a tab below to see its options.

<u>C</u> olors	Size
Option	Description
Original Image	Lists the snapshot's current width and height in the units you specify.
New Image	Sets the snapshot to a new size.
	Image Size. Sets the snapshot to a standard size. Or you can set a custom size.
	Width, Height, Units. Sets the snapshot's width and height to a specific size in units you choose.
	Scale Proportionally. Maintains the snapshot's width to height ratio as its width or height is changed.
	Scaling Method. Specifies how the snapshot is resized.
	Basic: poorest quality; fastest scaling method.
	Good: average quality; fast scaling method.
	Better: good quality (can be blurry); slow scaling method.

Best: best quality; slowest scaling method.





# Arrange Catalog Entries



Arranges icons of entries in <u>Catalog</u>.



Step by step
Creating and modifying a Catalog
Command
Catalog



Starts the <u>Bitmap</u> Editor application which you can use to edit a bitmap, or change its palette.



# Asymetrix 3D F/X User Manual Chapter 4, "Advanced projects"



# **Palette Editor**

Tools menu

Starts the Palette Editor application which you can use to create custom palettes for your  $\underline{snapshots}$  and  $\underline{animations}$ .



### Asymetrix 3D F/X User Manual Chapter 4, "Advanced projects"





Starts the Wave File Editor application, which you can use to modify a wave file used as a soundtrack.



### Asymetrix 3D F/X User Manual Chapter 1, "The basics"



### **Photo CD Converter**

Tools menu



Starts the Photo CD Converter application, which you can use to convert images you select from a Photo CD to bitmap (.BMP) format.



### Asymetrix 3D F/X User Manual Chapter 1, "The basics"



## Options (Program tab)



Keyboard: F7

Sets default settings and options for working in Asymetrix 3D F/X.

**Note** Click a tab below to see its options.

Program	Models <u>F</u> ile
Option	Description
Catalog Options	Sets options for the default Catalog that starts with Asymetrix 3D F/X.
	Default. Sets which catalog file opens when you start Asymetrix 3D F/X. Clicking Browse opens the <u>Open</u> dialog box, in which you can select a Catalog file.
	Spacing. Sets default distance between Catalog entries.
	When Creating New Catalog Entry.
	Prompt User For File Name: opens the <u>Save As</u> dialog
	box when you add a catalog entry.
	Create File Name: automatically creates names for new catalog entries.
Zoom Dialogs	Makes dialog boxes appear to zoom out as they open.
Display Solid Models In Previews & OLE	Shows dialog box previews and scenes in OLE <u>container applications</u> as <u>solid models</u> .
Generate Snapshot Button Uses Last Settings	When the Generate Snapshot toolbar button is clicked, immediately generates a snapshot using the last settings from the Generate Snapshot dialog box without opening the dialog box.





# Options (Models tab)

Tools menu

Keyboard: F7

Sets default settings and options for working in Asymetrix 3D F/X.

Note Click a tab below to see its options.

<u>P</u> rogram	Models <u>File</u>
Option	Description
Default Colors	Sets default colors used to create models.
	Face. Sets color applied to model face. Click color button to set a new color.
	Side. Sets color applied to model sides. Click color button to set a new color.
	Default. Sets color applied to <u>simple models</u> and <u>imported models</u> that do not have <u>surface</u> information. Click color button to set a new color.
	Bevel. Displays color applied to model <u>bevels</u> . Click color button to set a new color.
Wireframe Display	Sets default colors used to display models as wireframes.
Colors	Line. Sets color used to draw a model in Wireframe mode. Click color button to set a new color.
	Selected. Sets color used for selection lines in Wireframe or <u>Boxes</u> mode. Click color button to set a new color.
	Backfaces Hidden In Wireframe Mode. Hides <u>surfaces</u> of models in Wireframe mode which would be hidden if the <u>scene</u> were displayed in <u>Solid Models</u> mode.
Move In Steps Of	Sets increments in which model <u>moves</u> , <u>rotates</u> , or <u>scales</u> when adjusted using the <u>Position palette</u> , mouse, or arrow keys.





# Options (File tab)

Keyboard: F7

Sets default settings and options for working in Asymetrix 3D F/X.

**Note** Click a tab below to see its options.

<u>P</u> rogram	Models File
Option	Description
At Startup	Sets what opens when you start Asymetrix 3D F/X.
	Use Startup Dialog. Opens the Startup dialog box, from which you can choose a startup option.
	Use Scene Specialist. Opens the Scene Specialist program that can create <u>snapshots</u> for you.
	Create New Scene. Creates a new <u>scene</u> . New scene contents are determined by the default options you set in the <u>Snapshot &amp; Animation Settings</u> dialog box.
	Display Open Dialog Box. Displays the $\underline{\text{Open}}$ dialog box so you can select a scene to work with.
New Scenes	Specifies what settings are used to create a new scene.
	Use Snapshot & Animation Defaults. Creates new scenes using the default options set in the Snapshot & Animation Settings dialog box.
	Use Scene File As Template. Creates new scenes using an existing scene file's settings and content as a template.
	File. Specifies a scene file to use as a template. Enter the name of a scene file, or click Browse to display the Open dialog box, in which you can choose a file to to use as a template.



### Commands

Convert Snapshot
Generate Animation
Generate Snapshot
New
Snapshot & Animation Settings
Scene Specialist

### Models menu



### **Create Text Model or Modify Text Model**

Models menu



Keyboard: Ctrl+T (Create Text Model command)

Toolbar:

 $\triangle$ 

(Create Text Model command)

Creates a 3D <u>model</u> from text or modifies an existing 3D <u>text model</u>. You can set the font and style of the text before creating the text model.

Option Description

Toolbar Click a button below to see its description.

\* 🖶 🖺



Font Sets the font of the text model.

Size Sets the font size of the text model.

Enter Text Here Sets the text for the model. Press Shift+Enter to start a new line of text.

Model Name Displays the model name. The model name is automatically set to the text in the field. Double-click in the box to enter a new name, or click <u>Modify</u> to enter a new name and description for the model.

Spelling Opens the Spelling dialog box.

Character Map Opens the Character Map dialog box, in which you can select alternative characters to include in the text model.

Modify 3D Opens the Modify 3D dialog box, in which you can set the bevel and thickness for the model.



Step by step
About text and picture models
Creating a text model

#### Commands

Modify 3D
Modify Letter Model (dialog box)
Modify Name (dialog box)
Spelling (dialog box)

### Asymetrix 3D F/X User Manual

Chapter 1, "The basics"

### Cut

Cuts selected text to the Windows Clipboard, replacing the previous Clipboard contents.

### Сору

Copies selected text to the Windows Clipboard, replacing the previous Clipboard contents.

### **Paste**

Pastes the contents of the Windows Clipboard into the Enter Text Here area.

### Bold

Makes selected text bold.

### Italic

Makes selected text italic.

### Align left

Aligns all text to left.

### Center

Centers all text.

Align right
Aligns all text to right.

# **Justify**Justifies text.

### Subscript

Formats selected text as subscript.

### Normal

Sets text's vertical alignment to normal (neither subscript nor superscript).

### Superscript

Formats selected text as superscript.



## Modify Name (dialog box) Any scene element dialog box or right-click menu



Allows you to set a new name and description for a scene element.

Option	Description
Name	Sets a name to display in the Scene Contents window and status bar.
	<b>Note</b> To modify the name of a group of elements, such as lights or paths, right-click the group in the Scene Contents window, then enter a name.
Description	Sets a description to display in the status bar.



#### Commands

Create Picture Model

Create Text Model

**Modify Animation** 

Modify Backdrop

Modify Cube (dialog box)
Modify Cylinder (dialog box)

Modify Imported Model (dialog box)

Modify Letter Model (dialog box)

Modify Lights

Modify Picture Model (dialog box)

Modify Ring (dialog box)

Modify Sphere (dialog box)

Modify Sub-part (dialog box)

Modify Surface & Color

Modify Text Model (dialog box)

Modify Warp

#### Asymetrix 3D F/X User Manual

Chapter 1, "The basics"



# Spelling (dialog box) Models menu / Create Text Model / Spelling



Provides options for correcting the spelling of words used in <u>text models</u>.

Option	Description
Not In Dictionary; Invalid Character; Capitalization	Displays unknown text, unknown use of punctuation, or unknown capitalization scheme.
Change To	Displays suggested new text to replace the unknown text. Double-click to enter corrections here.
Suggestions	Displays a list of alternative words for the unknown text, if available.
Personal Dictionary	Specifies a dictionary to open. Enter the name of a dictionary.
Add	Adds the unknown text to a custom user dictionary.
Ignore group	Specifies types of words to ignore.
	Words In UPPERCASE. Ignores words containing only capital letters.
	Words With Numbers. Ignores words containing numbers.
Ignore	Ignores the unknown text.
Ignore All	Ignores every occurrence of the unknown text.
Change	Changes unknown text to the text specified in the Change To box.
Change All	Changes every occurrence of the unknown text to the text specified in the Change To box.



Command
Create Text Model
Asymetrix 3D F/X User Manual
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### **Create Picture Model**

Models menu



Keyboard: Ctrl+M





Imports graphic files to create <u>3D picture models</u>. For <u>bitmaps</u>, Asymetrix 3D F/X converts the image to black and white, then <u>traces</u> around the black to create a 3D picture model. For graphic files defined by polygons and lines (such as <u>metafiles</u>), Asymetrix 3D F/X uses the information in the source file to create a 3D picture model.

Option	Description
Create Model From Graphic File	Imports a graphic file to use in creating a model.
	File. Specifies a file to import. Enter the name of a graphic file. Clicking Browse opens the <a href="Import Graphic">Import Graphic</a> dialog box, in which you can choose a file to import.
	Paste Graphic From Clipboard. Pastes a graphic file from the Windows Clipboard into the dialog box.
	Preview. Previews the graphic file.
	<b>Note</b> Metafiles may appear distorted in the preview area, but will be imported without distortion.
	Autotrace. Creates a model by converting a bitmap to black and white, then tracing around the black.
	Trace Options. Opens the <u>Trace Options</u> dialog box, which specifies how a bitmap is converted to black and white, and how closely it is traced.
Model Name	Model Name. Displays the model name. Double-click in the box to enter a new name, or click <u>Modify</u> to enter a new name and description for the model.
Modify 3D	Opens the $\underline{\text{Modify 3D}}$ dialog box, in which you can set the $\underline{\text{bevel}}$ and thickness for the model.



#### Step by step

About text and picture models Creating a picture model

#### Commands

Import Graphic (dialog box)

Modify 3D
Modify Name (dialog box)
Modify Picture Model (dialog box)
Modify Sub-part (dialog box)
Trace Options (dialog box)

### Asymetrix 3D F/X User Manual Chapter 1, "The basics"



### Import Graphic (dialog box) Models menu / Create Picture Model / Browse



Used to import a bitmap or metafile.

Option	Description
File Name	Lists all files in the current default directory with the default file extension for the selected file format (.BMP, .DIB, or .WMF). A file selected from the File Name list replaces the contents of the File Name box.
List Files Of Type	Indicates that the default file types are the graphic types .BMP, .DIB, and .WMF. The drop-down list includes all other available file types.
Directories	Displays the default path. Change the directory by selecting a new path from the Directories box, which lists all directories available on the current drive. To change the drive, make a selection in the Drives box.
Drives	Lists the available drives. Selecting a new drive changes the contents of the Directories box.
Preview	Previews the bitmap or metafile.
Preview Selection	Enables the Preview area.
Network	Available if your system is connected to a network. Opens the Network dialog box from which you can choose additional drives and directories.



Step by step
Creating a picture model
Command
Create Picture Model
Asymetrix 3D F/X User Manual
Chapter 1, "The basics"



# Trace Options (dialog box) Models menu / Create Picture Model / Trace Options



Specifies which shades in a bitmap are converted to white, and how closely it is traced to create a picture model.

Option	Description
Tightness Of Fit	Sets how closely (in pixels) to trace the curves in a bitmap, once it has been converted to black and white.
Ignore	Shades Lighter Than. Sets the shades that will be considered white when tracing a bitmap.
	Things Smaller Than. Sets the size of areas that will be traced (in pixels).



Step by step
Creating a picture model
Command
Create Picture Model
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# Create Simple Model submenu



Creates geometrically defined models.

Submenu item	Description
Sphere	Creates a sphere model.
Ring	Creates a ring model.
Cylinder	Creates a cylinder model.
Cube	Creates a cube model.
Cone	Creates a cone model, based on a cylinder.
Plane	Creates a plane model, based on a cube.
Octahedron	Creates an octahedron model, based on a sphere.
Barrel	Creates a barrel model, based on a sphere.
Gear	Creates a gear model, based on a cylinder.
Hexnut	Creates a hexnut model, based on a ring.
Tube	Creates a tube model, based on a cylinder.
Double Bell	Creates a double bell model, based on a sphere.



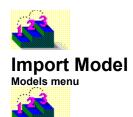
#### Step by step

About simple models Adding a preset model Modifying a simple model's shape

#### Commands

Modify Cube (dialog box)
Modify Cylinder (dialog box)
Modify Ring (dialog box)
Modify Sphere (dialog box)

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Keyboard: Ctrl+I

Imports a  $\underline{3D \ model \ file}$  created in another program into a  $\underline{scene}$ . Asymetrix  $3D \ F/X$  supports  $\underline{models}$  that use the Autodesk  $3D \ Studio \ (.3DS)$  or AutoCAD (.DXF) format.

Option	Description
File Name	Lists all files in the current default directory with the default file extension for the selected file format. A file selected from this box replaces the contents of the File Name box.
List Files Of Type	Indicates that geometry files (extensions .3DS or .DXF) are the default file type.
Directories	Displays the default path. Change the directory by selecting a new path from the Directories box, which lists all directories available on the current drive. To change the drive, make a selection in the Drives box.
Drives	Lists the available drives. Selecting a new drive changes the contents of the Directories box.
Network	Available if your system is connected to a network. Opens the Network dialog box from which you can choose additional drives and directories.



Step by step About imported models Importing a model

Commands
Imported Model Surface (dialog box)
Modify Imported Model (dialog box)



# Imported Model Surfaces (dialog box) Models menu / Import Model



Opens when you import a  $\underline{model}$  in .3DS format and Asymetrix 3D F/X cannot locate the  $\underline{surface}$  mapping files required to display it.

Option	Description
Reassign Surface Mappings	.3DS Filename (Map Type) -> New Filename list. Lists Autodesk 3D Studio surface map file names that cannot be found. Select a surface map name, click Browse, and then select a file to assign to it.



Step by step
About imported models
Importing a model

Commands
Import Model
Modify Imported Model (dialog box)



Modifies the currently selected  $\underline{\text{text}}$  or  $\underline{\text{picture model's}}$  3D options.

Option	Description
Bevel	Sets type of angle on a model's edges. Adding a <u>bevel</u> causes a model to redraw and <u>generate</u> more slowly.
	None. Removes model's bevel.
	Angled. Adds 45-degree bevel to model's edges.
	Concave Curve. Adds concave bevel to model's edges.
	Convex Curve. Adds convex bevel to model's edges.
	Bevel Size. Sets bevel's size as a percentage of the model's depth.
Thickness	Sets model's depth in relation to the apparent width of the Scene Preview window.
Preview	Preview. Previews 3D options. Click to stop and start rotation.
	Update. Applies options set in dialog box to model in preview area.



Step by step
About text and picture models
Creating a picture model
Creating a text model

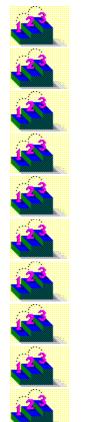
Commands

Create Picture Model
Create Picture Model





You can use the Modify Model command to change text, picture, simple, and imported models you've created. For details about modifying a specific type of model, click a topic below.



Modify Cube (dialog box)

Modify Cylinder (dialog box)

Modify Imported Model (dialog box)

Modify Letter Model (dialog box)

Modify Picture Model (dialog box)

Modify Ring (dialog box)

Modify Sphere (dialog box)

Modify Sub-part (dialog box)

Modify Text Model (dialog box)

Step by step About imported models About object linking and embedding (OLE) About simple models About surfaces About text and picture models



# Modify Picture Model (dialog box) Models menu / Modify Model



Modifies the name of the selected <u>picture model</u>.

Option	Description
Model Name	Displays the model or sub-part's name. Double-click in the box to enter a new name, or click
	Modify to enter a new name and description for the model or sub-part.



Step by step
About text and picture models
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# Modify Sub-part or Modify Letter Model (dialog box) Models menu / Modify Model



Modifies the name of the selected <u>sub-part</u> of a model or <u>text model</u>.

Option	Description
Model Name	Displays the name of the sub-part of the model or text model. Double-click in the box to enter a
	new name, or click Modify to enter a new name and description for the sub-part.



Step by step
About text and picture models
Creating a picture model
Creating a text model

Commands

Create Picture Model
Create Text Model



# Modify Imported Model (dialog box) Models menu / Modify Model



Modifies the selected imported <u>model's</u> name and <u>meshes</u>.

Option	Description
Model Name	Displays the model name. Double-click in the box to enter a new name, or click <u>Modify</u> to enter a new name and description for the model.
Mesh Operations	Manipulates the triangles that make up the surface of an imported model.
	Flip Normals. Reassigns the front and back of each triangle. Use this option when you can't see an imported model once you've rendered it.
	Melt. Makes a surface more faceted, and less smooth.
	Weld. Makes a surface less faceted, and more smooth.
	Unify Normals. Orients all the triangles in a mesh in the same direction.
	Sub Diivide. Divides each triangle in a mesh into three triangles.



Step by step About imported models Importing a model

Commands
Import Model
Imported Model Surface (dialog box)
Modify Name (dialog box)



## Modify Cube (dialog box) Models menu / Modify Model





Modifies the selected cube or plane <u>model</u>.

Option	Description
Model Name	Displays the model name. Double-click in the box to enter a new name, or click <u>Modify</u> to enter a new name and description for the model.
Preview	Previews options set in dialog box.
Update	Applies options set in dialog box to model in preview area.
Size X	Sets model's width. Range of values: .001 to 5000.
Size Y	Sets model's height. Range of values: .001 to 5000.
Size Z	Sets model's depth. Range of values: .001 to 5000.
Divisions	Sets number of triangles that make up the model. Range of values: 2 to 16.



#### Step by step

About simple models Adding a preset model Modifying a simple model's shape

#### Commands

Create Simple Model
Modify Cylinder (dialog box)
Modify Name (dialog box) Modify Ring (dialog box)
Modify Sphere (dialog box)

{ewl ewl, ewBitmap, cube.dib}

If you do not see a series of example snapshots, you do not have file CUBE.DIB.



## Modify Cylinder (dialog box) Models menu / Modify Model





Modifies the selected cylinder, cone, gear, or tube <u>model</u>.

Option	Description
Model Name	Displays the model name. Double-click in the box to enter a new name, or click <u>Modify</u> to enter a new name and description for the model.
Preview	Previews options set in dialog box.
Update	Applies options set in dialog box to model in preview area.
Upper Radius	Adjusts radius of circle at top of model. Range of values: .001 to 5000.
Lower Radius	Adjusts radius of circle at bottom of model. Range of values: .001 to 5000.
Radial Divisions	Adjusts number of wedge shapes that make up model's circular faces. Range of values: 3 to 256.
Height Divisions	Adjusts number of rows of triangles that make up model's vertical faces. Range of values: 1 to 32.
Height	Adjusts model's height. Range of values: .001 to 5000.
Radial Power	Contorts model's curves away from or toward its horizontal and vertical axes. A value close to 10 collapses model toward its center to resemble a cross; a value close to 0 expands model's curves to resemble a square. Range of values: .01 to 10.
End Caps	Places faces on ends of model.
Petals	Molds model into a flower shape with the specified number of petals. Range of values: 1 to 16.
Petal Size	Adjusts size of petals (if petals are specified). Range of values: 0 to 1.
	If petal size is greater than 0 and Radial Divisions have not already been set, Asymetrix 3D F/X automatically changes the Radial Divisions to 16 times the value of Petals when the Update button is clicked.
Petal Shape	Modifies the shape of model's petals. A value close to 0 make petals more squared; a value close to 10 makes petals more pointed. Range of values: .01 to 10.
	If petal size is greater than 0, petal shape is less than .5 or greater than 4, and Radial Divisions have not already been set, Asymetrix 3D F/X automatically changes the Radial Divisions to 32 times the value of Petals when the Update button is clicked.



#### Step by step

About simple models Adding a preset model Modifying a simple model's shape

#### Commands

Create Simple Model
Modify Cube (dialog box)
Modify Name (dialog box) Modify Ring (dialog box)
Modify Sphere (dialog box)

**Example 1:** Illustrates the radius, divisions, power, and end caps parameters.

**Example 2:**: Illustrates the petal parameters.

{ewl ewl, ewBitmap, cylndr1.dib}

If you do not see a series of example snapshots, you do not have file CYLNDR1.DIB.

{ewl ewl, ewBitmap, cylndr2.dib}

If you do not see a series of example snapshots, you do not have file CYLNDR2.DIB.



## Modify Ring (dialog box) Models menu / Modify Model





Modifies the selected ring or hexnut model.

Option	Description
Model Name	Displays the model name. Double-click in the box to enter a new name, or click $\underline{\text{Modify}}$ to enter a new name and description for the model.
Preview	Previews options set in dialog box.
Update	Applies options set in dialog box to model in preview area.
Power X	Contorts model's curves away from or toward its horizontal and vertical axes. A value close to 10 collapses model to make it resemble a cross; a value close to 0 expands model to make it resemble a square. Range of values: .01 to 10.
Power Y	Contorts curves of the circles that comprise the model away from or toward their horizontal and vertical axes. A value close to 10 collapses each circle to make model seem composed of crosses; a value close to 0 expands each circle to make model seem composed of squares. Range of values: .01 to 10.
Thickness	Adjusts radius of circles that comprise model. Range of values: .001 to 5000.
Ring Radius	Adjusts radius of entire model. Range of values: .001 to 5000.
Major Divisions	Adjusts number of circles that make up model. Range of values: 3 to 100.
Minor Divisions	Adjusts number of lines in circles that make up model. Range of values: 3 to 100.



#### Step by step

About simple models Adding a preset model Modifying a simple model's shape

#### Commands

Create Simple Model
Modify Cube (dialog box)
Modify Cylinder (dialog box)
Modify Name (dialog box)
Modify Sphere (dialog box)

{ewl ewl, ewBitmap, ring.dib}

If you do not see a series of example snapshots, you do not have file RING.DIB.



## Modify Sphere (dialog box) Models menu / Modify Model





Modifies the selected sphere, octahedron, barrel, or double bell  $\underline{model}$ .

Option	Description
Model Name	Displays the model name. Double-click in the box to enter a new name, or click Modify to enter a new name and description for the model.
Preview	Previews options set in dialog box.
Update	Applies options set in dialog box to model in preview area.
Fineness	Adjusts number of triangles that make up model. Range of values: 1 to 5.
Power X	Contorts model's curves away from or toward its horizontal axis. A value close to 10 elongates the curve (to resemble a top); a value close to 0 squares the curve. Range of values: 0 to 10.
Power Y	Contorts model's curves away from or toward its vertical axis. A value close to 10 elongates the curve; a value close to 0 squares the curve. Range of values: 0 to 10.
Power Z	Contorts model's curves away from or toward its depth axis. A value close to 10 elongates the curve; a value close to 0 squares the curve. Range of values: 0 to 10.
Radius X	Adjusts length of model's horizontal axis. Range of values: .001 to 5000.
Radius Y	Adjusts length of model's vertical axis. Range of values: .001 to 5000.
Radius Z	Adjusts length of model's depth axis. Range of values: .001 to 5000.
Optimize For Bitmap Surface	Adjusts model's surface to better display bitmap patterns, <u>bump textures</u> , or <u>reflection maps</u> .



#### Step by step

About simple models Adding a preset model Modifying a simple model's shape

#### Commands

Create Simple Model
Modify Cube (dialog box)
Modify Cylinder (dialog box)
Modify Name (dialog box)
Modify Ring (dialog box)

{ewl ewl, ewBitmap, sphere.dib}

If you do not see a series of example snapshots, you do not have file SPHERE.DIB.



#### **Modify Surface & Color (Surface Pattern tab)**

Models menu





Modifies the surface of a model.

Note Click a tab below to see its options.

Surface Pattern	Highlights Effects	
Option	Description	
Surface Name	Displays the surface's name. Double-click in the box to enter a new name, or click $\underline{\text{Modify}}$ to enter a new name and description for the surface.	
Surface Preview	Previews surface options.	
Surface Pattern	Color. Sets pattern to a color. To change color, see the Surface Settings options below.	
	Bitmap Pattern. Sets pattern to a <u>bitmap</u> . To apply a different bitmap, see the Surface Settings options below.	
	Solid Material. Sets pattern to a preset solid material. To change material, see the Surface Settings options below.	
	<b>Note</b> If you apply a solid material surface to a model, the surface will not be visible until you generate a snapshot or animation of the scene.	
Surface Settings	Color surface pattern options.	
201X	Color button: displays Color Wheel dialog box.	



Color tiles: set pattern to a color.

Bitmap surface pattern options.



Bitmap: contains list of preset pattern files, or indicator that file is imported.

File: displays selected file's name. Double-click to enter a different file name, or click Browse to select a new file. Bitmap surfaces can be found in the Bitpatrn subdirectory of your Catalog directory.

Note You can also select a digital video (.AVI) file to play as a model's surface.

Tile Bitmap: sets how often a bitmap is repeated on a model's surface.

**Note** If you tile a bitmap surface, the surface will not appear tiled until you generate a snapshot or animation of the scene.

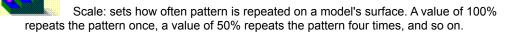
Solid Material, Granite surface pattern options.

Scale: sets how often pattern is repeated on a model's surface. A value of 100% displays the pattern once, a value of 50% displays the pattern four times, and so on.

Stone: sets color of stone, and percentage of stone in relation to other pattern elements.



Grains: sets color of grain, and percentage of grain in relation to other pattern elements. Solid Material, Marble surface pattern options.





Vein Curliness: sets curliness of vein.



Stone: sets color of stone, and percentage of stone in relation to other pattern elements.

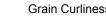


Vein: sets color of vein, and percentage of vein in relation to other pattern elements.

Grainline: sets whether grainline shows on top, sides, or front of model. Solid Material, Wood surface pattern options.



Scale: sets how often pattern is repeated on a model's surface. A value of 100% repeats the pattern once, a value of 50% repeats the pattern four times, and so on.



Grain Curliness: sets curliness of grain.



Wood: sets color of wood, and percentage of wood in relation to other pattern elements.



Grain 1: sets color of grain, and percentage of grain in relation to other pattern elements.

Single Sided Double Sided

Grainline: sets whether grainline shows on top, sides, or front of model.

Sets a surface to appear only on the outer faces of a model.

Sets a surface to appear on both the inner and outer faces of a model.



#### Step by step

About surfaces

Adding a texture to a model's surface

Applying a digital video file as a surface

Applying a surface to a model

Creating a "glass" surface

Creating models that appear to be lights

Making a color surface appear transparent

Making a scene and backdrop appear smoky

Making a scene and backdrop appear snowy

Making a solid material surface transparent

Making a surface reflect a bitmap

Making a surface reflective

Making all models in a scene reflect a bitmap

Modifying a model's surface

Submerging a model in "water"

#### Commands

Color Wheel (dialog box)

Import Graphic (dialog box)

Modify Name (dialog box)

**Snapshot & Animation Settings** 

#### Asymetrix 3D F/X User Manual

Chapter 1, "The basics"

**Example 1:** Illustrates the Surface Pattern tab parameters.

**Example 2:** Illustrates the Highlights tab parameters.

**Example 3:** Illustrates the Effects tab parameters.

{ewl ewl, ewBitmap, surf1.dib}

If you do not see a series of example snapshots, you do not have file SURF1.DIB.



# Modify Surface & Color (Highlights tab)





Modifies the  $\underline{\text{surface}}$  of a  $\underline{\text{model}}$  .

Note Click a tab below to see its options.

Surface Pattern	Highlights: Effects
Option	Description
Surface Name	Displays the surface's name. Double-click in the box to enter a new name, or click $\underline{\text{Modify}}$ to enter a new name and description for the surface.
Surface Preview	Previews surface options.
Surface Finish	Sets how surface changes with <u>light</u> .
	Highlight Size. Adjusts the amount of area the highlight covers.
	Highlight Intensity. Adjusts highlight brightness.
	Unhighlighted Surface. Adjusts shade of unhighlighted surfaces.
Bump Texture	Defines a surface's texture.
	Texture. Contains list of preset texture files, or indicates that file is imported or that no file is selected.
	File. Displays selected file's name. Double-click to enter a different file name, or click Browse to select a new file. Bump textures can be found in the Bumps subdirectory of your Catalog directory.
	Tile Texture. Sets how often the texture <u>bitmap</u> is repeated on a model's surface.



{ewl ewl, ewBitmap, surf2.dib}

If you do not see a series of example snapshots, you do not have file SURF2.DIB.



# Modify Surface & Color (Effects tab)





Modifies the  $\underline{\text{surface}}$  of a  $\underline{\text{model}}$  .

Note Click a tab below to see its options.

Surface Pattern	Highlights Effects
Option	Description
Surface Name	Displays the name that appears in the <u>Scene Contents window</u> and status bar. Double-click in the box to enter a new name, or click <u>Modify</u> to enter a new name and description for the surface.
Surface Preview	Previews surface options.
Reflections	Sets how reflective a surface is, and what it reflects.
	Use Reflection Map. Check to make a model's surface appear to reflect a bitmap.
	Reflection. Lists preset reflection files, or indicates that file is imported or that no file is selected.
	File. Displays selected file's name. Double-click to enter a different file name, or click Browse to select a new file. Reflection maps can be found in the Rflctns subdirectory of your Catalog directory.
	Enable Optical Effects When Ray Tracing. Check to make an object reflect both a reflection map and the scene around it if either Ray Traced or Ray Traced w/Shadows are selected as generating options.
	Intensity. Adjusts how much of the <u>reflection map</u> or <u>scene</u> the model's surface reflects.
Transparency	Adjusts surface's transparency.



{ewl ewl, ewBitmap, surf3.dib}

If you do not see a series of example snapshots, you do not have file SURF3.DIB.



## Color Wheel (dialog box)



Displays colors you can choose for <u>surfaces</u> or <u>backdrops</u>.

Option	Description
Color Wheel	Sets a color.
Lightness	Adjusts lightness of all colors.
Color	Displays selected color.
Opacity Displays the transparency of a color, from 0 to 255.	
	Note Opacity is only available when modifying a color used as a surface.
RGB Values	Sets amounts of Red, Green, and Blue in a color, from 0 to 255.
HLS Values	Hue. A value between 0 and 255 that sets a color's quality corresponding to its position in the spectrum, ranging from red through yellow, green, cyan, blue, and magenta.
	Lightness. A value between 0 and 255 that represents the amount of white or black in a color.
	Saturation. A value between 0 and 255 that represents the intensity of a color.



### Step by step

About color in Asymetrix 3D F/X
About color palette shift
Applying a surface to a model
Making a scene and backdrop appear smoky
Making a scene and backdrop appear snowy
Making a solid material surface transparent
Modifying a model's surface

### Command

Modify Surface & Color

### Asymetrix 3D F/X User Manual

Chapter 1, "The basics"



# Animated Surface (dialog box) Models menu / Modify Surface & Color



Opens when you select an <u>.AVI</u> file, rather than a <u>bitmap</u>, to apply as a <u>model's surface</u>. Sets start and end <u>frames</u> of .AVI file to play. Start and end frames can only be defined once. To reset an animation's start and end frames, you must reselect it as a bitmap pattern in the Surface Pattern tab of the Modify Surface & Color dialog box.

Option	Description
Preview	Displays selected .AVI file.
Frames To Use	Start/End. Set the starting and ending frame numbers for the .AVI file. Click to set the currently visible Start and End frame numbers.
Start Time	Sets how many seconds after start of animation surface .AVI file begins to play.
	Asymetrix 3D F/X displays the start frame until the .AVI file starts playing.
Duration	Time in seconds of selected .AVI clip.
Continuous Loop	Sets .AVI file to play continuously on surface.
Freeze On Last Frame	Sets .AVI file to play once on surface, then hold on last frame.



Step by step
Applying a digital video file as a surface
Command
Modify Surface & Color
Asymetrix 3D F/X User Manual
Chapter 4, "Advanced projects"



# Modify Animation (Movement tab)



Modifies an animation path for a model.

Movement	Spin Effects
Option	Description
Animation Path Name(s)	Sets an animation path to modify.
	Modify. Opens the Modify Name dialog box, in which you can enter a new name and description for the path.
Duration	Seconds. Sets time length in seconds for the selected animation path.
Start And End Positions	Enter Scene. Creates path for model to enter <u>scene</u> . Click, then set the model's initial position using the Offscreen Position option described below.
	Leave Scene. Creates path for model to leave scene. Click, then set the model's final position using the Offscreen Position option described below.
	Don't Move. Specifies that model remain in place.
	Wait Offscreen. Specifies that model wait offscreen in the specified location for the specified duration.
	Custom. Indicates that the current path contains path information not created with this dialog box. Custom paths can only be edited, not created.
Offscreen Position	Sets model's initial or final Offscreen position. Click an intersection to set a model's position.



### Step by step

About animation in Asymetrix 3D F/X

Adding a soundtrack to an animation

Animating a model

Animating sub-parts of a model

Generating an animation

Modifying a model's animation path

Modifying a model's animation path sequence
Playing a linked or embedded animation

Previewing an animation

Printing a frame of an animation

Staggering when models enter a scene

### Commands

**Generate Animation** 

Modify Name (dialog box)

Modify Soundtrack

Preview All Frames

**Preview Animation** 

### Asymetrix 3D F/X User Manual

Chapter 1, "The basics"



# Modify Animation (Spin tab)



Modifies an animation path for a model.

M <u>o</u> vement Spin	Effec <u>t</u> s
Option	Description
Animation Path Name(s)	Sets an animation path to modify.
	Modify. Opens the $\underline{\text{Modify Name}}$ dialog box, in which you can enter a new name and description for the path.
No Spin	Specifies that model not spin.
Spin Entire Model	Specifies that entire model spins.
Spin Sub-parts Only	Specifies that only <u>sub-parts</u> of model spin.
Spin Both Model And Sub-parts	Specifies that both model and its sub-parts spin.
Number Of Turns	Specifies how many turns spinning objects perform. Positive numbers cause the model to rotate in the direction set in the Preview & Define Spin area; negative numbers cause the model to rotate in the opposite direction.
	<b>Note</b> You must specify a number of turns, or no spin will be applied to the model.
Preview & Define Spin	Spin Left/Right (Local Y). Specifies that model rotate from left to right, around its vertical axis.
	Spin Up/Down (Local X). Specifies that model rotate from top to bottom, around its horizontal axis.
	Propeller (Local Z). Specifies that model rotate from left to right, around its depth axis.
	Define Spin. Specifies that model rotate in the direction set by clicking in the Preview & Define Spin box.





# Modify Animation (Effects tab)



Modifies an <u>animation path</u> for a <u>model</u>.

M <u>o</u> vement	Spin Effects
Option	Description
Animation Path Name(s)	Sets an animation path to modify.
	Modify. Opens the <u>Modify Name</u> dialog box, in which you can enter a new name and description for the path.
Sub-part Sequence	Apply To Motion. Specifies that stagger options you set (described below) apply to model's motion.
	Apply To Spin. Specifies that stagger options you set (described below) apply to model's spin.
	Stagger Sub-parts First To Last. Specifies that model's <u>sub-parts</u> move or spin in the order they are listed in the <u>Scene Contents window</u> .
	Stagger Sub-parts Last To First. Specifies that model's sub-parts move or spin in reverse of the order they are listed in the Scene Contents window.
	Stagger In A Random Sequence. Specifies that model's sub-parts move or spin in random order.
	Stagger Factor. Specifies how far along its animation path each sub-part will progress before the next sub-part begins moving or spinning.
Offscreen Orientation	Sets how model is oriented as it enters or leaves scene.
	Enable. Specifies that as a model moves along an animation path, it tumbles from the offscreen orientation to the orientation of the model in the <u>Scene Preview</u> <u>window</u> .





# Modify Warp (Front tab)





Defines how the selected <u>model</u> will be stretched or twisted.

Front	<u>S</u> ide <u>I</u> op		
Option	Description		
Warp	Sets how bow and angle sliders warp model from the front.		
	Symmetrically. Adjusts both front edges in the same direction.		
	Mirrored. Adjusts front edges opposite each other.		
	Independently. Adjusts front edges independently.		
Twist (Front/Back)	ck) Sets how many degrees away from center the model's front and back twist.		
Bow	Adjusts the amount model's center is raised above or below its edges.		
Angle	Adjusts the angle of the model's ends.		
Enable Warp	Applies warp to model. Sub-parts cannot be moved individually, but only along with the rest of the model.		
Disable Warp	Removes warp from model, so that sub-parts can be moved individually.		
Warp Name	Displays the <u>warp's</u> name. Double-click in the box to enter a new name, or click $\underline{\text{Modify}}$ to enter a new name and description for the warp.		
Preview	Previews warp options set in dialog box. Click to stop and start rotation.		
Update	Applies options set in dialog box to model in preview area.		
Reset	Removes all warps from model.		



Step by step Modify Name (dialog box) Asymetrix 3D F/X User Manual Chapter 1, "The basics" {ewl ewl, ewBitmap, warp.dib}

If you do not see a series of example snapshots, you do not have file WARP.DIB.



# Modify Warp (Side tab)





Defines how the selected  $\underline{model}$  will be stretched or twisted.

<u>F</u> ront	Side: <u>I</u> op
Option	Description
Warp	Sets how bow and angle sliders warp model from the side.
	Symmetrically. Adjusts both side edges in the same direction.
	Mirrored. Adjusts side edges opposite each other.
	Independently. Adjusts side edges independently.
Twist (Left/Right)	Sets how many degrees away from center the model's sides twist.
Bow	Adjusts the amount model's center is raised above or below its edges.
Angle	Adjusts the angle of the model's ends.
Enable Warp	Applies warp to model. Sub-parts cannot be moved individually, but only along with the rest of the model.
Disable Warp	Removes warp from model, so that sub-parts can be moved individually.
Warp Name	Displays the <u>warp's</u> name. Double-click in the box to enter a new name, or click $\underline{\text{Modify}}$ to enter a new name and description for the warp.
Preview	Previews warp options set in dialog box. Click to stop and start rotation.
Update	Applies options set in dialog box to model in preview area.
Reset	Removes all warps from model.





# Modify Warp (Top tab)





Defines how the selected <u>model</u> will be stretched or twisted.

<u>F</u> ront	<u>S</u> ide <b>Top</b> i		
Option	Description		
Warp	Sets how bow and angle sliders warp model from the top.		
	Symmetrically. Adjusts both top edges in the same direction.		
	Mirrored. Adjusts top edges opposite each other.		
	Independently. Adjusts top edges independently.		
Twist (Top/Bottom)	Sets how many degrees away from center the model's top and bottom twist.		
Bow	Adjusts the amount model's center is raised above or below its edges.		
Angle	Adjusts the angle of the model's ends.		
Enable Warp	Applies warp to model. Sub-parts cannot be moved individually, but only along with the rest of the model.		
Disable Warp	Removes warp from model, so that sub-parts can be moved individually.		
Warp Name	Displays the <u>warp's</u> name. Double-click in the box to enter a new name, or click $\underline{\text{Modify}}$ to enter a new name and description for the warp.		
Preview	Previews warp options set in dialog box. Click to stop and start rotation.		
Update	Applies options set in dialog box to model in preview area.		
Reset	Removes all warps from model.		





## **Snapshot & Animation Settings (Size tab)**

Scene menu

Keyboard: Shift+F3

Sets how snapshots and animations are generated.

**Note** The  $\underline{\text{OLE}}$  tab is only available when performing  $\underline{\text{in-place editing}}$  in a  $\underline{\text{linked}}$  or  $\underline{\text{embedded}}$   $\underline{\text{scene}}$ .

Size Quality	Colors   Effects   OLE
Option	Description
Size	Sets snapshot or animation to an Image Size you choose.
	<b>Note</b> To generate snapshots larger than 4092 pixels wide when your <u>color depth</u> is 8 bits per pixel, 2046 pixels when your color depth is 16 bits per pixel, or 1364 pixels when your color depth is 24 bits per pixel, you must generate to file.
	Width, Height, Units. Sets snapshot's width and height to a size in units that you specify. Also changes automatically when you choose a preset image size.
	Scale Proportionally. Maintains snapshot's width to height ratio as its width or height is changed.
Animation Frame Rate	Sets how many <u>frames</u> per second (fps) are generated. Higher frame rates result in smoother motion, but create larger files. Fifteen fps is the suggested frame rate.
Default	Sets default size, animation frames per second, snapshot style, smoothing, palette, dithering, fog, and environment map options for new scenes you create to those specified in this dialog box.



### Step by step

About animation in Asymetrix 3D F/X

About color in Asymetrix 3D F/X

About object linking and embedding (OLE)

About surfaces

Changing a snapshot's color depth or size

<u>Displaying a snapshot or animation in a container application</u>

Generating a snapshot

Generating an animation

### Commands

**Convert Snapshot** 

Generate Animation

Generate Snapshot

Modify Animation

Modify Surface & Color

**Options** 

Asymetrix 3D F/X User Manual
Chapter 2, "Linking or embedding scenes"
Chapter 3, "Creating snapshot and animation files"



### **Snapshot & Animation Settings (Quality tab)**

Scene menu



Keyboard: Shift+F3

Sets how snapshots and animations are generated.

Note The OLE tab is only available when performing in-place editing in a linked or embedded scene.

Note Click a tab below to see its options.



### Description

Quality

Sets output style and smoothing for the snapshot.

Snapshot Style. Determines amount of detail used to generate snapshots.



Wireframes: draws wireframe models; fastest

generating method.

Note If you choose Wireframes, your snapshot or animation will generate at the color depth of your video driver.



Solid Models: draws solid models using rough approximations of shading; slower generating method.

Note If you choose Solid Models, your snapshot or animation will generate at the color depth of your video driver. If you select the Solid Model generating style, you cannot generate a snapshot larger than your screen.



Realistic: draws solid models using realistic



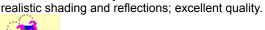


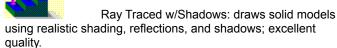
Realistic w/Shadows: draws solid models,

using realistic shading and shadows.



Ray Traced: draws solid models using





Smoothing. Sets how smooth high-contrast areas will appear. Sets number of ray traced reflections to draw in scene. Only available when the selected Snapshot Style is Ray Traced or Ray Traced w/Shadows.

Number Of Ray Traced Reflections

Default

Sets default size, animation frames per second, snapshot style, smoothing, palette, dithering, fog, and environment map options for new scenes you create to those specified in this





### **Snapshot & Animation Settings (Colors tab)**

Scene menu



Keyboard: Shift+F3

Sets how snapshots and animations are generated.

Note The OLE tab is only available when performing in-place editing in a linked or embedded scene.

Note Click a tab below to see its options.		
<u>S</u> ize <u>Q</u> ua	slity Colors Effects OLE	
Option	Description	
Colors	Palette. Sets the scene's <u>color depth</u> and palette.	
	Monochrome (1-bit): Dithers the image to a black and white palette.	
, <u>112</u>	16 Colors (4-bit): Dithers the image to the standard Windows palette.	
	256 Colors (8-bit): Dithers the image to the default Asymetrix 3D F/X palette.	
	65,536 Colors (16-bit): Recreates the image's colors precisely (does not impose a	
palette).	16 Million Colors (24-bit): Recreates the image's colors precisely (does not impose a	
palette).		
	16 Grays (8-bit): Dithers the image to a palette of 16 grays.	
precisely.	236 Grays (8-bit): Dithers the image to a palette of 236 grays. All grays will be recreated	



recreated precisely.

256 Grays (8-bit): Dithers the image to a palette of 256 grays. Some grays may not be

Compel Palette (8-bit): Dithers the image to the standard Asymetrix Compel palette. File. Sets the snapshot to use a color palette file (.PAL), or the palette of a specific bitmap. Clicking Browse opens the Open dialog box, in which you can import a palette. Dithering. Sets how Asymetrix 3D F/X blends the available colors to approximate those specified in the snapshot.



Ordered: poorest quality; fastest dithering speed.



Diffuse: best quality; slower dithering speed.



Cluster: average quality; medium dithering speed.

Default

None: no dithering. Only available for 16-bit or higher images.

Sets default size, animation frames per second, snapshot style, smoothing, palette, dithering, fog, and environment map options for new scenes you create to those specified in this dialog box.





## **Snapshot & Animation Settings (Effects tab)**

Scene menu



Keyboard: Shift+F3

Sets how snapshots and animations are generated.

Note The  $\underline{\text{OLE}}$  tab is only available when performing  $\underline{\text{in-place editing}}$  in a  $\underline{\text{linked}}$  or  $\underline{\text{embedded scene}}$ .

Size Quality	Colors Effects OLE
Option	Description
Fog	Sets use of fog effects in scene.
	Use Fog In Scene. Specifies that objects appear more diffuse the farther back in the scene they are.
	Fog Color. Specifies fog color. A dark color makes objects darker with distance; a light color makes objects brighter with distance.
	Fog Thickness. Specifies how transparent fog appears.
Environment Map	Use Environment Map. Specifies that all <u>models</u> in scene will reflect a selected <u>bitmap</u> , rather than other scene elements.
	File. Lists selected <u>environment map</u> file's name. Clicking Browse opens the <u>Import Graphic</u> dialog box in which you can choose an environment map to use. Environment maps can be found in the Rflctns subdirectory of your Catalog directory.
Default	Sets default size, animation frames per second, snapshot style, smoothing, palette, dithering, fog, and environment map options for new scenes you create to those specified in this dialog box.





## **Snapshot & Animation Settings (OLE tab)**

Scene menu

Keyboard: Shift+F3

Sets how snapshots and animations are generated.

**Note** The  $\underline{\text{OLE}}$  tab is only available when performing  $\underline{\text{in-place editing}}$  in a  $\underline{\text{linked}}$  or  $\underline{\text{embedded}}$   $\underline{\text{scene}}$ .

Size Quality Col	lors   Effects   OLE
Option	Description
Container Presentation	Display Which <u>.AVI</u> Frame. Sets the first or last <u>frame</u> of an animation to display in the OLE <u>container application</u> .
	First. Displays first frame of animation.
	Last. Displays last frame of animation.
	Make Snapshot Background Transparent. Makes the background of an embedded or linked snapshot transparent. Permanently affects the file.
	<b>Note</b> Only snapshots with solid color backgrounds generated using the Realistic, Realistic w/Shadows, Ray Traced, or Ray Traced w/Shadows generating style can be made transparent.
Default	Sets default size, animation frames per second, snapshot style, smoothing, palette, dithering, fog, and environment map options for new scenes you create to those specified in this dialog box.





# Camera Perspective submenu



Displays the <u>scene</u> at a normal, telephoto, or wide angle perspective.

Submenu item	Keyboard	Description
Normal	F5	Displays the scene at a normal perspective.
Wide Angle	Shift+F5	Displays the scene at a wide perspective, or as if through a wide-angle lens. The model's depth is emphasized.
Telephoto	Ctrl+F5	Displays the scene close up, or as if through a telephoto lens. Models look flatter, and depth is de-emphasized.



Step by step
About camera perspective
About creating 3D graphics with Asymetrix 3D F/X
Setting the camera perspective

# Asymetrix 3D F/X User Manual Chapter 1, "The basics"



Adds a backdrop to a scene.

Option	Description
Backdrop Name	Displays the backdrop's name. Double-click in the field to enter a new name, or click <u>Modify</u> to enter a new name and description for the backdrop.
Style	Defines backdrop settings.
	Default White. Sets backdrop to white.
	Color. Sets backdrop to a color. Clicking the color button opens the Color Wheel dialog box.
	<u>Gradient</u> . Sets backdrop to a blend of colors. Clicking the color button opens the <u>Backdrop</u> <u>Gradient</u> dialog box.
	Note A gradient backdrop generates at the color depth of the current video driver.
	Picture. Sets backdrop to a bitmap or metafile.
	File. Lists selected picture's name. Clicking Browse opens the <u>Import Graphic</u> dialog box where you can import a graphic or metafile.
	Picture Options. Opens the <u>Picture Options</u> dialog box, where you can define how a bitmap backdrop is displayed in the scene.



### Step by step

Adding a backdrop Modifying a backdrop

### Commands

Backdrop Gradient (dialog box)
Color Wheel (dialog box)
Import Graphic (dialog box)
Modify Name (dialog box)
Picture Options (dialog box)

## Asymetrix 3D F/X User Manual Chapter 1, "The basics"



# Backdrop Gradient (dialog box) Scene menu / Modify Backdrop / Gradient



Defines a gradient to apply to the <u>backdrop</u> of a <u>scene</u>.

Option	Description	
Gradient Style	Applies a gradient style as follows:	
Color Options	Major Color/Minor Color. Displays gradient's primary or secondary color. Clicking the color button opens the <u>Color Wheel</u> dialog box.  Blend. Creates a gradient that blends major and minor colors into each other.  Maximum Colors/Minimum Colors. Creates a multicolored gradient by blending the colors on the Color Wheel between the major and minor colors, taking the longest path (for Maximum Colors) or shortest path (for Minimum Colors) around the wheel.	
Preview & Set Center	Previews backdrop gradient. Clicking anywhere in area sets gradient's center. Clicking and dragging in area sets gradient's direction, if it has one.	



Step by step
Adding a backdrop
Modifying a backdrop

Commands
Color Wheel (dialog box)
Modify Backdrop

Asymetrix 3D F/X User Manual Chapter 1, "The basics"



# Picture Options (dialog box) Scene menu / Modify Backdrop / Picture Options



Defines how a <u>bitmap</u> <u>backdrop</u> is displayed in the <u>scene</u>, and whether it has a border color.

Option	Description
Size Options	Defines how a bitmap backdrop is displayed in the scene, based on the image size settings you choose in the <a href="Snapshot &amp; Animation Settings">Snapshot &amp; Animation Settings</a> dialog box.
	Center Picture In Scene. Centers the picture in the scene. The color of the area surrounding the picture is determined by the solid color selected for the backdrop.
	Stretch Picture To Snapshot Size. Resizes the bitmap backdrop.
	Stretch Picture Proportionally. Resizes the bitmap backdrop, but maintains its height to width ratio.
	Stretch Snapshot To Picture Size. Adjusts the image size to the bitmap's original size.
Border Color	Defines backdrop border color.
	Default White. Sets backdrop border to white.
	Color. Sets backdrop border to a color. Clicking the color button opens the Color Wheel dialog box, where you can select a color to apply.



Step by step
Adding a backdrop
Modifying a backdrop

Commands
Import Graphic (dialog box)
Modify Backdrop

Asymetrix 3D F/X User Manual Chapter 1, "The basics"



Modifies a <u>light</u> defined for the <u>scene</u>.

Option	Description
Light Name(s)	Lists lights that can be modified.
	Modify. Opens the Modify Name dialog box, in which you can modify both the light's name and description.
Settings	Intensity. Sets amount of white and black in the light. Enter a value, or adjust the slider.
	Color. Displays light's color. Clicking the color button opens the <u>Color Wheel</u> dialog box.
	Light Casts <u>Shadows</u> . Enables light to cast shadows in a <u>snapshot</u> or <u>animation</u> , if either Realistic w/Shadows or <u>Ray Traced</u> w/Shadows is specified in the <u>Snapshot</u> <u>&amp; Animation Settings</u> dialog box.
	<b>Note</b> As Asymetrix 3D F/X generates a scene with shadows, the progress indicator tracks the calculation of shadows for each light in the scene.
Preview & Set Light Direction	Displays light's direction. Click in preview area to reset direction.
	Show All Lights. When clicked, briefly displays the combined effect of all lights in scene.



**Step by step**<u>About creating 3D graphics with Asymetrix 3D F/X</u> Adding lights Including only a model's shadow in a scene Modifying a light

### Command

Modify Name (dialog box)

Asymetrix 3D F/X User Manual Chapter 1, "The basics"



# Modify Soundtrack



Adds a wave audio (.WAV) file you select to accompany an animation.

Option	Description
File Name	Lists all files in the current default directory with the default file extension for the selected file format. A file selected from this list replaces the contents of the File Name box.
List Files Of Type	Indicates .WAV is the default file extension.
Directories	Displays the default path. Change the directory by selecting a new path from the Directories box, which lists all directories available on the current drive. To change the drive, make a selection in the Drives box.
Drives	Lists the available drives. Selecting a new drive changes the contents of the Directories box.
Network	Available if your system is connected to a network. Opens the Network dialog box from which you can choose additional drives and directories.



Step by step Adding a soundtrack to an animation

Commands

Generate Animation
Modify Name (dialog box)

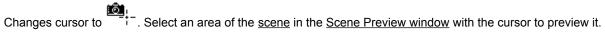
Asymetrix 3D F/X User Manual Chapter 1, "The basics"



# Preview Snapshot









Step by step About Asymetrix 3D F/X Generating a snapshot Previewing a snapshot

### Command

**Generate Snapshot** 

Asymetrix 3D F/X User Manual
Chapter 3, "Creating snapshot and animation files"



# **Preview Animation**

Scene menu



Previews the <u>animation paths</u> of all <u>models</u> in the <u>scene</u> at actual speed, dropping  $\underline{\text{frames}}$  if they can't be  $\underline{\text{generated}}$  quickly enough to display.



## Step by step

About animation in Asymetrix 3D F/X Generating an animation Previewing an animation

## Commands

Animation Palette
Generate Animation
Preview All Frames

Asymetrix 3D F/X User Manual Chapter 3, "Creating snapshot and animation files"



# **Preview All Frames**

Scene menu



Previews all <u>frames</u> of the <u>animation paths</u> of all <u>models</u> in the <u>scene</u>, slowing down if necessary to play each frame



## Step by step

About animation in Asymetrix 3D F/X
Generating an animation
Previewing an animation

## Commands

Animation Palette
Generate Animation
Preview Animation

## Asymetrix 3D F/X User Manual

Chapter 3, "Creating snapshot and animation files"



# Generate Snapshot



Keyboard: F3

Toolbar:



Specifies how to generate a snapshot of the scene or a frame of animation, and where to create the snapshot (in the Snapshot window or to a file).

Option	Description
Style	Sets generating detail for the snapshot.
	Wireframes. Draws wireframe models; fastest generating method.
	<b>Note</b> If you choose Wireframes, your snapshot will generate at the <u>color depth</u> of your video driver.
	Solid Models. Draws <u>solid models</u> using rough approximations of <u>shading</u> ; slower generating method.
	<b>Note</b> If you choose Solid Models, your snapshot will generate at the <u>color depth</u> of your video driver. If you select the Solid Model generating style, you cannot generate a snapshot larger than your screen.
	Realistic. Draws solid models using realistic shading.
	Realistic w/Shadows. Draws solid models, using realistic shading and shadows.
	Ray Traced. Draws solid models using realistic shading and reflections; excellent quality.
	Ray Traced w/Shadows. Draws solid models using realistic shading, reflections, and shadows; excellent quality.
Snapshot Image Statistics	Displays snapshot's width, height, <u>color depth</u> , <u>dithering</u> , and smoothing options as defined in the <u>Snapshot &amp; Animation Settings</u> dialog box.
	Snapshot Settings. Opens the Snapshot & Animation Settings dialog box.
Generate Image Of	Defines what is included in the snapshot.
	Current Scene. Generates a snapshot of the current scene.
	Single Frame Of Animation. Generates a snapshot of a specified frame of all model animations in the scene.
Destination	Specifies where to generate a snapshot.
	Display In Window. Generates the snapshot in a <u>Snapshot window</u> . Does not automatically save the snapshot.
	Generate Directly To File. Saves the snapshot directly to a file, generating the snapshot in a minimized Snapshot window.
	<b>Note</b> To generate snapshots larger than 4092 pixels wide when your <u>color depth</u> is 8 bits per pixel, 2046 pixels when your color depth is 16 bits per pixel, or 1364 pixels when your color depth is 24 bits per pixel, you must generate to file.
	File. Lists selected file name to generate snapshot to. Clicking Browse opens the <a href="Save As">Save As</a> dialog box where you can select a location in which to save a snapshot.



Step by step Generating a snapshot

## Commands

Generate Animation
Options
Save As
Snapshot & Animation Settings

Asymetrix 3D F/X User Manual Chapter 3, "Creating snapshot and animation files"



### **Generate Animation**

Scene menu



Keyboard: Ctrl+F3

Specifies how to generate an animation (.AVI file) of a scene, and where to save the animation.

Option Description

Style Sets generating detail for the animation.

Wireframes: draws wireframe models; fastest generating method.

Note If you choose Wireframes, your animation will generate at the color depth of your video driver.

Solid Models: draws <u>solid models</u> using rough approximations of <u>shading</u>; slower generating method.

**Note** If you choose Solid Models, your animation will generate at the <u>color depth</u> of your video driver.

Realistic: draws solid models using realistic shading.

Realistic w/Shadows: draws solid models, using realistic shading and shadows.

Ray Traced: draws solid models using realistic shading and reflections; excellent quality.

Ray Traced w/Shadows: draws solid models using realistic shading, reflections, and shadows; excellent quality.

Animation Statistics Displays animation's width, height, color depth, dithering, smoothing, and frames per

second options as defined in the Snapshot & Animation Settings dialog box, as well as the

total time to complete all the scene's animation paths.

Animation Settings. Opens the Snapshot & Animation Settings dialog box.

Compression Displays video compression system used for animation.

Change. Opens the Video Compression dialog box where you can set how a file is

compressed.

Repeat Frames Defines whether to add copies of the first and last frames to the generated .AVI file, or skip

frames at the beginning, end, or beginning and end of an animation.

First. If you enter a positive number, specifies number of copies of the first frame to add to beginning of file. If you enter a negative number, specifies the number of frames to skip

from the beginning of the animation before generating.

Last. If you enter a positive number, specifies number of copies of the last frame to add to end of file. If you enter a negative number, specifies the number of frames to skip from the

end of the animation before generating.

Output File Specifies where to generate animation. Entering a bitmap file name makes Asymetrix 3D

F/X generate an animation as a sequence of bitmaps.

File. Lists selected file name to generate animation to. Clicking Browse opens the Save As

dialog box where you can select a location in which to save the .AVI file.

Max Size. Estimates the file size of the uncompressed animation.



## Step by step

About animation in Asymetrix 3D F/X Generating an animation

Commands Generate Snapshot

Options
Save As
Snapshot & Animation Settings
Video Compression (dialog box)

Asymetrix 3D F/X User Manual Chapter 3, "Creating snapshot and animation files"



# Video Compression (dialog box) Scene menu / Generate Animation / Change



Specifies which compression method to use in creating an  $\underline{.AVI}$  file of  $\underline{animation\ paths}$  in a  $\underline{scene}$ .

Option	Description
Compressor	Lists types of compressors available on your system.
Compression Quality	Adjusts compression quality. May not be available for all drivers.
Key Frame Every	Defines how often compressor stores a <u>frame</u> to use as a base point for displaying intermediate frames.
Data Rate	Defines how fast the .AVI file transfers information.
Configure	Displays additional configuration options for a specific compressor, if available.



Step by step
About animation in Asymetrix 3D F/X
Generating an animation

Command

**Generate Animation** 

Asymetrix 3D F/X User Manual
Chapter 3, "Creating snapshot and animation files"

# Windows menu



# Arrange Main Windows



Tiles the <u>Scene Preview window</u>, <u>Scene Contents window</u>, and <u>Catalog</u>, then minimizes any open <u>Snapshot</u> or <u>Animation</u> windows.



Step by step About Asymetrix 3D F/X

Commands Arrange Icons
Cascade
Tile Horizontally
Tile Vertically



# Tile Horizontally



Tiles all open Asymetrix 3D F/X windows horizontally, giving each window an equal amount of screen area.



Step by step
About Asymetrix 3D F/X
Commands
Arrange Icons
Arrange Main Windows
Cascade
Tile Vertically



Tiles all open Asymetrix 3D F/X windows vertically, giving each window an equal amount of screen area.



Step by step
About Asymetrix 3D F/X
Commands
Arrange Icons
Arrange Main Windows
Cascade
Tile Horizontally



Tiles all open Asymetrix 3D F/X windows so that they overlap in a cascading pattern.



Step by step About Asymetrix 3D F/X

Commands
Arrange Icons
Arrange Main Windows
Tile Horizontally
Tile Vertically



# Arrange Icons



Arranges all minimized Asymetrix 3D F/X window icons along the bottom of the main Asymetrix 3D F/X window.



Step by step
About Asymetrix 3D F/X
Commands
Arrange Main Windows
Cascade
Tile Horizontally
Tile Vertically



# 1 <Window Name>

Window menu



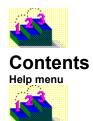
Makes the selected open Asymetrix 3D F/X window active. Open windows can include:  $\underline{Scene\ Preview}$ ,  $\underline{Scene\ Contents}$ ,  $\underline{Snapshot\ windows}$ ,  $\underline{Animation\ windows}$ , and  $\underline{Catalogs}$ .



Step by step About Asymetrix 3D F/X

Commands
Arrange Icons
Arrange Main Windows
Cascade
Tile Horizontally
Tile Vertically

# Help menu



Opens the online Help Contents screen.



## Commands

About Asymetrix 3D F/X
Asymetrix 3D F/X Help Contents Examples
Search For Help On
Startup Assistant
Technical Support

Asymetrix 3D F/X User Manual "Welcome"



# Search For Help On

Help menu

Opens the online Help Search dialog box.



Commands

About Asymetrix 3D F/X

Contents
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Startup Assistant
Technical Support

Asymetrix 3D F/X User Manual "Welcome"



# Startup Assistant



Opens the Asymetrix 3D F/X Startup Assistant, a quick online introduction to Asymetrix 3D F/X.



Commands

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Contents
Examples
Search For Help On
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Asymetrix 3D F/X User Manual "Welcome"



Opens example snapshots and animations created using Asymetrix 3D F/X.



## Step by step

Eight ball snapshot example
Helicopter and moving background animation example
Patterned ring snapshot example
Switching text animation example
Water molecule animation example

### Commands

About Asymetrix 3D F/X
Contents
Examples Contents
Search For Help On
Startup Assistant
Technical Support

## Asymetrix 3D F/X User Manual

"Welcome"



# Technical Support



Opens the online Help topic on Technical Support for Asymetrix 3D F/X.



Step by step Calling Technical Support **Technical Support Contents** Using America Online
Using CompuServe
Using Internet
Using the Asymetrix Bulletin Board System (BBS)

### Commands

Contents Examples Search For Help On Startup Assistant

# Asymetrix 3D F/X User Manual "Welcome"



Displays information about your system configuration.

Option	Description
Display Information	Provides information about your system's display capability.
	Video Driver. Lists your default video driver file, if available.
	Driver Name. Lists name of your default video driver, if available.
	Driver Version. Lists version of your default video driver, if available.
	Display Resolution. Lists current screen resolution.
	Display Colors. Lists number of currently available colors.
	Logical Pixel Size. Lists how many logical units are defined per pixel.
System Status	Processor. Displays type of processor in system.
	Mode. Displays whether system is running in enhanced or normal mode.
	Math co-processor. Displays whether system includes a co-processor.
	Free memory. Displays currently available virtual memory (includes both physical memory and 386 swap file for Enhanced mode).
	User memory. Displays percentage of allocated space free for the Windows USER function.
	GDI memory. Displays percentage of allocated space free for the Windows GDI function
	Windows directory. Displays location of Windows directory.
	TEMP directory. Displays location of Windows temp directory.
	Drives. Lists each drive on the system or network, and space available on each.
Multimedia Drivers	Lists all available multimedia drivers installed on the system.



## Asymetrix 3D F/X User Manual "Welcome"



# About Asymetrix 3D F/X



Displays the version number and Asymetrix 3D F/X copyright information.



## Asymetrix 3D F/X User Manual "Welcome"

## RIght-click menus



## Paths (right-click menu)



Provides access to frequently used commands for modifying an <u>animation path</u>. Click a button or command name below to see its description.



### Step by step

About animation in Asymetrix 3D F/X Adding a soundtrack to an animation

Animating a model

Animating sub-parts of a model

Generating an animation

Modifying a model's animation path

Modifying a model's animation path sequence
Playing a linked or embedded animation

Previewing an animation

Printing a frame of an animation

Staggering when models enter a scene

#### Commands

Copy

Cut

**Duplicate** 

<u>Paste</u>

### Asymetrix 3D F/X User Manual

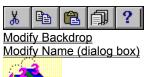
Chapter 1, "The basics"



## Backdrop (right-click menu)



Provides access to frequently used commands for modifying a <u>backdrop</u>. Click a button or command name below to see its description.



Step by step About Asymetrix 3D F/X Adding a backdrop

Modifying a backdrop

### Commands

Copy
Cut
Duplicate
Paste



## Scene Contents (right-click menu)



Provides access to commands for modifying the <u>Scene Contents window</u>. Click a button or command name below to see its description.





Step by step About the Scene Contents window

### Commands

Copy Cut Duplicate Paste



### **Select Font**

Scene Contents (right-click menu)



Allows you to select a font for the text in the Scene Contents window.

Option	Description
Font	Sets the font of the Scene Contents window text from the fonts available on your system.
Font Style	Sets the font style.
Size	Sets the font size.
Sample	Displays an example of the selected font style and size.



Step by step
About the Scene Contents window
Commands
Scene Contents Window (right-click menu)
Asymetrix 3D F/X User Manual
Chapter 1, "The basics"



## Lights (right-click menu)



Provides access to frequently used commands for modifying <u>lights</u>. Click a button or command name below to see its description.



Modify Lights
Modify Name (dialog box)
Create Ambient Light
Create Directional Light



**Step by step**<u>About creating 3D graphics with Asymetrix 3D F/X</u> Adding lights Modifying a light

### Commands

Copy
Cut
Duplicate
Paste



# Create Ambient Light Lights (right-click menu)



Creates a <u>light</u> that brightens every <u>surface</u> of a <u>model</u> in a <u>scene</u>. Lights are always positioned outside the scene.

**Step by step**<u>About creating 3D graphics with Asymetrix 3D F/X</u> Adding lights
Modifying a light

Command

Modify Lights



# Create Directional Light Lights (right-click menu)



Creates a <u>light</u> that brightens the <u>surface</u> of a <u>model</u> based on whether the surface faces toward or away from the light. Lights are always positioned outside the <u>scene</u>.

**Step by step**<u>About creating 3D graphics with Asymetrix 3D F/X</u> Adding lights
Modifying a light

Command

Modify Lights



## Picture Model (right-click menu)



Provides access to frequently used commands for modifying <u>picture models</u>. Click a button or command name below to see its description.



Modify 3D Modify Name (dialog box) Modify Surface & Color

Modify Animation



Step by step
About text and picture models
Creating a picture model

### Commands

Copy Cut Duplicate Paste



## Scene (right-click menu)



Provides access to frequently used commands for modifying a <u>scene</u>. Click a button or command name below to see its description.



Snapshot & Animation Settings
Modify Name (dialog box)
Modify Backdrop
Modify Lights
Modify Soundtrack
Generate Snapshot
Generate Animation
Print
Preview Full Size



### Step by step

About Asymetrix 3D F/X Generating a snapshot Modifying a backdrop
Printing a scene or snapshot

### Commands

Copy
Cut
Duplicate
On Camera Area submenu
Paste



## Catalog Scene (right-click menu)



Provides access to frequently used commands for modifying a <u>scene</u> in a <u>Catalog</u>. Click a button or command name below to see its description.



Snapshot & Animation Settings Modify Name (dialog box) Modify Backdrop Modify Lights



### Step by step

About Asymetrix 3D F/X Generating a snapshot Modifying a backdrop Printing a scene or snapshot

### Commands

Copy
Cut
Duplicate
Generate Snapshot
On Camera Area submenu

Paste

Preview Full Size

**Print** 



### **Preview Full Size**

Scene (right-click menu)



Resizes <u>scene</u> to Image Size set in <u>Snapshot & Animation Settings</u> dialog box.



Step by step About Asymetrix 3D F/X

Commands

On Camera Area submenu Scene (right-click menu) Snapshot & Animation Settings

Asymetrix 3D F/X User Manual
Chapter 3, "Creating snapshot and animation files"



## Simple Model: Ring (right-click menu)



Provides access to frequently used commands for modifying a <u>simple model</u> based on a ring shape. Click a button or command name below to see its description.



Modify Model
Modify Name (dialog box)
Modify Surface & Color
Modify Animation
Modify Warp

Step by step
About simple models Adding a preset model

Modifying a simple model's shape

### Commands

Copy
Cut
Duplicate
Paste



## Simple Model: Cube (right-click menu)



Provides access to frequently used commands for modifying a <u>simple model</u> based on a cube shape. Click a button or command name below to see its description.



Modify Model
Modify Name (dialog box)
Modify Surface & Color
Modify Animation
Modify Warp



Step by step
About simple models Adding a preset model

Modifying a simple model's shape

### Commands

Copy
Cut
Duplicate
Paste



## Simple Model: Cylinder (right-click menu)



Provides access to frequently used commands for modifying a <u>simple model</u> based on a cylinder shape. Click a button or command name below to see its description.



Modify Model
Modify Name (dialog box)
Modify Surface & Color
Modify Animation
Modify Warp



Step by step
About simple models Adding a preset model

Modifying a simple model's shape

### Commands

Copy
Cut
Duplicate
Paste



## Simple Model: Sphere (right-click menu)



Provides access to frequently used commands for modifying a <u>simple model</u> based on a sphere shape. Click a button or command name below to see its description.



Modify Model
Modify Name (dialog box)
Modify Surface & Color
Modify Animation
Modify Warp



Step by step
About simple models Adding a preset model

Modifying a simple model's shape

### Commands

Copy
Cut
Duplicate
Paste



## Model (right-click menu)



Provides access to frequently used commands for modifying an <u>imported model</u>. Click a button or command name below to see its description.



Modify Model
Modify Name (dialog box)
Modify Surface & Color
Modify Animation
Modify Warp



Step by step
About imported models
Importing a model

### Commands

Copy
Cut
Duplicate
Paste



# Snapshot (right-click menu)



Provides access to frequently used commands for modifying a snapshot. Click a button or command name below to see its description.





#### Step by step

About Asymetrix 3D F/X About color in Asymetrix 3D F/X About color palette shift Changing a snapshot's color depth or size Generating a snapshot

## Commands

Copy Cut Duplicate Paste

# Asymetrix 3D F/X User Manual Chapter 4, "Advanced projects"



# Soundtrack (right-click menu)



Provides access to frequently used commands for modifying a <u>scene's soundtrack</u>. Click a button or command name below to see its description.



**Modify Soundtrack** 



#### Step by step

About animation in Asymetrix 3D F/X Adding a soundtrack to an animation

Animating a model

Animating sub-parts of a model

Generating an animation

Modifying a model's animation path

Modifying a model's animation path sequence
Playing a linked or embedded animation

Previewing an animation

Printing a frame of an animation

Staggering when models enter a scene

#### Commands

Copy

Cut

<u>Duplicate</u>

**Modify Animation** 

<u>Paste</u>

#### Asymetrix 3D F/X User Manual

Chapter 1, "The basics"



# Sub-part (right-click menu)



Provides access to frequently used commands for modifying the <u>sub-parts</u> of a <u>model</u>. Click a button or command name below to see its description.



Modify 3D
Modify Name (dialog box)
Modify Surface & Color
Modify Animation
Modify Warp

#### Step by step

About imported models About text and picture models

Making a model a sub-part of another model

## Commands

Copy
Cut
Duplicate
Paste

# Asymetrix 3D F/X User Manual Chapter 1, "The basics"



# Surface (right-click menu)



Provides access to frequently used commands for modifying a <u>surface</u>. Click a button or command name below to see its description.



Modify Surface & Color Modify Name (dialog box)



#### Step by step

About surfaces

Adding a texture to a model's surface

Applying a digital video file as a surface

Applying a surface to a model

Creating a "glass" surface
Creating models that appear to be lights

Making a color surface appear transparent

Making a scene and backdrop appear smoky

Making a scene and backdrop appear snowy

Making a solid material surface transparent

Making a surface reflect a bitmap

Making a surface reflective

Making all models in a scene reflect a bitmap

Modifying a model's surface

Submerging a model in "water"

#### Commands

Copy

<u>Cut</u>

**Duplicate** 

**Paste** 

#### Asymetrix 3D F/X User Manual

Chapter 1, "The basics"



# Text Model (right-click menu)



Provides access to frequently used commands for modifying <u>text models</u>. Click a button or command name below to see its description.



Modify Text Model
Modify Name (dialog box)
Modify 3D
Modify Surface & Color
Modify Animation
Modify Warp



Step by step
About text and picture models
Creating a text model

#### Commands

Copy Cut Duplicate Paste

# Asymetrix 3D F/X User Manual Chapter 1, "The basics"



# Letter Model (right-click menu)



Provides access to frequently used commands for modifying sub-parts of <u>text models</u>. Click a button or command name below to see its description.



Modify 3D
Modify Name (dialog box)
Modify Surface & Color
Modify Animation
Modify Warp

Step by step
About text and picture models
Creating a text model

#### Commands

Copy Cut Duplicate Paste

# Asymetrix 3D F/X User Manual Chapter 1, "The basics"



# Warp (right-click menu)



Provides access to frequently used commands for modifying a <u>warp</u>. Click a button or command name below to see its description.



Modify Name (dialog box)
Modify Warp



Step by step Warping a model

## Commands

Copy Cut Duplicate Paste

# Asymetrix 3D F/X User Manual Chapter 1, "The basics"



# Catalog (right-click menu)



Provides access to frequently used commands for modifying a <u>Catalog</u>. Click a button or command name below to see its description.



**Arrange Catalog Entries** 



#### Step by step

About the Scene Contents window Adding a backdrop Adding a preset model Adding lights Animating a model
Applying a surface to a model

#### Commands

Copy Cut Duplicate Modify Name (dialog box)
Modify Warp Paste

# Asymetrix 3D F/X User Manual Chapter 1, "The basics"

# Cut

Removes the selected object and places it on the Windows Clipboard, replacing the previous Clipboard contents. This command is dimmed on the menu if unavailable.

# Сору

Places a copy of the selected object on the Windows Clipboard, replacing the previous Clipboard contents. This command is dimmed on the menu if unavailable.

# **Paste**

Pastes the contents of the Windows Clipboard into the active window. This command is dimmed on the menu if unavailable.

# **Duplicate**

Duplicates the selected object without using the Windows Clipboard. This command is dimmed on the menu if unavailable.

# Help

Provides help on this menu's commands.



# Point & Click



Keyboard: Shift+F1

Toolbar:



Changes the cursor to a question mark. Click any <u>model</u> with the question mark to open online Help for that model.



Commands

About Asymetrix 3D F/X Contents
Examples
Search For Help On
Startup Assistant

Asymetrix 3D F/X User Manual "Welcome"



**Glossary**Click a letter to display Asymetrix 3D F/X glossary terms.



























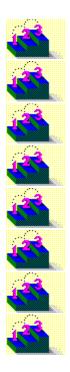












2D (two-dimensional)
3D (three-dimensional)

#### Α

add depth
animation
Animation palette
animation path
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ANSI characters
audio/video interleaved (.AVI)

## В

backdrop bevel bitmap boxes bump texture

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Catalog
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**Snapshot window** 

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starter scene

sub-part

surface

swap file

#### **T - V**

text model texture map tracing transparency vector graphic

# **W** - **Z**

warping wireframes

# 2D (two-dimensional)

Having width and height only; a flat surface.

# 3D (three-dimensional)

Having (or seeming to have) depth, as well as width and height.

# add depth

To create a 3D model from a 2D picture or text by adding a third dimension (depth).

# animation

Series of frames in which changing bitmaps show motion over time. Animations are saved in audio/video interleaved (.AVI) format.

# **Animation palette**

Palette containing tools that play animations in the Scene Preview window.

# animation path

A motion path (containing motion and direction) that you assign to a model to create an animation.

# **Animation window**

Window in which animations of a scene are generated.

# **ANSI characters**

Set of characters that cor	ntains the standard Am	erican keyboard c	haracters non-Eng	lich letters, and s	elodmy
SEL UI GIIAI ACIEIS IIIAI CUI	Italiis liie stailualu Alli	tiicaii ktybbaiu c	Haraclers, Hon-Eng	ilion iellero, and s	MILIDUIS.

# audio/video interleaved (AVI)

Digital video format in which a series of audio and video frames are played in sequence (interleaved) to produce an animation.

# backdrop

Scene background. Can be a color, gradient, or bitmap.

## bevel

Ornamental effect applied to the edges of a text or picture model, so that edges meet in a curve or flattened area rather than at a 90-degree angle.

# bitmap

Stored set of bits that defines each pixel in an image. Bitmaps have the file extension .BMP or .DIB.

#### boxes

View in the Scene Preview window in which the models are drawn as bounding boxes. This view is the fastest to generate.

#### bump texture

Bitmap that can be applied to a surface, changing the reflection and shading to give the appearance of a bump or ripple in the surface.

## camera perspective

The representation of a scene as viewed through a camera lens. The perspective can be normal, wide angle, or telephoto.

## Catalog

Window that contains scene elements. Drag elements from the Catalog and drop them into the Scene Preview or Scene Contents window to add them to a scene.

## color depth

Number of bits that defines the color of each pixel in a file; a 2-color bitmap contains 1 bit per pixel; a 16-color bitmap contains 4 bits per pixel; a 256-color bitmap contains 8 bits per pixel and so on.

# color palette

Predefined set of colors stored in a palette file (.PAL).

# container application

Application in which you can place objects from a server application. Asymetrix 3D F/X is not a container application.

## dithering

Process of blending existing palette colors to approximate additional colors. To display a high-resolution color image on a system that has fewer colors than the image, Windows dithers the existing palette colors.

## drag and drop

Process of clicking an element in the Catalog, dragging it to the Scene Preview or Scene Contents window, and then releasing the mouse button. You can also drag elements from the Scene Contents window into the Catalog.

# embedded object

OLE object created in a server application that is stored as part of a container application file. Compare linked object.

## environment map

Bitmap that can be applied to a scene to create a simulated reflection off all reflective model surfaces. An environment map is not a true mirror image.

# fog

Effect that makes models appear to be behind a progressively thicker white screen the farther back in a scene they appear. Fog does not affect backdrops.

## frame

Still image from an animation file. A series of frames played in succession produces the illusion of movement, similar to a film or videotape.

#### generate

To translate a 3D scene into a snapshot or animation (saved in bitmap or audio/video interleaved format, respectively). Also known as render. Generating draws scenes in a higher resolution and more detail than is visible in the Scene Preview window.

For a snapshot, generating translates the scene into a bitmap.

For an animation, generating combines models and animation paths.

# gradient

Gradual blending of two or more fill colors.

**highlight**Bright spot on the surface of a model caused by a light.

## imported model

3D model file created in another program, then added to a scene. Asymetrix 3D F/X supports models that use the Autodesk 3D Studio (.3DS) or AutoCAD (.DXF) format.

# in-place editing

Technique that allows you to edit a linked or embedded scene without leaving the container application.

## light

Effect that brightens models in a scene. Ambient light brightens every surface of models. Directional lights such as Default Left Light, brighten based on whether the model surface faces toward or away from the light. Lights are always positioned outside the scene.

## linked object

Reference in a container application to an OLE object created in a server application and stored in a separate file. Compare embedded object.

#### mesh

Sub-part of an imported model.

## metafile

Image defined as a series of graphic objects (such as lines, squares or rectangles, and circles) instead of pixels (such as a bitmap).

## models

3D objects (clip art, pictures, and text) that create a scene.

#### move

Process of changing a model's position in 3D space.

#### name

Word or phrase that identifies a scene or any of its elements (model, surface, backdrop, light, warp, or animation path) in the Scene Contents or Catalog window, and in the status bar when the element is selected.

## object linking and embedding (OLE)

Technique for creating an object in one application (the server application), then incorporating it into a file from another application (the container application). Asymetrix 3D F/X is a server application.

# **OLE registration database**

List of OLE server applications maintained by Windows.

#### picture model

Model created from a bitmap (.BMP or .DIB) or vector graphic such as a metafile (.WMF). For bitmaps, Asymetrix 3D F/X converts the image to black and white, then traces around the black to create a picture model. You can apply the original bitmap to the face of the model as a surface. For metafiles, Asymetrix 3D F/X uses the information in the source file to create a picture model.

# **Position palette**

Palette containing tools that rotate, move, and scale models in the Scene Preview window.

# ray tracing

Method of simulating light rays passing through a scene. Ray tracing results from a series of complex calculations, and can be very slow.

## reflection map

Bitmap that can be applied to a model to create a simulated reflection off a shiny surface. A reflection map is not a true mirror image.

## refract

To turn or bend light when it passes from one medium into another of different density. For example, light refracts when it passes from air through glass.

#### rotate

To turn a model around an axis or center point.

#### scale

To reduce or increase a model's size.

#### scene

Elements contained in the Scene Preview or Scene Contents window, including all models (their attributes and positions), surfaces, animation paths, lights, and the backdrop.

#### **Scene Contents window**

Window that lists all scene attributes such as backdrop, light, and soundtrack; and all models and their attributes, such as surfaces and animation paths. To view details of an element in this window, double-click it.

## **Scene Preview window**

Window in which you arrange, edit, and manipulate models to create a 3D scene.

## server application

Application that creates objects that can be linked or embedded in a container application. Asymetrix 3D F/X is a server application, not a container application.

## shading

How colors on a surface vary, based on where light strikes the model's surface (creating a lighter color) and where light does not strike the model's surface, or where the model's surface is in the shadows (creating a darker color).

## shadows

Area in the scene where a light is block	cked by models. Directional ligh	ite cast shadows.	ambient lights do r	not
Alea III lile Scelle Wilele a liqill is biol	ckeu by models. Directional liqu	แอ บลอเ อแลนบพอ,	annoient ilunts do i	ıυι.

## simple model

Geometric model generated by Asymetrix 3D F/X, based on one of four shapes: sphere, ring, cube, or cylinder.

## snapshot

Bitmap generated from the scene you create.

# **Snapshot window**

Window in which snapshots of a scene are generated.

## solid models

View in the Scene Preview window in which models are drawn as solids. This view displays all characteristics of models, including their surfaces and shading, and is the slowest to generate.

## soundtrack

Wave audio (.WAV) file saved as part of an animation.

#### starter scene

Scene in which models have already been placed and modified, which can be used as a template.

## sub-part

Individual parts of a model, such as the letters of a text model, that can be modified independently of the model itself.

## surface

Appearance of a model's exterior, such as gold or marble.

## swap file

Space on a hard disk that Windows uses for virtual memory management. Effectively extends the amount of memory available to a system.

## text model

Model created from text.

## texture map

Bitmap applied as a surface that simulates a texture or pattern, such as brick or leopard skin.

## tracing

Process of creating a 3D picture model from a bitmap. Asymetrix 3D F/X converts the image to black and white, then traces around the black to create a picture model.

## transparency

State in which clear pixels in a bitmap allow objects and colors behind them to show through.

## vector graphic

Graphic (such as a metafile, .WMF) stored as a set of instructions describing how to draw the graphic rather than as a series of pixels (such as a bitmap).

## warping

Process of bending or twisting models.

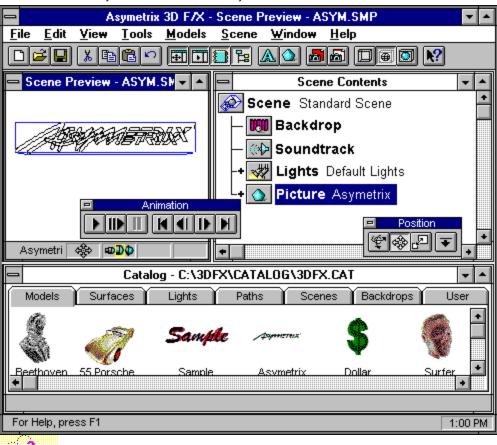
## wireframes

View in the Scene Preview window in which models are drawn as wireframes. This view displays some 3D characteristics of models, and generates quickly.



#### Map of screen elements

Click an area of the Asymetrix 3D F/X window that you'd like to know more about.







Open
Opens an existing scene, Catalog, or snapshot.



Saves the active window (scene, snapshot, or Catalog) to a file.



Removes the selected object and places it on the Windows Clipboard, replacing the previous Clipboard contents.



Copy
Places a copy of the selected object on the Windows Clipboard, replacing the previous Clipboard contents.



Pastes the contents of the Windows Clipboard into the active window.



Reverses the effect of your most recent action.



Displays and hides the Position palette used to rotate, move, and scale models.



Animation Palette
Displays and hides the Animation palette used to preview models' animation paths.



Catalog
Displays and hides the Catalog, a window that contains preset scene elements. You can drag elements from the Catalog and drop them into the Scene Preview or Scene Contents window to add them to a scene.



Scene Contents window
Displays and hides the Scene Contents window, which lists all scene attributes, and all models and their attributes.









with which you can select an area of the screen to preview as a snapshot.



Displays the models in the Scene Preview window as their bounding shapes.



Displays the models in the Scene Preview window as wireframes.



Displays the models in the Scene Preview window as solid objects.



Changes cursor to with which you can click an element of Aysmetrix 3D F/X to get Help on it.

## **Scene Preview window**

Window in which you arrange, edit, and manipulate models to create a 3D scene.

### **Scene Contents window**

Window that lists all scene attributes such as backdrop, lights, and soundtrack; and all models and their attributes such as surfaces, warps, and animation paths. To view details of an element's attributes, double-click it.



Represents the entire scene and all its sub-parts. Double-click the icon to collapse or expand the view of the scene's elements, or double-click the text to open the Snapshot & Animation Settings dialog box.

Backdrop
Represents the scene's backdrop and its name. Double-click to modify the backdrop.

Soundtrack
Represents the soundtrack that will be included with the scene when it is generated as an animation, and the name of the sound file. Double-click to select a file to use as a soundtrack.



Lights

Represents the group of lights included in the scene. Double-click the icon to view the individual lights in the group, or double-click the text to modify the lights.



Picture
Represents a picture model. Double-click the icon to view the model's elements, or double-click the text to modify the model.

# Catalog

Window that contains scene elements. Drag elements from the Catalog and drop them into the Scene Preview or Scene Contents window.

### Toolbar

Displayed across the top of the Asymetrix 3D F/X main window. Provides fast mouse access to menu commands. Can be converted into a floating palette by dragging away from the edge of the window. Can be displayed or hidden by selecting Toolbar from the View menu.

# Catalog status bar

Displays the currently selected element's description and name.

### Main Window status bar

Provides help on the menu or toolbar command currently under the cursor and displays the time. While generating an animation, displays the number of the frame being generated and the total number of frames to be generated.

### Scene Preview window status bar

Displays the name of the selected model; or, after previewing a snapshot, displays how many lines were generated for the preview; or, after resizing the Scene Preview window, displays the current size as a percentage of the final snapshot size. Also displays the currently selected Position palette tool, and the current camera perspective.

# **Position palette**

Palette that contains tools that rotate, move, and scale models in the Scene Preview window.





with which you can rotate a model.





with which you can move a model left, right, up, or down.





with which you can scale (resize) a model.



**Expand**Expands the Position palette to display graphical and numerical positioning controls.

# **Animation palette**

Palette containing tools that play animations in the Scene Preview window.



Play
Previews the animation paths of all models in the scene at actual speed, dropping frames if they can't be generated quickly enough.



Play all
Previews the animation paths of all models in the scene, but does not play frames at actual speed.



Stops or resumes playing a stopped animation from the current frame.



Returns to first frame of all animation paths.







Advances to last frame of all animation paths.

### Menu bar

Contains all Asymetrix 3D F/X commands.

To view the contents of a menu, do one of the following:



Click the menu name with the mouse.

Press Alt+*n* (the underlined letter in the menu name).

## Title bar

The area at the top of the Asymetrix 3D F/X window that indicates which window is currently active and the name of the project file that is currently open.

Keyboard and mouse shortcuts
General shortcuts
Getting Help
Working with text
Moving a model
Rotating a model
Scaling a model
Working with models
Working with scenes



Use the following keyboard and mouse shortcuts to get help.

For this type of Help	Do this
List of Help topics	Press F1.
Help on a specific element	Right-click element, then click on right-click toolbar.
Help on an interface element	Click then click an element; or press Shift+F1, then click an element.





Use the following keyboard and mouse shortcuts to work with text in the Create Text Model dialog box.

То	Do this
Select word	Double-click in word
Extend text selection	Shift+arrow key
Select a range of text	Click at beginning of text, press Shift, click at end
Move insertion point	Press an arrow key
Move right one word	Press Ctrl+Right Arrow
Move left one word	Press Ctrl+Left Arrow
Insert a line	Ctrl+Enter





## Moving a model Keyboard and mouse shortcuts





tool on the Position palette





cursor.

То	Using the keyboard	Using the mouse	
Move right	Select the model, then hold down the Right Arrow key	Select the model, then drag mouse right	
Move left	Select the model, then hold down the Left Arrow key	Select the model, then drag mouse left	
Move up	Select the model, then hold down the Up Arrow key	Select the model, then drag mouse up	
Move down	Select the model, then hold down the Down Arrow key	Select the model, then drag mouse down	
Move back in 3D space	Select the model, then hold down Shift+Right Arrow or Shift+Up Arrow	Select the model, press Shift, then drag mouse right	
Move closer in 3D space	Select the model, then hold down Shift+Left Arrow or Shift+Down Arrow	Select the model, press Shift, then drag mouse left	



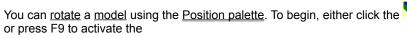


## Rotating a model Keyboard and mouse shortcuts





tool on the Position palette





cursor.

То	Using the keyboard	Using the mouse
Rotate clockwise around vertical axis	Select the model, then hold down the Right Arrow key	Select the model, then drag mouse right
Rotate counterclockwise around vertical axis	Select the model, then hold down the Left Arrow key	Select the model, then drag mouse left
Rotate clockwise around horizontal axis	Select the model, then hold down the Up Arrow key	Select the model, then drag mouse up
Rotate counterclockwise around horizontal axis	Select the model, then hold down the Down Arrow key	Select the model, then drag mouse down
Rotate clockwise around depth axis	Select the model, then hold down Shift+Right Arrow or Shift+Up Arrow	Select the model, press Shift, then drag mouse right
Rotate counterclockwise around depth axis	Select the model, then hold down Shift+Left Arrow or Shift+Down Arrow	Select the model, press Shift, then drag mouse left
Constrain rotation to around vertical axis only		Select the model, press Ctrl, then drag mouse right or left
Constrain rotation to around horizontal axis only		Select the model, press Ctrl, then drag mouse up or down





## Scaling a model Keyboard and mouse shortcuts





tool on the Position palette





cursor.

То	Using the keyboard	Using the mouse
Make entire model smaller	Select the model, then hold down Shift+Down Arrow key	Select the model, then drag mouse left
Make entire model larger	Select the model, then hold down Shift+Up Arrow key	Select the model, then drag mouse right
Scale width smaller	Select the model, then hold down the Right Arrow key	Select the model, press Shift, then drag mouse left
Scale width larger	Select the model, then hold down the Left Arrow key	Select the model, press Shift, then drag mouse right
Scale height smaller	Select the model, then hold down the Down Arrow key	Select the model, press Ctrl, then drag mouse down
Scale height larger	Select the model, then hold down the Up Arrow key	Select the model, press Ctrl, then drag mouse up
Scale depth smaller	Select the model, then hold down Shift+Left Arrow	Select the model, press Ctrl, then drag mouse left
Scale depth larger	Select the model, then hold down Shift+Right Arrow	Select the model, press Ctrl, then drag mouse right





## **General shortcuts**

Keyboard and mouse shortcuts



Use the following keyboard and mouse shortcuts to work in Asymetrix 3D F/X.

То	Press
Open a scene, Catalog, or snapshot	Ctrl+O
Print a scene, snapshot, or animation frame	Ctrl+P
Save a scene, snapshot, or Catalog	Ctrl+S
Undo or redo the last action	Ctrl+Z
Display the Scene Contents window	F2
Display the Position palette	F8
Select the rotation tool on the Position palette	F9
Select the move tool on the Position palette	F10
Select the scale tool on the Position palette	F11
Expand the Position palette	F12
Toggle between graphical/numerical display if the Position palette is expanded	Shift+F12
Switch the focus from one window to the next	Ctrl+F6
Exit Asymetrix 3D F/X	Alt+F4





## Working with models Keyboard and mouse shortcuts



Use the following keyboard and mouse shortcuts to work with models.

<u>To</u>	Do this
Create a text model	Press Ctrl+T
Create a picture model	Press Ctrl+M
Select a single model	Click the model
Select multiple models	Shift+click the models
Add to or remove from selection	Shift+click each model you want to add or remove
Select all models in a scene	Press Ctrl+A
Modify a model	Double-click the model in the <u>Scene</u> <u>Preview window</u>
Expand a model in the <u>Scene</u> <u>Contents window</u>	Double-click the model in the Scene Contents window
Select a <u>sub-part</u> of a model	Click the sub-part in the Scene Contents window





# Working with scenes Keyboard and mouse shortcuts



Use the following keyboard and mouse shortcuts to work with scenes.

То	Press
Display or hide a scene's backdrop	F4
Switch to Wide Angle camera perspective	Shift+F5
Switch to Telephoto camera perspective	Ctrl+F5
Switch to Normal camera perspective	F5
Modify options	F7
Modify snapshot and animation settings	Shift+F3
Generate a snapshot	F3
Generate an animation	Ctrl+F3



## Point & click topics



A scene is a collection of elements displayed in the <u>Scene Preview</u> or <u>Scene Contents</u> window. A scene includes all <u>models</u> (their attributes and positions), <u>surfaces</u>, <u>animation paths</u>, <u>lights</u>, and the <u>backdrop</u>.

After you've created a scene, you can generate a <u>snapshot</u> or <u>animation</u> from it to use alone or incorporate into other programs.

#### Scene concepts and step-by-step procedures

About Asymetrix 3D F/X

About camera perspective

About creating 3D graphics with Asymetrix 3D F/X

About editing scenes in a container application

About the Scene Contents window

Adding a backdrop

Adding a preset model

Adding lights

Building a scene

Generating a snapshot

Generating an animation

Modifying a backdrop

Modifying a light

Setting the camera perspective

Working in Asymetrix 3D F/X

#### Scene commands

**Boxes** 

On Camera Area

**Options** 

Print

**Snapshot & Animation Settings** 

Snapshot (right-click menu)

Solid Models

Soundtrack (right-click menu)

Wireframes





A backdrop is a <u>scene's</u> background, and can be white, a color, a <u>bitmap</u>, or a <u>gradient</u>. You can hide a scene's backdrop to make a draft of the scene that generates more quickly, or display a scene's backdrop to see the scene as it will finally appear.

#### Backdrop concepts and step-by-step procedures

About Asymetrix 3D F/X
About creating 3D graphics with Asymetrix 3D F/X
About the Scene Contents window
Adding a backdrop
Building a scene
Generating a snapshot
Generating an animation
Modifying a backdrop
Working in Asymetrix 3D F/X

#### **Backdrop commands**

Backdrop Gradient (dialog box) Modify Backdrop





## **Soundtrack**

Point & click

A soundtrack is a wave audio (.WAV) file saved as part of an animation.

Soundtrack concepts and step-by-step procedures

About animation in Asymetrix 3D F/X

Soundtrack command

**Modify Soundtrack** 





Lights are effects that brighten <u>models</u> in a <u>scene</u>. Ambient light brightens every surface of a model. Directional light (such as Default Left Light) brightens based on whether the model's <u>surface</u> faces toward or away from the light. Lights are always positioned outside the scene.

### Light concepts and step-by-step procedures

About creating 3D graphics with Asymetrix 3D F/X

#### **Light commands**

Create Ambient Light
Create Directional Light
Modify Lights





### **Text model**

Point & click

A text <u>model</u> is created from text. Asymetrix 3D F/X creates a text model by adding depth, or a third dimension, to two-dimensional shapes.

### Text model concepts and step-by-step procedures

About text and picture models Creating a text model

#### **Text model commands**

<u>Create Text Model</u> <u>Modify 3D</u> <u>Modify Text Model (dialog box)</u>





### Letter model

Point & click

A letter  $\underline{model}$  is a  $\underline{sub\text{-part}}$  of a text model. Asymetrix 3D F/X creates a text model by adding depth, or a third dimension, to two-dimensional shapes.

#### Letter model concepts and step-by-step procedures

About text and picture models Creating a text model

#### Letter model commands

<u>Create Text Model</u> <u>Modify 3D</u> <u>Modify Lettter Model (dialog box)</u>





#### Picture model

#### Point & click

A picture <u>model</u> is a model created from a graphic file such as a <u>bitmap (.BMP or .DIB)</u> or <u>metafile (.WMF)</u>. To create a picture model from a bitmap, Asymetrix 3D F/X converts the image to black and white, then <u>traces</u> around the black. You can apply the original bitmap to the face of the model as a <u>surface</u>. To create a picture model from a metafile, Asymetrix 3D F/X uses the information in the source file to create a 3D picture model.

#### Picture model concepts and step-by-step procedures

About text and picture models Creating a picture model

Picture model commands

Create Picture Model
Modify 3D
Modify Picture Model (dialog box)





## Imported model Point & click

An imported model is a 3D model file created in another program, then added to a scene. Asymetrix 3D F/X supports models created in Autodesk 3D Studio (.3DS) or AutoCAD (.DXF) format.

#### Imported model concepts and step-by-step procedures

About imported models Importing a model

#### Imported model commands

Import Model
Imported Model Surface (dialog box)





## Simple model Point & click

A simple model is a geometric model created by Asymetrix 3D F/X, based on one of four shapes: sphere, ring, cube, or cylinder.

#### Simple model concepts and step-by-step procedures

About simple models Adding a preset model

#### Simple model commands

Create Simple Model Modify Cube
Modify Cylinder
Modify Ring (dialog box)
Modify Sphere (dialog box)





## Sub-part Point & click

A sub-part is an individual part of a model, such as a part of a picture model, that can be modified independently of the model.

### Sub-part concepts and step-by-step procedures

About the Scene Contents window

Making a model a sub-part of another model

#### **Sub-part model commands**

Modify Sub-part (dialog box)





A <u>model's</u> surface is a thin layer, placed over the model's geometry. A surface can be a color, <u>bitmap</u>, or material.

#### Surface concepts and step-by-step procedures

About surfaces
Applying a surface to a model
Adding a texture to a model's surface
Making a surface reflect a bitmap
Making all models in a scene reflect a bitmap
Modifying a model's surface

#### **Surface command**

Modify Surface & Color





## Path

#### Point & click

An animation path is a motion path (containing motion and direction) that you assign to a <u>model</u> to create an <u>animation</u>.

#### Path concepts and step-by-step procedures

About animation in Asymetrix 3D F/X
Adding a soundtrack to an animation
Animating a model
Animating sub-parts of a model
Generating an animation
Modifying a model's animation path
Modifying a model's animation path sequence
Playing a linked or embedded animation
Previewing an animation
Printing a frame of an animation
Staggering when models enter a scene

#### Path commands

Animation Palette
Generate Animation
Modify Animation
Preview All Frames
Preview Animation





Warping is the process of bending or twisting a <u>model</u>.

Warp step-by-step procedure
Warping a model
Warp command
Modify Warp





## **Scene Contents window**

Point & click

The Scene Contents window lists all scene attributes, such as the <u>backdrop</u>, <u>lights</u>, and <u>soundtrack</u>; and all <u>models</u> and their attributes, such as <u>surfaces</u>, <u>warps</u>, and <u>animation paths</u>.

#### Scene Contents window concepts and step-by-step procedures

About Asymetrix 3D F/X
About the Scene Contents window
Selecting models

#### **Scene Contents window command**

Scene Contents





## **Scene Preview window**

Point & click

The Scene Preview window is where you arrange, edit, and manipulate <u>models</u> to create a 3D <u>scene</u>.

#### Scene Preview window concepts and step-by-step procedures

About Asymetrix 3D F/X
About creating 3D graphics with Asymetrix 3D F/X
About the Scene Contents window
Selecting models





The Catalog is the window that contains preset  $\underline{\text{scene}}$  elements. You can  $\underline{\text{drag}}$  elements from the Catalog and drop them into the  $\underline{\text{Scene Preview}}$  or  $\underline{\text{Scene Contents}}$  window to add them to a scene.

## Catalog concepts and step-by-step procedures

About Asymetrix 3D F/X Selecting models

Catalog commands
Arrange Catalog Entries
Catalog





## **Snapshot window**

Point & click

The Snapshot window is the window in which Asymetrix 3D F/X generates a snapshot.

#### Snapshot window concepts and step-by-step procedures

About Asymetrix 3D F/X
About camera perspective
About color in Asymetrix 3D F/X
About color palette shift
About creating 3D graphics with Asymetrix 3D F/X
Generating a snapshot
Previewing a snapshot
Printing a scene or snapshot

#### **Snapshot window commands**

Convert Snapshot Generate Snapshot Preview Snapshot





### **Animation window**

Point & click

The Animation window is the window in which Asymetrix 3D F/X generates an animation.

#### Animation window concepts and step-by-step procedures

About Asymetrix 3D F/X
About camera perspective
About color in Asymetrix 3D F/X
About color palette shift
About creating 3D graphics with Asymetrix 3D F/X
Generating an animation
Previewing an animation
Printing a frame of an animation

#### **Animation window commands**

Generate Animation
Preview All Frames
Preview Animation





## Technical Support

You can receive Asymetrix Technical Support in a variety of ways. Click a topic below for step-by-step instructions about Technical Support.

**Calling Technical Support Using America Online** 

Using CompuServe

**Using Internet** 

Using the Asymetrix Bulletin Board System (BBS)



## **Calling Technical Support**

Step by step



Registered Asymetrix 3D F/X users receive complimentary technical support. If you leave a message or fax before or after business hours, a technical support representative will respond to your inquiry within two business days (Monday through Friday).

Use the following Asymetrix technical support telephone numbers as needed for your location.

#### Australia/Asia Pacific



Infotainment Asia Pacific Pty Ltd.

(61+3) 5255-471 (direct) (61+3) 5255-482 (fax)

9 a.m. to 6 p.m. Eastern Standard Time



**XLTECH Pty Ltd.** 

(61+2) 9752-111 (direct) 9 a.m. to 6 p.m. Eastern Standard Time

(61+2) 9752-167 (fax)

Europe (except France, Germany, and United Kingdom); Middle East; Africa;

Russia

+44 923-208-433 9:00 to 17:00 GMT

**France** 

05-90-83-19 (freephone) 9:00 to 17:00 GMT

Germany

01-30-81-27-07 (freephone) 9:00 to 17:00 GMT

**United Kingdom** 

0800-716-957 (freephone) 9:00 to 17:00 GMT

U.S.A. and rest of world

206-637-1600 (direct) 6 a.m. to 6 p.m. Pacific time Monday through Thursday; 6

206-454-0672 (fax) a.m. to 3 p.m. Friday

When you call Technical Support, please be at your computer with your <u>Asymetrix 3D F/X User Manual</u>, and have the following information:

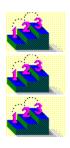
Your Asymetrix 3D F/X serial number (found on the first installation disk, your license agreement envelope, or your Asymetrix 3D F/X product box)

The version of Asymetrix 3D F/X you are running

Your system configuration information (you can find this information by choosing System Info from the Help menu, or by double-clicking the System Info icon in the Asymetrix 3D F/X program group, located in the Program Manager; or by double-clicking Windows Setup, located in the Program Manager in the Main group)



The exact wording of any error message you have encountered



What happened and what you were doing when the problem occurred

How you tried to solve the problem

Step by step
Using America Online
Using CompuServe
Using Internet
Using the Asymetrix Bulletin Board System (BBS)



## **Using the Asymetrix Bulletin Board System (BBS)**

Step by step



You can receive online technical support on the Asymetrix Bulletin Board System (BBS) by leaving a message for the Asymetrix System Operator. The System Operator checks the BBS daily for new messages and answers them within two business days (Monday through Friday). To help the System Operator answer your question, gather information about your system.

The data configuration for the BBS is: no parity, 8 data bits, 1 stop bit.

#### To gather system configuration information for the System Operator:

- 1 From the Help menu, choose System Info. If you cannot run Asymetrix 3D F/X, double-click the System Info icon in the Asymetrix 3D F/X program group, located in the Program Manager.
- 2 Copy down all the information listed in the System Status box.

#### To connect to the Asymetrix Bulletin Board System:

1 Call the Asymetrix BBS number:



If you have a 1200 to 14,400 baud modem (v.32bis), call (206) 451-1173.

If you have a 9600 to 14,400 baud modem (v.32bis), call (206) 451-8290.

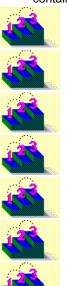
2 Enter your first and last names at the prompts.

If you are a new BBS user and you see a welcome message, there is probably another user with the same name. Hang up the phone, redial, and use a different name, such as "Jim" instead of "James," or include your middle initial.

- **3** Enter your password, then retype it to confirm its spelling.
- 4 If you are a new user, complete the new user questionnaire.

Make sure you have your Asymetrix 3D F/X serial number (found on the first installation disk, your license agreement envelope, or your Asymetrix 3D F/X product box). You will be asked about your software and hardware. Where applicable, it is recommended that you accept the defaults.

**5** To leave a message for the System Operator, type C for "Comments to the sysop," then leave a message containing the following information:



All the information gathered about your system configuration

The version of DOS you are running

The version of Windows you are running

The version of Asymetrix 3D F/X you are running

The exact wording of any error message you have encountered

What happened and what you were doing when the problem occurred

How you tried to solve the problem

**6** To log off the BBS, type G for "Goodbye," then type Y to confirm.

**Tip** At any time, you can type "?" to get online command help. If you have any problems or difficulties with the Asymetrix BBS, leave a message for the BBS System Operator or call the Asymetrix Technical Support line at (206) 637-1600.



Step by step
Calling Technical Support
Using America Online
Using CompuServe
Using Internet



## **Using CompuServe**

Step by step



If you are a CompuServe member, you can receive online technical support by leaving a message for the Asymetrix Forum Moderator. The Forum Moderator checks CompuServe daily for new messages and answers them within two business days (Monday through Friday). To help the Forum Moderator answer your question, gather information about your system.

#### To gather system configuration information for the Forum Moderator:

- 1 From the Help menu, choose System Info. If you cannot run Asymetrix 3D F/X, double-click the System Info icon in the Asymetrix 3D F/X program group, located in the Program Manager.
- 2 Copy down all the information listed in the System Status box.

Refer to your CompuServe documentation for step-by-step instructions for logging onto CompuServe, leaving messages for the Forum Moderator, and logging off CompuServe.

#### To connect to CompuServe:

- 1 Log on to CompuServe.
- 2 To connect to



Windows Third Party Developer A forum, Section 1, type GO ASYMETRIX or GO WINAPA at the



Multimedia Vendors forum, Section 15, type GO MULTIVEN at the prompt.



IBM Ultimedia Tools A forum, Section 5, type GO ULTIATOOLS at the prompt.

3 In the Asymetrix section (Section 1), leave a message for the Forum Moderator containing the following information:



All the information gathered about your system configuration



Your Asymetrix 3D F/X serial number (found on the first installation disk, your license agreement envelope, or your Asymetrix 3D F/X product box)



The version of DOS you are running



The version of Windows you are running



The version of Asymetrix 3D F/X you are running



The exact wording of any error message you have encountered

What happened and what you were doing when the problem occurred



How you tried to solve the problem 4 Log off CompuServe.



Step by step
Calling Technical Support
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### **Using America Online**

Step by step



If you are an America Online member, you can receive online technical support by leaving a message for the Asymetrix Forum Moderator. The Forum Moderator checks America Online daily for new messages and answers them within two business days (Monday through Friday). To help the Forum Moderator answer your question, gather information about your system.

Note America Online operates a text telephone (TDD) for deaf or hearing-impaired members.

### To gather system configuration information for the Forum Moderator:

- 1 From the Help menu, choose System Info. If you cannot run Asymetrix 3D F/X, double-click the System Info icon in the Asymetrix 3D F/X program group, located in the Program Manager.
- 2 Copy down all the information listed in the System Status box.

Refer to your America Online documentation for step-by-step instructions for logging onto America Online, leaving messages for the Forum Moderator, and logging off America Online.

#### To connect to America Online:

- 1 Log on to America Online.
- 2 Do one of the following:



From the Go To menu, select Keyword, then type Asymetrix.

Go to the Computing and Software area, select Industry Connection, then select Asymetrix.

**3** Leave a message for the Forum Moderator containing the following information:



All the information gathered about your system configuration

Your Asymetrix 3D F/X serial number (found on the first installation disk, your license agreement envelope, or your Asymetrix 3D F/X product box)



The version of DOS you are running



The version of Windows you are running



The version of Asymetrix 3D F/X you are running



The exact wording of any error message you have encountered



What happened and what you were doing when the problem occurred



How you tried to solve the problem

4 Log off America Online.

Tip You can receive the software required to use America Online at no cost, plus five complimentary hours of

online time. For details about America Online, call (800) 827-6364 or (703) 893-6288.



Step by step
Calling Technical Support
Using CompuServe
Using Internet
Using the Asymetrix Bulletin Board System (BBS)



### **Using Internet**

Step by step



If you have access to Internet mail, you can receive online technical support by leaving a message for the Asymetrix Forum Moderator. The Forum Moderator checks Internet daily for new messages and answers them within two business days (Monday through Friday). To help the Forum Moderator answer your question, gather information about your system.

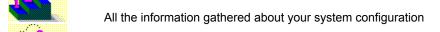
### To gather system configuration information for the Forum Moderator:

- 1 From the Help menu, choose System Info. If you cannot run Asymetrix 3D F/X, double-click the System Info icon in the Asymetrix 3D F/X program group, located in the Program Manager.
- 2 Copy down all the information listed in the System Status box.

Refer to your electronic mail documentation for step-by-step instructions about starting mail and sending messages on Internet.

#### To access Internet:

- 1 Start your electronic mail application.
- 2 In the box where you enter the receiver's address, type support@asymetrix.com or techsup@asymetrix.com.
- 3 Leave a message for the Forum Moderator containing the following information:



Your Asymetrix 3D F/X serial number (found on the first installation disk, your license agreement envelope, or your Asymetrix 3D F/X product box)



The version of DOS you are running



The version of Windows you are running



The version of Asymetrix 3D F/X you are running



The exact wording of any error message you have encountered



What happened and what you were doing when the problem occurred



How you tried to solve the problem

4 Send your message.



Step by step
Calling Technical Support
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### Working in Asymetrix 3D F/X

Step by step

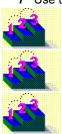


In the <u>Scene Preview window</u> you move <u>3D</u> objects--called <u>models</u>--around the screen, rotate them to display different sides, move them forward and backward in 3D space, and <u>scale</u> their size. You can use the Scene Preview window to build a <u>scene</u> and arrange models in relationship to each other.

Asymetrix 3D F/X provides a comprehensive collection of models (including shapes and text) and 3D tools to modify a scene. To use models and other scene elements stored in the <u>Catalog</u>, you <u>drag</u> them from the Catalog and <u>drop</u> them into the Scene Preview or <u>Scene Contents window</u>.

### To work in Asymetrix 3D F/X:

- 1 Add and create models.
- 2 Modify models by applying surfaces or arranging them in the scene.
- 3 Modify the scene by adding a backdrop, lights, or shadows.
- 4 To create an animation, add animation paths to a model.
- 5 From the File menu, choose <u>Save</u> to save the scene, then enter a file name in the Save As dialog box.
- 6 Generate a snapshot or animation of the scene.
- 7 Use the snapshot or animation:



Import the snapshot or animation into another application. Or link or embed the scene.

Print the scene or snapshot.

About Asymetrix 3D F/X

About creating 3D graphics with Asymetrix 3D F/X

About the Scene Contents window

Adding a backdrop

Adding a preset model
Adding lights

Animating a model

Applying a surface to a model

Arranging a model in a scene

Creating a picture model

Creating a text model

Embedding or linking an existing scene

Generating a snapshot

Generating an animation

Importing a model

Printing a scene or snapshot

### Asymetrix 3D F/X User Manual

Chapter 1, "The basics"



### Building a scene

Step by step



To build a scene in the Scene Preview window, you can

begin with a starter scene and its models from the Catalog, then modify the models to create the scene you want.

use an existing scene file as a template.

create a scene from scratch by <u>dragging</u> models from the Catalog and <u>dropping</u> them into the Scene Preview or Scene Contents window.

### To use a starter scene:

Click the Scenes tab in the Catalog, then drag a starter scene from the Catalog and drop it into the Scene Preview or Scene Contents window.

### To use an existing scene file as a template:

- 1 From the Tools menu, choose Options.
- 2 In the File tab, for At Startup, select Create New Scene.
- 3 Under New Scenes, select Use Scene File As Template, then click Browse.
- 4 Select a scene file to use as a template, click OK, and then click OK again to close the Options dialog box. When you restart Asymetrix 3D F/X, the scene file opens as a template.

### To create a scene from scratch:



Drag a preset model from the Catalog. Or add a simple model using the Models menu.



Create a text model.



Create a picture model from a graphic.



Import a model.

### To save a scene:



From the File menu, choose Save to save the scene, then enter a file name in the Save As dialog



About imported models About simple models About text and picture models About the Scene Contents window Adding a preset model
Creating a picture model
Creating a text model
Importing a model

### Commands

Create Picture Model Create Simple Model submenu Create Text Model Import Model New **Options** 



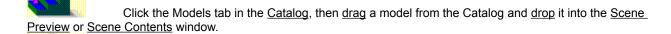
# Adding a preset model

Step by step



You can add a preset model to a scene, then modify it to fit your needs.

To add a preset model to a scene:



From the Models menu, choose Create Simple Model, then select a model to add.
You can modify most models by selecting the model, then choosing Modify Model from the Models menu. For details about a specific model's options, click the Help button in the Modify Model dialog box.



About simple models
About the Scene Contents window
Modifying a simple model's shape

### Commands

Catalog
Create Simple Model submenu
Modify Cube (dialog box)
Modify Cylinder (dialog box)
Modify Ring (dialog box)
Modify Sphere (dialog box)

### Asymetrix 3D F/X User Manual

Chapter 1, "The basics"



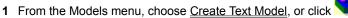
# Creating a text model

Step by step



You can create a 3D model from text you format.

### To create a model from text:





- **2** Replace the words Enter Text Here with the text you want. You can create additional lines of text by pressing Shift+Enter.
- 3 Optional. To add <u>special (ANSI) characters</u> to your model, click Character Map.
- 4 Select your text, then use the toolbar options to format it.
- **5** For Font, select a font.
- 6 Optional. To check the spelling of your text, click <u>Spelling</u>.
- 7 Optional. To modify the model's 3D options, click Modify 3D.
- **8** Optional. To change the model's <u>name</u>, under Model Name, type a name, or click the Modify button to open the <u>Modify Name</u> dialog box.

**Note** The model name is automatically set to the model's text when it is created.

9 Click OK to close the dialog box.



About text and picture models Adding a preset model Creating a picture model Importing a model

### Commands

Spelling (dialog box)
Create Text Model Modify 3D
Modify Letter Model (dialog box)
Modify Name (dialog box) Modify Text Model (dialog box)



# Creating a picture model

Step by step



You can create a 3D <u>picture model</u> from any <u>bitmap</u> or graphic file composed of polygons and lines (for example, <u>vector graphics</u> such as <u>metafiles</u>) you can import or paste into Asymetrix 3D F/X. Asymetrix 3D F/X converts bitmap images to black and white, then <u>traces</u> the black to create a model.

### To create a picture model:



To import a picture, click Browse, locate the file, and then click OK. Or to paste a picture from the Clipboard, click Paste Graphic From Clipboard. Metafiles may appear distorted in the preview area, but will be imported without distortion.

**Note** A scene that includes models created from a metafile may appear in the Scene Preview window to include only a single large rectangular model. You may want to select and delete the large rectangular model so you can view the other models created from the file.

- Optional. For a bitmap, click Trace Options to open the <u>Trace Options</u> dialog box, where you can determine how the bitmap will be converted to black and white, and how much detail will be traced.
- 4 Optional. To modify the model's 3D options, click Modify 3D.
- 5 Optional. To give the model a <u>name</u>, under Model Name, type a name, or click the Modify button to open the <u>Modify Name</u> dialog box.
  - 6 Click OK to close the dialog box.



About text and picture models Adding a preset model Creating a text model Importing a model

### Commands

Create Picture Model
Import Graphic (dialog box)
Modify 3D
Modify Name (dialog box)
Modify Picture Model (dialog box) Trace Options (dialog box)



# Applying a surface to a model

Step by step



Each <u>model</u> has a default <u>surface</u>, which is the appearance of its exterior. You can give a model a different appearance by applying a different surface.

Asymetrix 3D F/X applies the surface by wrapping it around the contours of the model or its <u>sub-part</u> (such as a character in a word). Each time you apply a new surface, Asymetrix 3D F/X removes the old surface from the model.

### To apply a surface to a model:

- 1 Click the Surfaces tab in the <u>Catalog</u>.
- 2 <u>Drag</u> a surface from the Catalog and <u>drop</u> it on the model in the <u>Scene Preview</u> or <u>Scene Contents</u> window. To apply a surface to a sub-part of a model (such as its <u>bevel</u>), from the View menu, choose <u>Scene Contents</u> to open the Scene Contents window, then drag a surface and drop it on the model's sub-part.

**Note** If you apply a wood, granite, marble, or rainbow surface to a model, the surface will not be visible until you generate a snapshot or animation of the scene.



Step by step About surfaces About the Scene Contents window Modifying a model's surface

Commands

Catalog Modify Surface & Color



### Warping a model

Step by step



You can easily change a <u>model's</u> shape by <u>warping</u> it. However, once you've warped a model, if you want to move, rotate, or scale the model's <u>sub-parts</u>, you must temporarily disable the warp.

### To warp a model:

- 1 Select a model in the <u>Scene Preview</u> or <u>Scene Contents</u> window.
- 2 From the Models menu, choose Modify Warp.
- 3 Change the model's bow, angle, or twist, then click OK to close the dialog box.

### To move a sub-part of a warped model:

- 1 Select a warped model in the Scene Preview or Scene Contents window.
- 2 From the Models menu, choose Modify Warp, click Disable Warp, and then click OK.
- **3** In the Scene Contents window, expand the model to display its sub-parts, select the sub-part you want to move, then in the Scene Preview window, move, scale, or rotate the sub-part.
- 4 To reapply the warp, from the Models menu, choose Modify Warp, click Enable Warp, and then click OK.



Step by step
About the Scene Contents window
Command
Modify Warp
Asymetrix 3D F/X User Manual
Chapter 1, "The basics"



# Arranging a model in a scene

Step by step



The <u>Scene Preview window</u> is like a room in which you can arrange <u>models</u> in relationship to each other in 3D space. You can scale or change the size of one or more of the models, move them around the <u>scene</u>, and rotate them to display other sides. You can even position your models to be out of the scene, which means that the models or part of the models will be out of view in the next <u>snapshot</u> or <u>animation</u> you generate.

### To arrange a model in a scene:



To <u>move</u> a model left, right, up, or down in a scene, click the move button on the Position palette, then drag the model.

To move a model closer or farther in 3D space, click the move button on the Position palette, then press Shift while dragging the model.



To <u>rotate</u> a model, click the rotate button on the Position palette, then drag the model.

About Asymetrix 3D F/X About camera perspective
About creating 3D graphics with Asymetrix 3D F/X
About the Position palette
About the Scene Contents window
Resetting a model's location, rotation, or scale Rotating a model

### Commands

Position Palette Reset Orientation Reset Position Reset Size



# Resetting a model's location, rotation, or scale

Step-by step



You can return a model to the center of the scene, a flat orientation, or to its size when created.

### To reset a model's location to the center of a scene:

In the <u>Scene Contents</u> or <u>Scene Preview</u> window, select the model, then from the Edit menu, choose <u>Reset Position</u>.

### To bring a model that is out of the scene back into view:

- 1 From the View menu, choose On Camera Area then choose 75% or a smaller percentage, so you can see the area outside the scene.
- 2 Select the model in the Scene Contents window, then move the model back into view using the move button on the Position palette.

### To set a model to a flat orientation:

In the Scene Contents or Scene Preview window, select the model, then from the Edit menu, choose Reset Orientation.

### To reset a model's size:

In the Scene Contents or Scene Preview window, select the model, then from the Edit menu, choose Reset Size.

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Position Palette Reset Orientation
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# Adding a backdrop

Step by step



You can add a <u>backdrop</u> to your <u>scene</u> to create visual interest. You can use a solid color, a <u>gradient</u>, or a <u>bitmap</u>, <u>metafile</u>, or other graphic as a backdrop.

Note Models in a scene are always in front of a backdrop; lights, shadows, and fog do not affect a backdrop.

### To add a backdrop to a scene:

- 1 Click the Backdrops tab in the <u>Catalog</u>.
- 2 Drag a backdrop from the Catalog and drop it in the Scene Preview or Scene Contents window.
  Note Show or hide a scene's backdrop by choosing Backdrop from the View menu.



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Backdrop Catalog



<u>Lights</u> set the <u>scene's</u> mood and style; a scene can take on a different feel when the brightness, direction, and color of lights are changed. Ambient light brightens every <u>surface</u>. Directional lights (such as White Right Light) brighten based on whether the <u>model</u> surface faces toward or away from the light. Lights sources always come from outside the scene.

### To add a set of lights to a scene:

- 1 Click the Lights tab in the <u>Catalog</u>.
- 2 <u>Drag</u> a light set from the Catalog and <u>drop</u> it in the <u>Scene Preview</u> or <u>Scene Contents</u> window. It doesn't matter where you drop the lights because they affect the entire scene. Each light has a preset color and position you can modify.



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### Commands

Catalog Modify Lights



# Adding shadows to a scene

Step by step



<u>Shadows</u> add dramatic effect, showing where a <u>scene's light</u> comes from. By default, each light set in the <u>Catalog</u> provides one light with shadows turned on. You can make additional lights cast shadows in your scene, however, the scene will take longer to <u>generate</u>.

**Note** Because a <u>backdrop</u> is not a <u>model</u>, shadows do not affect it. To create the effect of shadows on a backdrop, use a wall model.

### To add shadows to a scene:

- 1 From the Scene menu, choose Modify Lights.
- 2 Under Light Name(s), select a light to cast shadows, check Light Casts Shadows, and then click OK.
- 3 From the Scene menu, choose Snapshot & Animation Settings, then click the Quality tab.
- **4** For <u>Snapshot</u> Style, select Realistic w/Shadows or <u>Ray Traced</u> w/Shadows, then click OK. **Note** Shadows are only visible after you generate a scene.
- **5** From the Scene menu, choose <u>Generate Snapshot</u>, then click OK.

  As Asymetrix 3D F/X generates a scene with shadows, the progress indicator tracks the calculation of shadows for each light in the scene.

### To adjust the scene lights to create dramatic shadows:

- 1 Add a wall and floor plane to your scene to provide surfaces for the shadows.
- 2 Choose Modify Lights from the Scene menu; in the Preview & Set Light Direction box move the light so that the bright spot is at the top and center of the sphere, then click OK.



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### Commands

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# Setting the camera perspective

Step by step



You can change the <u>camera perspective</u> so that <u>models</u> appear to change in size and distance. The models retain their actual size and place; only the perspective changes.

To make models appear at actual size and distance:

From the Scene menu, choose Camera Perspective, then choose Normal.

To make models appear larger and closer:

From the Scene menu, choose Camera Perspective, then choose Wide Angle.

To make models appear smaller and farther away:



From the Scene menu, choose Camera Perspective, then choose <u>Telephoto</u>.

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# Animating a model

Step by step



To create an <u>animation</u>, you define a motion for all <u>models</u> in the <u>scene</u> that you want to move. To do this, you select preset <u>animation paths</u> for each model and then modify each animation path so that the model moves in the way you want.

For added interest, you can apply a soundtrack--a wave audio (.WAV) file--that plays with the animation.

### To add an animation path to a model:

- 1 Click the Paths tab in the Catalog.
- 2 <u>Drag</u> an animation path from the Catalog and <u>drop</u> it on the model in the <u>Scene Preview</u> or <u>Scene Contents</u> window.
  - If you added more than one animation path to a model, in the Scene Contents window, double-click the model's Paths icon to expand its branch, then drag the animation paths and drop them into the order you want.
- 3 To preview the animation, from the Scene menu, choose Preview Animation.



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# Modifying a model's animation path

Step by step



You can modify an animation path applied to a model so that it moves in the way you want.

### To modify an animation path:

- 1 Select the model, then from the Models menu, choose Modify Animation.
- 2 For Animation Path Name(s), select an animation path to modify.
- 3 In the Movement tab, under Duration, set the animation's length.
- **4** Under Start And End Positions, select whether the model enters the scene, leaves the scene, doesn't move, or waits offscreen on the animation path.
- **5** Under Offscreen Position, click to set where the model is positioned out of the scene.
- **6** Click the Spin tab, then set if and how the model spins. The spin can apply to the model, its <u>sub-parts</u> (such as each character in a text model), or both.
- 7 Click the Effects tab, then set the animation sequence (which part of the model moves first), whether the sequence applies to the motion or spin, and how the model is oriented offscreen.
- 8 Click OK.



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# Modifying a model's animation path sequence

Step by step



When a <u>model</u> has more than one <u>animation path</u>, you can adjust the sequence of the paths so the model moves the way you want.

### To adjust the sequence of animation paths:

- 1 From the View menu, choose Scene Contents to open the <u>Scene Contents window</u>.
- 2 In the Scene Contents tree, under the model's Path branch, drag the animation paths into the sequence you want. (The top path occurs first.)

**Note** If you apply fly-in and fly-out animation paths in sequence to a model, the model's motion will become a curve rather than two straight lines.



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# Adding a soundtrack to an animation

Step by step



You can easily apply a <u>soundtrack</u> to accompany your <u>animation</u>. Asymetrix 3D F/X saves animations in audio/video interleaved (.AVI) format so that the animation <u>frames</u> are interleaved with the sound. As a result, the sound plays with the animation.

Note You can apply only one soundtrack to an entire animation.

#### To add a soundtrack to an animation:

- 1 From the Scene menu, choose Modify Soundtrack.
- 2 Select a wave audio (.WAV) file or an .AVI file that contains sound, then click OK.



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## Embedding a new scene

Step by step



You can <u>embed</u> a new, empty Asymetrix 3D F/X <u>scene</u> in a <u>container application</u>, then use Asymetrix 3D F/X to add <u>models</u>, <u>lights</u>, and other elements to this scene.

**Note** The container application you are working in may use slightly different menu command names than those listed below.

#### To embed a new scene:

- 1 From the container application's Edit or Insert menu, choose Insert Object.
- 2 Select Create New, then under Object Type, select Asymetrix 3D F/X Scene.
- 3 Click OK to start Asymetrix 3D F/X, then build your scene.
- **4** When you're finished, if Asymetrix 3D F/X is in a separate window, from the File menu, choose Exit & Return. If it is not in a separate window, click away from the scene in the container document to display the container application.



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# Embedding or linking an existing scene

Step by step



You can <u>embed</u> or <u>link</u> an existing <u>scene</u> file into a <u>container application</u>. To embed or link an existing scene, you must have already <u>built the scene in Asymetrix 3D F/X</u> and saved it to a file.

**Note** The container application you are working in may use slightly different menu command names than those listed below.

#### To embed or link an existing scene file in a container application:

- 1 From the container application's Edit or Insert menu, choose Insert Object.
- 2 Select Create From File. If you want to link the scene, check Link.
- 3 Locate the scene file, then click OK.



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## Editing embedded or linked Asymetrix 3D F/X scenes

Step by step



You can use Asymetrix 3D F/X to edit a <u>scene</u> you have <u>embedded</u> or <u>linked</u> to an OLE <u>container application</u>. The updated scene appears in the container application.

**Note** The container application you are working in may use slightly different menu command names than those listed below.

#### To edit a linked or embedded scene:

- 1 In the container application, select the scene.
- **2** From the container application's Edit menu, choose Asymetrix 3D F/X Scene Object (or Scene Object), then choose Edit to start Asymetrix 3D F/X.
- 3 Edit the scene.
- **4** Optional. In Asymetrix 3D F/X, generate a <u>snapshot</u> or <u>animation</u> to display in the container application, instead of the scene.
  - **Note** If you are regenerating an animation, in most cases, save it to the same name as the previous version so that you do not consume disk space with multiple animations.
- **5** When you're finished, if Asymetrix 3D F/X is in a separate window, from the File menu, choose Exit & Return. If it is not in a separate window, click away from the scene in the container document to display the container application.



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# Displaying a snapshot or animation in a container application

Step by step



You can determine what part of your <u>linked</u> or <u>embedded scene</u> appears in the <u>container application</u>. You can display a <u>snapshot</u> or <u>frame</u> of an <u>animation</u> <u>generated</u> from a scene, the scene itself, or the Asymetrix 3D F/X icon

**Note** The container application you are working in may use slightly different menu command names than those listed below.

#### To display a snapshot in a container application:

- 1 In the container application, link or embed a scene.
- **2** From the Scene menu, choose <u>Generate Snapshot</u>. If you make any changes to the scene, you must regenerate the snapshot.

#### To display an animation in a container application:

- 1 In the container application, link or embed a scene
- 2 To determine whether the first or last frame of the animation is displayed, from the Scene menu, choose Snapshot & Animation Settings, click the OLE tab, select First or Last, and then click OK.
- **3** From the Scene menu, choose <u>Generate Animation</u>. If you make any changes to the scene, you must regenerate the animation.



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# Displaying a scene or icon in a container application

Step by step



You can determine what part of your <u>linked</u> or <u>embedded scene</u> appears in the <u>container application</u>. You can display a <u>snapshot</u> or <u>frame</u> of an <u>animation</u> <u>generated</u> from a scene, the scene itself, or the Asymetrix 3D F/X icon

**Note** The container application you are working in may use slightly different menu command names than those listed below.

### To display a scene in a container application:

- 1 In the container application, link or embed a scene.
  If you don't generate a snapshot or animation in Asymetrix 3D F/X, the scene appears in the container application and uses the <u>Scene Preview</u> window settings.
- 2 To view the scene as <u>solid models</u>, from the Tools menu, choose <u>Options</u>, then check Display Solid Models In Previews & OLE.

#### To display the Asymetrix 3D F/X icon in a container application:



In the container application's Insert Object dialog box, check Display As Icon.

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# Playing a linked or embedded animation

Step by step



You can play a <u>linked</u> or <u>embedded animation</u> using the Asymetrix 3D F/X runtime player (which you can freely distribute with your files to play your animations), Microsoft Video for Windows, or the Media Player.

**Note** The container application you are working in may use slightly different menu command names than those listed below.

#### To play an animation:

1 Double-click the OLE Registration icon in the Asymetrix 3D F/X Program Manager group to open the Browse For 3DFXPLAY.DLL dialog box. Locate the 3DFXPLAY.DLL file, then click OK.

Note You only need to do this once for each system on which you want to play Asymetrix 3D F/X animations.

2 In the container application, double-click the embedded or linked scene.



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# **Updating your OLE registration database**

Step by step



If you are trying to <u>embed</u> or <u>link</u> a <u>scene</u> in an OLE <u>container application</u>, and the Insert Object dialog box does not contain the Asymetrix 3D F/X Scene entry, you may need to update your <u>OLE registration database</u>.

**Note** The container application you are working in may use slightly different menu command names than those listed below.

#### To update your OLE registration database:

- 1 Start Asymetrix 3D F/X by clicking the icon in the Program Manager, then exit Asymetrix 3D F/X.
- 2 Double-click the OLE Registration icon in the Asymetrix 3D F/X Program Manager group to open the Browse For 3DFXPLAY.DLL dialog box. Locate the 3DFXPLAY.DLL file, then click OK.

The Asymetrix 3D F/X Scene entry should now appear in the Insert Object dialog box.



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## Previewing a snapshot

Step by step



Before you generate a <u>snapshot</u>, you may want to preview it, because generating can be quite time-consuming. You can preview your snapshot in several ways before creating the final version.

#### To preview only part of the snapshot:

From the Scene menu, choose <u>Preview Snapshot</u> to display a crosshair. In the <u>Scene Preview window</u>, use the crosshair to draw a box around the area you want to preview. **Note** Snapshot previews do not include a <u>backdrop</u>.

### To generate a draft of a snapshot:

From the Scene menu, choose <u>Generate Snapshot</u>. Under Style, select a faster generating style (such as <u>Solid Models</u>), then click OK to generate the draft.

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## Previewing an animation

Step by step



Before you generate an animation, you may want to preview it, because generating can be quite time-consuming. You can preview your animation in several ways before creating the final version.

#### To preview the animation in real time:



From the Scene menu, choose Preview Animation.

Asymetrix 3D F/X drops <u>frames</u> from the animation if the current system cannot play all the frames at the correct rate (measured in frames per second), so the preview may appear jerky or choppy. This preview can help you determine how long a <u>soundtrack</u> will play during the animation.

**Tip** To stop previewing an animation, click in the Scene Preview window.

#### To preview all frames in an animation:



From the Scene menu, choose Preview All Frames.

In this preview, a soundtrack you've added will not play back synchronized with the animation, and Asymetrix 3D F/X will display all frames in the animation regardless of your system's speed.

#### To generate a draft of an animation:

- 1 From the Scene menu, choose Generate Animation.
- 2 Under Style, select a faster generating style (Wireframes and Solid Models are fastest, Ray Traced w/Shadows is slowest), then click OK to generate the draft.



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## Generating a snapshot

Step by step



When your <u>scene</u> is the way you want, you can <u>generate</u> a snapshot of it. Before generating, preview the snapshot, because this process can take a minute or more depending on the scene complexity and generating style you choose.

#### To generate and save a snapshot:

- 1 From the Scene menu, choose Generate Snapshot.
- 2 Under Style, select a generating style.
  - **Note** If you choose Wireframes or Solid Models, the snapshot will generate at the <u>color depth</u> of your video driver. If you choose Solid Models, you cannot generate a snapshot larger than your screen.
- 3 Under Generate Image Of, select whether to generate the current scene, or create a snapshot from a <u>frame</u> of <u>animation</u>. Use the <u>Animation palette</u> to go to the frame (its number appears in the Scene Preview window status bar).
- 4 Under Destination, set whether to generate the snapshot onscreen or to a file, and then enter a file name.
- 5 Click OK to generate the snapshot.To stop generating, click Cancel in the status bar or press the Esc key.
- 6 To save the snapshot, select the Snapshot window, then from the File menu, choose Save.



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## Generating an animation

Step by step



When your <u>scene</u> is the way you want, you can <u>generate</u> an <u>animation</u> of it. Before generating, preview the animation, because this process can take a minute or more depending on the scene complexity and generating style you choose.

Note Each frame in an animation is generated separately, which can take time.

#### To generate and save an animation:

- 1 From the Scene menu, choose Generate Animation.
- 2 Under Style, select a generating style.
  - **Note** If you choose Wireframes or Solid Models, the animation will generate at the <u>color depth</u> of your video driver.
- 3 Under Compression, click Change to set the type and quality of compression used.
- 4 Under Output File, enter a file name or click Browse to locate a file to which the animation will be saved. If you enter a bitmap file name, Asymetrix 3D F/X will generate the animation as a sequence of bitmaps.
- 5 Under Repeat Frames, enter a positive number to add copies of the first or last frame to the generated .AVI file, or enter a negative number to skip generating frames at the beginning or end of the animation.
- **6** Click OK to generate the animation.
  - To stop generating, click Cancel in the status bar or press the Esc key.
  - **Tip** You can minimize the Asymetrix 3D F/X main window, then switch to a different application while generating in the background. The minimized icon tracks the generating progress.
- 7 To view the results, click the play button in the Animation window.
  - If you aren't satisfied with the results, alter the models in the Scene Preview window or change the options in the Scene & Animation Settings dialog box, then regenerate the scene.



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## Generating complex or large snapshots

Step by step



Large <u>snapshots</u> using many colors can require a substantial amount of RAM to <u>generate</u>. If you have trouble generating a snapshot, try generating to a file first. If the snapshot still won't generate properly, try applying a <u>color palette</u> that uses fewer colors, and then regenerate the snapshot.

**Note** To generate snapshots larger than 4092 pixels wide when your <u>color depth</u> is 8 bits per pixel, 2046 pixels when your color depth is 16 bits per pixel, or 1364 pixels when your color depth is 24 bits per pixel, you must generate to file.

#### To generate a snapshot to a file:

- 1 From the Scene menu, choose Generate Snapshot.
- 2 Under Destination, select Generate Directly To File, enter a file name, and then click OK.

#### To generate a snapshot using fewer colors:

- 1 From the Scene menu, choose <u>Snapshot & Animation Settings</u>, then click the Colors tab.
- 2 For Palette, select a color palette with fewer colors, and then click OK.
- 3 From the Scene menu, choose Generate Snapshot, then click OK.



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## Printing a scene or snapshot

Step by step



You can print the entire contents of the <u>Scene Preview window</u> or just a <u>snapshot</u> that you've <u>generated</u>. Depending on options you set, your results from the <u>Snapshot window</u> or Scene Preview window may be very different. For example, <u>shadows</u> and <u>lights</u> do not appear in the Scene Preview window, but do appear in the Snapshot window. As a result, if you want to print with shadows and lights, print from the Snapshot window.

#### To print a scene or snapshot:

- 1 Select either the Scene Preview or Snapshot window, depending on which you want to print.
- 2 From the File menu, choose Print.
- 3 Select to print the active window's contents or a different snapshot file.
- 4 Under Margins, set whether the image is printed at actual size, scaled to fit within the default printer margins, or within margins you specify.
- 5 Click OK to start printing.



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# Printing a frame of an animation

Step by step



You can generate a snapshot of a single frame of animation, then print it.

#### To print a single frame of animation:

- **1** From the File menu, choose Open, then select the <u>scene</u> containing the animation.
- **2** From the View menu, choose <u>Animation Palette</u>, and use it to move through the animation until you display the frame you want. Note the frame number shown in the status bar.
- 3 From the Scene menu, choose Generate Snapshot.
- 4 Under Generate Image Of, select Single Frame Of Animation, then enter the frame number.
- 5 Under Destination, select Display In Window, then click OK to generate the snapshot.
- **6** With the <u>Snapshot window</u> active, choose <u>Print</u> from the File menu, then click OK.



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# Animating sub-parts of a model

Step by step



You can animate the sub-parts of a model to enter, leave, or spin in a scene.

#### To animate the sub-parts of a model:

- 1 Select a model with sub-parts.
- 2 From the Models menu, choose Modify Animation.
- 3 In the Movement tab, under Duration, set how long you want the animation to last.
- 4 Under Start And End Positions, select either Enter Scene or Leave Scene, then click a position in the Offscreen Position box for the models to enter from or go to when they leave.
- 5 In the Effects tab, check Apply To Motion or Apply To Spin, then select a method of staggering sub-parts.
- 6 Click OK
- 7 From the Scene menu, choose Preview Animation.



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## Staggering when models enter a scene

Step by step



You can <u>animate models</u> to enter a <u>scene</u> one at a time by applying a fly-in <u>path</u> to one model, and a Wait Offscreen path to another.

#### To animate models to enter a scene one at a time:

- 1 Create the models.
- 2 Select the model you want to enter the scene first, then from the Models menu, choose Modify Animation.
- 3 In the Movement tab, under Animation Path Names, enter a name for the path, such as Fly-In.
- 4 Set Duration to the length you want. (It must be the same length as the Wait Offscreen path.)
- **5** Under Start And End Positions, select Enter Scene, set the Offscreen Position to where you want the model to enter the scene, and then click OK.
- 6 Select the model you want to enter the scene next, then from the Models menu choose Modify Animation.
- 7 In the Movement tab, under Animation Path Names, enter a name for the path, such as Wait Offscreen.
- 8 Set Duration to the same length as the Fly-In path.
- **9** Under Start And End Positions, select Wait Offscreen, set the Offscreen Position to where you want the model to enter the scene, and then click OK.
- 10 In the <u>Scene Contents window</u>, select the Fly-in path and drop it on the second model, then select the wait path and drop it on the first model.
  - The paths should be in the correct order for each model.
- 11 From the Scene menu, choose Preview Animation.



About animation in Asymetrix 3D F/X

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Animating sub-parts of a model

Generating an animation

Modifying a model's animation path

Modifying a model's animation path sequence
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#### Commands

**Animation Palette** 

Generate Animation

**Modify Animation** 

Preview All Frames

**Preview Animation** 

### Asymetrix 3D F/X User Manual

Chapter 4, "Advanced projects"



# Applying a digital video file as a surface

Step by step



You can create an exciting <u>animation</u> effect by applying a digital video file (<u>.AVI</u>) or a <u>generated</u> animation file to a <u>model's surface</u>. You can also add an <u>animation path</u> to the model so that it rotates as it plays the video on its surface. However, this effect can take a lot of time and computer resources (RAM) to generate.

**Note** If the video is important to your message, make sure your audience is able to watch it before you begin rotating the model. In addition, use a <u>simple model</u> (such as a cube) so that the video can be viewed easily; for example, a video doesn't play well on the surface of a dinosaur model.

#### To apply a digital video file as a surface:

- 1 Select the model, then from the Models menu, choose Modify Surface & Color.
- 2 In the Surface Pattern tab, select Bitmap Pattern.
- 3 Under Surface Settings, click Browse to open the <u>Import Graphic</u> dialog box. From List Files Of Type, select AVI (\*.avi), select a video file from the list box, and then click OK to open the <u>Animated Surface</u> dialog box.
- **4** Set the video's start and end <u>frames</u>, and whether the video loops continuously or freezes on the last frame, then click OK.
- 5 Click OK in the Modify Surface & Color dialog box.
- 6 From the Scene menu, choose Generate Animation, then click OK.



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#### Command

Modify Surface & Color

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## Changing a snapshot's color depth or size

Step by step



After you've generated a snapshot, you may want to modify its color depth or size.

You might want to change a snapshot's color depth, for example, if you want to display the same snapshot on different color systems, such as 24-bit (16.7 million colors) and 4-bit (16-colors). For the best results, generate the snapshot at the higher color depth, then convert it to the lower color depth.

**Note** Try to set your final snapshot size and <u>color palette</u> before you generate it. In general, you can reduce a snapshot's size or color palette successfully; but enlarging a snapshot or increasing color depth may not produce attractive results.

#### To change a snapshot's color depth or size:

- 1 From the Tools menu, choose Convert Snapshot.
- 2 In the Colors tab, under New Image For Palette, set a new palette.

  If you are converting a snapshot to 256 colors for an Asymetrix Compel presentation, choose Compel Palette (8-bit). If you are converting a snapshot from 24-bit or 16-bit to 8-bit (256 colors), choose Best 256 Colors (8-bit).
- **3** For <u>Dithering</u>, specify how to dither the snapshot.
- 4 Click the Size tab; under New Image, set a new size, then click OK.



Step by step
About color in Asymetrix 3D F/X
About color palette shift

Commands

Convert Snapshot Snapshot & Animation Settings

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# Importing a model

Step by step



You can import a 3D model file created in another program into your scene. Asymetrix 3D F/X supports models created in Autodesk 3D Studio (.3DS) or AutoCAD (.DXF) format.

#### To import a model:

- 1 From the Models menu, choose Import Model.
- 2 Enter a file name, or select a file from the list.
- 3 Click OK to import the model into your scene.

**Note** Imported model files often have associated <u>surface</u> mapping files. If Asymetrix 3D F/X cannot locate an imported model's associated surface mapping files, the <u>Imported Model Surface</u> dialog box opens automatically. You can assign new files to use as surfaces, or search for the original surface mapping files Asymetrix 3D F/X needs.



About imported models Adding a preset model Creating a picture model Creating a text model Modifying an imported model

#### Commands

Import Model Imported Model Surface (dialog box)
Modify Imported Model (dialog box)



### **Selecting models**

Step by step



In Asymetrix 3D F/X, you can select one model, multiple models, or a model's sub-parts to work with.

#### To select a model:



Click the model in the <u>Scene Preview</u> or <u>Scene Contents</u> window.

#### To select all models in a scene:



From the Edit menu, choose Select All.

### To select a sub-part of a model:

- 1 Double-click the model in the Scene Contents window to display its elements. If the model has sub-parts, they will be listed.
- 2 Click a sub-part in the Scene Contents window. The sub-part will also be selected in the Scene Preview window. Using the Position palette, you can <u>move</u>, <u>rotate</u>, <u>scale</u>, <u>warp</u>, or modify the sub-part's <u>surface</u> while it is selected.

#### To select multiple models or model sub-parts:



Shift+click or Ctrl+click each model or sub-part in the Scene Preview or Scene Contents window.

Step by step
About the Scene Contents window
Command
Select All



## Adding a texture to a model's surface

Step by step



You can add a texture to a <u>model's surface</u> by choosing a <u>bump texture</u> to apply. A bump texture can be added to any <u>model</u>, no matter what type of surface it currently has.

#### To add a bump texture to a model's surface:

- 1 In the <u>Scene Preview</u> or <u>Scene Contents</u> window, select a model to modify.
- 2 From the Models menu, choose Modify Surface & Color, then click the Highlights tab.
- 3 Select a preset Bump Texture file from the Texture list, or click Browse to import a bitmap file as a texture. Bump textures can be found in the Bumps subdirectory of your Catalog directory.
- **4** Select a Tile Bitmap value to determine how many times the texture will be repeated over the surface. The higher the number, the more times the <u>bitmap</u> will be repeated on the surface.
- **5** Click OK to close the dialog box, and apply the bump texture to your model.



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#### Command

Modify Surface & Color



# Making a model a sub-part of another model

Step by step



You can easily create a new model by making one model a sub-part of another in the Scene Contents window.

#### To make a model a sub-part of another model:

In the Scene Contents window, select the model you want to be a sub-part. <u>Drag</u> the model, then <u>drop</u> it onto a second model. The first model becomes a sub-part of the second model.

#### To disassociate sub-parts from a model:

- 1 In the Scene Contents window, select the model sub-part you want to disassociate, then drag the sub-part and drop it on the scene icon.
- 2 Repeat Step 1 for all the model sub-parts you want to disassociate.



Step by step
About the Scene Preview and Scene Contents windows
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## Modifying a model's surface

Step by step



You can easily modify a model's surface by applying a color, bitmap, or solid material to it.

#### To modify a surface:

- 1 From the Models menu, choose Modify Surface & Color.
- 2 In the Surface Pattern tab, select Color, Bitmap Pattern, or Solid Material.
  - **Note** If you apply a wood, granite, marble, or rainbow surface to a model, the surface will not be visible until you generate a snapshot or animation of the scene. Also, if you tile a bitmap surface, the surface will not appear tiled until you generate a snapshot or animation of the scene. Bitmap surfaces can be found in the Bitpatrn subdirectory of your Catalog directory.
- 3 Click the <u>Highlights</u> tab, then set Highlight Size, Intensity, Unhighlighted Surface, or a <u>bump texture</u> for the surface.
- 4 Click the Effects tab.
- **5** Under Reflections, choose a preset <u>reflection map</u>; then use the Intensity slider to adjust how reflective the surface is, or use the <u>Transparency</u> slider to make the surface more or less transparent.
- 6 Click OK to close the dialog box.

**Note** If you add reflections to a model in a scene and want them to appear in a <u>snapshot</u> or <u>animation</u> you <u>generate</u> from it, you must choose <u>Ray Traced</u> or Ray Traced w/<u>Shadows</u> under Snapshot Style in the Quality tab of the <u>Snapshot & Animation Settings</u> dialog box.



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#### Command

Modify Surface & Color



# Making a surface reflective

Step by step



You can make a model's surface reflective using the Asymetrix 3D F/X reflection settings.

#### To make a surface reflective:

- 1 From the Scene menu, choose <u>Snapshot & Animation Settings</u>, then click the Quality tab.
- 2 For Snapshot Style, select Ray Traced, or Ray Traced w/Shadows, then click OK.
- 3 In the <u>Scene Contents window</u>, right-click the surface, then choose <u>Modify Surface & Color</u> from the right-click menu. (If you don't see the model's surface listed, double-click the model's icon to expand it.)
- 4 In the Surface Pattern tab, select Color, then under Surface Settings, select a color to apply.
- 5 In the Effects tab, set the Intensity of the object to Mirror, click Enable Optical Effects When Ray Tracing, and then click OK.
- 6 To see the reflective surface, generate a snapshot of the scene.



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#### Commands

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## Making a surface reflect a bitmap

Step by step



You can make a <u>model's surface</u> appear to reflect a <u>bitmap</u>. This is an easy way to create <u>scenes</u> that appear complex, but which <u>generate</u> quickly.

#### To make a surface reflect a bitmap:

- 1 In the <u>Scene Contents window</u>, right-click the surface, then choose <u>Modify Surface & Color</u> from the right-click menu.
- 2 In the Effects tab, click Use Reflection Map, then select a preset <u>reflection map</u>, or click Browse to import a file to use as a reflection. Reflection maps can be found in the Rflctns subdirectory of your Catalog directory.
  Note To make an object reflect both a reflection map and the scene around it, check Enable Optical Effects When Ray Tracing.
- 3 Move the Intensity slider close to Mirror, then click OK.
- **4** To see the reflection map, generate a snapshot of the scene.



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#### Commands

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## Making all models in a scene reflect a bitmap

Step by step



You can make all <u>models</u> in a <u>scene</u> appear to reflect a <u>bitmap</u>. This is an easy way to create scenes that appear complex, but which <u>generate</u> quickly.

#### To make all models in a scene reflect a bitmap:

- 1 From the Scene menu, choose <u>Snapshot & Animation Settings</u>.
- 2 In the Effects tab, check Use Environment Map, enter the name of an <u>environment map</u> or click Browse to import a file as an environment map, and then click OK. Environment maps can be found in the Rflctns subdirectory of your Catalog directory.
- 3 To see the environment map, generate a snapshot of the scene.



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#### Commands

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# Making a color surface appear transparent

Step by step



You can make a color <u>surface</u> appear <u>transparent</u> by changing the surface's transparency.

#### To make a color surface transparent:

- 1 In the Scene Contents window, right-click the surface you want to modify.
- 2 Choose Modify Surface & Color from the right-click menu.
- **3** Click the Effects tab, then move the transparency slider toward Transparent. The change you have made will appear in the Surface Preview box.
- **4** Move the transparency slider until you achieve the effect you want, and then click OK to apply it to the surface of your model.
- **5** To see the transparent surface, generate a snapshot of the scene.



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#### Commands

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# Making a solid material surface transparent

Step by step



You can make a solid material <u>surface</u> appear transparent by changing the opacity of one of its grain or vein

**Note** You can only change the opacity of colors in Marble, Granite, or Wood solid material surfaces: you cannot set the opacity of colors in the Rainbow solid material surface.

#### To make a solid material transparent:

- 1 In the Scene Contents window, right-click the surface you want to modify.
- 2 Choose Modify Surface & Color from the right-click menu, then click Solid Material.
- **3** Under Surface Settings, select a color element (such as stone, vein, or grain color) to adjust, then click its color button to open the <u>Color Wheel</u> dialog box.
- **4** Set the color's Opacity (values between 1 and 15 simulate the transparency of air, values between 100 and 120 simulate the transparency of glass, and values between 130 and 140 simulate the transparency of water); then click OK.
  - The change you have made will appear in the Surface Preview box.
- **5** Repeat Steps 3 and 4 until you achieve the effect you want, then click OK to apply it to the surface of your model.
  - **Note** You must set the <u>Snapshot</u> Style to <u>Ray Traced</u> or Ray Traced w/<u>Shadows</u> in the <u>Snapshot & Animation</u> <u>Settings</u> dialog box to see <u>lights</u> reflect and <u>refract</u> correctly in the <u>scene</u>.
- 6 To see the transparent surface, generate a snapshot of the scene.



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#### Commands

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# Creating a "glass" surface

Step by step



You can quickly create the appearance that a <u>model</u> is made of glass using a modified <u>surface</u> and the <u>Ray Traced</u> or Ray Traced w/<u>Shadows</u> <u>generating</u> style.

**Note** A <u>backdrop</u> will never appear distorted when viewed through a transparent surface. To create the effect of a distorted backdrop, create a wall model and place it at the rear of your <u>scene</u>.

#### To create a "glass" surface:

- 1 Create a model, then from the Models menu, choose Modify Surface & Color.
- 2 In the Surface Pattern tab, select Color; then under Surface Settings select a color for your model.
- 3 In the Effects tab, move the Transparency slider almost to Transparent, then click OK.
- **4** Generate a <u>snapshot</u> of the scene using the Ray Traced or Ray Traced w/Shadows Snapshot Style to see your results.



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Adding a wall or floor
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Command

Modify Surface & Color

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### Creating a reflection or environment map of a scene

Step by step



You can quickly create <u>snapshots</u> that appear to have complex <u>ray traced</u> reflections without actually ray tracing the entire <u>scene</u>. Start by <u>generating</u> one ray traced snapshot of a scene. Then, use the snapshot as a <u>reflection</u> or <u>environment map</u> for another scene that contains the <u>models</u> you want, and generate the scene using the Realistic or Realistic w/Shadows Snapshot Style.

#### To create a reflection or environment map of a scene:

- 1 Create the scene you want to reflect.
- 2 From the Scene menu, choose Generate Snapshot.
- 3 Set the Snapshot Style to Ray Traced or Ray Traced w/Shadows, then click OK. When the snapshot is generated, save it.

#### To apply the snapshot as a reflection map:

- 1 Create a new scene that contains the model you want to reflect the snapshot.
- 2 Select a model, then from the Models menu, choose Modify Surface & Color.
- 3 In the Effects tab, click Use Reflection Map, enter the snapshot's file name in the File box, and then click OK.
- 4 From the Scene menu, choose Generate Snapshot.
- **5** Set the Snapshot Style to Realistic or Realistic w/Shadows, then click OK.

#### To apply the snapshot as an environment map:

- 1 Create a new scene that contains the models you want to reflect the snapshot.
- 2 From the Scenes menu, choose Snapshot & Animation Settings.
- 3 In the Effects tab, click Use Environment Map, enter the snapshot's file name in the File box, and then click OK.
- 4 From the Scene menu, choose Generate Snapshot.
- 5 Set the Snapshot Style to Realistic or Realistic w/Shadows, then click OK.



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# Modifying a simple model's shape

Step by step



You can quickly modify the shape of a simple model, such as a cube, sphere, or ring.

### To modify a simple model's shape:

- 1 Select a simple model in the <u>Scene Preview</u> or <u>Scene Contents</u> window.
- 2 From the Models menu, choose Modify Model to open the appropriate dialog box.
- 3 Modify the model's values, then click Update to see how the model's shape will be changed.
- **4** When you've achieved the effect you want, click OK to apply the changes to your model.



Step by step
About simple models

### Commands

Modify Cube (dialog box)
Modify Cylinder (dialog box)
Modify Ring (dialog box)
Modify Sphere (dialog box)



### Modifying an imported model

Step by step



angles.

You can modify the surfaces of an imported model's <u>meshes</u> if you are having difficulty displaying it. A model you import into Asymetrix 3D F/X may have the following problems:

Meshes that don't all face the same direction, so that the model appears to have holes in it.

Reversed meshes, so that a sub-part of the model is not visible when you display it in Solid Models view, or generate a snapshot.

Meshes that should be smooth but are faceted, so that a curved surface appears very angular.

Meshes that should be faceted but are smooth, such as corners that meet in curves rather than

You can also modify the meshes of an imported model to change the way it looks. For example, you can subdivide a mesh so that it appears smoother.

#### To make a model's meshes face the same direction:

- 1 Select an imported model or one of its meshes in the Scene Contents window.
- 2 From the Models menu, choose Modify Model to open the Modify Imported Model dialog box.
- 3 Click Unify Normals, then click OK.
  If you can't see the model or mesh in Solid Models view, follow the procedure for reversing a model's meshes below.

#### To reverse a model's meshes:

- 1 Select an imported model or one of its meshes in the Scene Contents window.
- 2 From the Models menu, choose Modify Model to open the Modify Imported Model dialog box.
- 3 Click Flip Normals, then click OK.

#### To smooth a model's meshes:

- 1 Select an imported model or one of its meshes in the Scene Contents window.
- 2 From the Models menu, choose Modify Model to open the Modify Imported Model dialog box.
- 3 Click Weld, then click OK.

#### To facet a model's meshes:

- 1 Select an imported model or one of its meshes in the Scene Contents window.
- 2 From the Models menu, choose Modify Model to open the Modify Imported Model dialog box.
- 3 Click Melt, then click OK.

#### To sub-divide a model's meshes:

- 1 Select an imported model or one of its meshes in the Scene Contents window.
- 2 From the Models menu, choose Modify Model to open the Modify Imported Model dialog box.
- 3 Click Sub-divide, then click OK.



Step by step
About imported models Adding a preset model Importing a model

#### Commands

Import Model
Imported Model Surface (dialog box)
Modify Imported Model (dialog box)



## Modifying a backdrop

Step by step



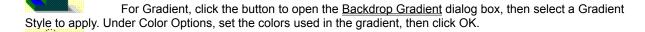
You can modify a scene's backdrop to add interest to a scene.

### To modify a backdrop:

- 1 From the Scene menu, choose Modify Backdrop.
- 2 Under Style, set the backdrop to Default White, Color, Gradient, or Picture:



For Solid Color, click the button to set the backdrop to a color.



For Picture, click Browse to select a file, click the Picture Options button to set how the <u>bitmap</u> fits in the backdrop, and then click OK.

3 Click OK to close the Modify Backdrop dialog box and apply your changes.



Step by step About Asymetrix 3D F/X Adding a backdrop Adding a wall or floor

Commands

Backdrop Gradient (dialog box)
Modify Backdrop



## Modifying a light

Step by step



You can modify a light's direction, brightness, or color.

#### To modify a light:

- 1 From the Scene menu, choose Modify Lights.
- 2 Under Light Name(s), select a light to modify.
- **3** Under Settings, set the Intensity (or brightness); click the Color button to select a color for the light.
- **4** If you selected a directional light (not Ambient), click in the Preview & Set Light Direction box to move the light to the position you want.
- **5** To briefly preview the effect of all lights added to the <u>scene</u>, click the Show All Lights button.
- 6 Click OK to close the dialog box and apply your changes.

**Note** As Asymetrix 3D F/X generates a scene with shadows, the progress indicator tracks the calculation of shadows for each light in the scene.



**Step by step**<u>About creating 3D graphics with Asymetrix 3D F/X</u> Adding lights

Create Ambient Light
Create Directional Light
Modify Lights



# Adding a wall or floor

Step by step



Adding a wall or floor to your <u>scene</u> can define the scene's depth and <u>perspective</u>. Because walls and floors are <u>models</u>, they are affected by <u>lights</u> and <u>shadows</u>. Other models can also be moved behind a wall or under a floor.

#### To add a wall or floor to a scene:

- 1 From the Models menu, choose Create Simple Models, then choose Plane.
- 2 Using the Position palette, rotate, move, and scale the plane until it resembles a wall or floor.



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#### Commands

Create Simple Model submenu Modify Cube (dialog box) Position Palette

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## Submerging a model in "water"

Step by step



You can quickly create the appearance of a model submerged in water by modifying a plane.

#### To submerge a model in "water":

- 1 From the Models menu, choose Create Simple Models, then choose Plane.
- 2 Using the Position palette, rotate, move, and scale the plane until it resembles a floor.
- **3** From the Models menu, choose Modify Model, which for a plane opens the <u>Modify Cube</u> dialog box, enter a value of 1 for Size Z, and then click OK.
- 4 From the Models menu, choose Modify Surface & Color.
- 5 In the Surface Pattern tab, select Color, and then click blue.
- **6** In the Effects tab, move the Transparency slider slightly more than halfway toward Transparent, and then click OK to close the Modify Surface & Color dialog box.
- 7 Create the model you want to submerge in the water, then in <u>Solid Models</u> view, move the model until it intersects the plane.
- 8 <u>Generate</u> a <u>snapshot</u> of the <u>scene</u> using any snapshot style except <u>Ray Traced</u> or Ray Traced w/<u>Shadows</u> to see your results.



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#### Commands

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Modify Cube (dialog box)
Modify Surface & Color Position Palette Snapshot & Animation Settings Solid Models

## Asymetrix 3D F/X User Manual Chapter 4, "Advanced projects"



## Making a scene and backdrop appear smoky

Step by step



You can create the appearance of smoke over a <u>scene</u> and <u>backdrop</u> by placing a plane with a partially transparent pattern in front of the scene.

**Note** You can also use the Fog effect in the <u>Snapshot & Animation Settings</u> dialog box to add an appearance of fog or smoke to a scene; however, Fog does not affect backdrops, so scenes with backdrops may not look realistic.

#### To make a scene and backdrop appear smoky:

- 1 Create a scene that includes the models you want.
- 2 From the Models menu, choose Create Simple Model, then choose Plane.
- 3 Using the Position palette, rotate, move, and scale the plane until it resembles a wall in front of all the other models in your scene.
- 4 From the Models menu, choose Modify Surface & Color.
- 5 In the Surface Pattern tab, select Solid Material, then select Marble from the list.
- **6** Under Surface Settings, set the Scale slider all the way left, the Vein Curliness slider all the way right, and the Grainline to Face.
- 7 Set Stone to 70, then click the Color button to open the <u>Color Wheel</u> dialog box; set the Opacity to 60, then click OK.
- 8 Click the vein color button to open the Color Wheel dialog box; move the Lightness slider to the top, set Opacity to 255, and then click OK.
- 9 Click OK to close the Modify Surface & Color dialog box.
- 10 Generate a snapshot of the scene to see your results.



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#### Commands

Create Simple Model submenu Generate Snapshot

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### Making a scene and backdrop appear snowy

Step by step



You can create the appearance of snow over a <u>scene</u> and <u>backdrop</u> by placing a plane with a partially transparent pattern in front of the scene.

Note This effect works best against a dark backdrop.

#### To make a scene and backdrop appear snowy:

- 1 Create a scene that includes the models you want.
- 2 From the Models menu, choose Create Simple Model, then choose Plane.
- 3 Using the Position palette, rotate, move, and scale the plane until it resembles a wall in front of all the other models in your scene.
- 4 From the Models menu, choose Modify Surface & Color.
- 5 In the Surface Pattern tab, select Solid Material, then select Granite from the list.
- **6** Under Surface Settings, set Stone to 90, then click the color button to open the <u>Color Wheel</u> dialog box; set Opacity to 2, then click OK.
- 7 Set Grain 2 to 10 (Grains 1 and 3 will be 0), then click the Grain 2 color button to open the Color Wheel dialog box; move the Lightness slider to the top, set Opacity to 255, and then click OK.
- 8 Generate a snapshot of the scene to see your results.



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Resetting a model's location, rotation, or scale

#### Commands

Create Simple Model submenu Generate Snapshot

Modify Surface & Color Position Palette Snapshot & Animation Settings

Asymetrix 3D F/X User Manual Chapter 4, "Advanced projects"



## Creating models that appear to be lights

Step by step



In addition to using preset lights from the Catalog, you can create  $\underline{\mathsf{models}}$  that appear to be directional  $\underline{\mathsf{lights}}$ .

Note These models only appear to be lights, and do not add any actual light to a scene.

#### To create models that appear to be lights:

- 1 From the Models menu, choose Create Simple Model, then choose Cone or Cylinder.
- 2 Using the Position palette, rotate, move, and scale the model until it appears in the location you want.
- 3 From the Models menu, choose Modify Surface & Color.
- 4 In the Surface Pattern tab, select Color, then under Surface Settings, click white.
- 5 In the Effects tab, move the Transparency slider approximately halfway toward Transparent, then click OK.
- 6 Generate a snapshot of the scene to see your results.



About simple models Adding a preset model Arranging a model in a scene

Making a solid material surface transparent
Resetting a model's location, rotation, or scale

#### Commands

Generate Snapshot

Modify Cylinder (dialog box)

Modify Surface & Color Position Palette

## Asymetrix 3D F/X User Manual Chapter 4, "Advanced projects"



## Including only a model's shadow in a scene

Step by step



You can form a scene in which a model casts a shadow, but the model itself does not appear.

#### To include only a model's shadow in a scene:

- 1 From the View menu, choose On Camera Area, then choose 66%.
- 2 Add a wall model and a floor model to the scene, so the shadow has a surface on which to be cast.
- 3 Create the model whose shadow you want to cast.
- **4** In <u>Boxes</u> or <u>Wireframes</u> mode, position the model so that it is above the white area in the <u>Scene Preview</u> window.
- 5 In the <u>Scene Contents window</u>, double-click the <u>Lights</u> icon to display the individual lights, then <u>drag</u> a light, and <u>drop</u> it on the Lights icon to create a copy of it.
- **6** Double-click the icon for the light you just created to open the <u>Modify Lights</u> dialog box, click in the center of the Preview & Set Direction box to place the light directly above the scene, and then click OK.
- 7 From the Scene menu, choose **Generate Snapshot**.
- 8 Under Style, select Realistic w/Shadows or Ray Traced w/Shadows, then click OK.

**Note** As Asymetrix 3D F/X generates a scene with shadows, the progress indicator tracks the calculation of shadows for each light in the scene.



About camera perspective About creating 3D graphics with Asymetrix 3D F/X
About the Scene Contents window
Arranging a model in a scene
Modifying a light

#### Commands

**Boxes** Create Simple Model submenu Generate Snapshot Modify Lights Wireframes

## Asymetrix 3D F/X User Manual Chapter 4, "Advanced projects"



## **Creating and modifying a Catalog**

Step by step



You can create a new Catalog of scene elements to use, or modify the Asymetrix 3D F/X Catalog.

#### To create a new Catalog:



From the File menu, choose New Catalog.

#### To add elements to a new or existing Catalog:

<u>Drag</u> any scene element from the <u>Scene Contents window</u> and <u>drop</u> it in the Catalog you want. The element will automatically be placed in the appropriate Catalog tab.

You can store any type of scene element in the User tab of a Catalog. For example, you can place all the surfaces, models, backdrops, and lights you use most frequently in the User tab so you can find them quickly.

#### To store an element in the User tab of a Catalog:

- 1 Click the User tab in a Catalog.
- 2 Drag any scene element from the Scene Contents window and drop it in the User section of the Catalog.

#### To remove elements from a Catalog:

Select any scene element in the Catalog, then press Del. Asymetrix 3D F/X displays a warning that deleting a Catalog entry cannot be undone. You are given the choice of deleting both the entry and its actual file, or just the entry.



Step by step
About Asymetrix 3D F/X
About the Scene Contents window
Selecting models

Commands Catalog New Catalog



## Generating a 32-bit snapshot

Step by step



You can use Asymetrix 3D F/X to generate 32-bit snapshots in .TGA format. Snapshots in .TGA format contain 24 bits of color information, and 8 bits of transparency (alpha-channel) information.

#### To generate a 32-bit snapshot:

- 1 From the Scene menu, choose Generate Snapshot.
- 2 Under Style, select a Realistic or Ray Traced generating style.
- 3 Under Generate Image Of, select whether to generate the current scene, or create a snapshot from a <u>frame</u> of <u>animation</u>. Use the <u>Animation palette</u> to go to the frame (its number appears in the Scene Preview window status bar).
- 4 Under Destination, click Generate To File, then enter a file name with a .TGA extension.
- **5** Click OK to generate the snapshot.



About Asymetrix 3D F/X Building a scene Generating complex or large snapshots
Previewing a snapshot

### Commands

Generate Snapshot
Preview Snapshot
Snapshot & Animation Settings

Asymetrix 3D F/X User Manual Chapter 3, "Creating snapshot and animation files"



## **About Asymetrix 3D F/X**

Concepts



In Asymetrix 3D F/X, you create and arrange 3D <u>models</u> in the <u>Scene Preview window</u> to build a <u>scene</u>. After you've created a scene, you can <u>generate</u> a <u>snapshot</u> or <u>animation</u> from it to use alone or incorporate into other programs.

Asymetrix 3D F/X provides tools for creating scenes, including

the Scene Preview window, which gives you the best idea of what your generated snapshot or animation will look like. You arrange, edit, and manipulate models in the Scene Preview window.

the <u>Scene Contents window</u>, which lists all scene attributes such as the <u>backdrop</u>, <u>lights</u>, and <u>soundtrack</u>; and all models and their attributes such as <u>surfaces</u>, <u>warps</u>, and <u>animation paths</u>. (To view details of an element's attributes in the Scene Contents window, double-click it.)

the <u>Catalog</u> window, which contains predefined scene elements you can <u>drag and drop</u> into the Scene Preview or Scene Contents window.

the Position palette, which contains tools that rotate, move, and scale models in the Scene Preview



the Animation palette, which contains tools that play animations in the Scene Preview window.

About creating 3D graphics with Asymetrix 3D F/X About the Position palette About the Scene Contents window Building a scene Generating a snapshot
Generating an animation
Working in Asymetrix 3D F/X

#### Commands

**Animation Palette** Catalog Position Palette
Scene Contents

# Asymetrix 3D F/X User Manual Chapter 1, "The basics"



## About animation in Asymetrix 3D F/X

Concepts



You create <u>animation</u> in Asymetrix 3D F/X by applying <u>animation paths</u> to <u>models</u>, then <u>generating</u> an animation. Animation paths are a set of instructions that tell a model how to move, whether to spin, and if the motion starts or ends outside the <u>scene</u>. One animation path of a model must completely finish before another can start; however, multiple models can be animated at the same time. The duration of the animation generated from a scene is determined by the model in the scene with the longest sequence of animation paths.

Asymetrix 3D F/X generates an animation by generating a <u>snapshot</u> of a scene, adding the data to its .AVI file, moving all the models in the scene one <u>frame</u> along their paths, and then repeating the process.



Adding a soundtrack to an animation

Animating a model

Animating sub-parts of a model

Generating an animation

Modifying a model's animation path
Modifying a model's animation path sequence

Playing a linked or embedded animation

Previewing an animation

Printing a frame of an animation

Staggering when models enter a scene

#### Commands

**Animation Palette** 

Generate Animation

**Modify Animation** 

Preview All Frames

**Preview Animation** 

#### Asymetrix 3D F/X User Manual

Chapter 1, "The basics"
Chapter 3, "Creating snapshot and animation files"



## About color in Asymetrix 3D F/X

Concepts



You can create images in Asymetrix 3D F/X in these color resolutions:



1-bit (black and white)



4-bit (16 colors)



8-bit (256 colors)



16-bit (65,536 colors)



24-bit (16.7 million colors)

Color resolution is determined by the number of bits that define each pixel. The more bits per pixel, the higher the resolution. Higher resolution means more colors can be included in the image, making the image more realistic, but it also requires more memory to store.

If you plan to display a snapshot online, you should generate it using the same number of colors or resolution as the target system on which you will display it. To set the snapshot's color palette, choose Snapshot & Animation Settings from the Scene menu, click the Color tab, and then select a color palette that contains the same number of colors or resolution as the target system.



About Asymetrix 3D F/X
About color palette shift
Changing a snapshot's color depth or size
Generating a snapshot

### Commands

Convert Snapshot
Generate Snapshot
Snapshot & Animation Settings

#### Asymetrix 3D F/X User Manual

Chapter 1, "The basics"
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### About color palette shift

Concepts

If you display one <u>snapshot</u> or <u>animation</u> onscreen and then immediately display another, you may notice that the colors in the first image shift or distort onscreen. The distortion is called palette shift and may occur when you display images on an 8-bit display device.

An 8-bit display device can show any color from a selection of more than 16 million, but it can show only 256 of those colors at one time. It stores the 256 colors it's currently using in a color table, called a system or hardware palette.

When you create a snapshot or animation, Asymetrix 3D F/X creates a <u>color palette</u> containing the snapshot's or animation's colors. The color palette determines the color of each pixel.

If you display an image on an 8-bit display device, the system palette and the image's color palette have to reconcile their colors. If the colors are similar, only slight changes are made. If the colors are different, the system palette discards its current colors and uses the image's color palette.

Displaying a succession of snapshots or animations that use different color palettes causes palette shifts during the color reconciliation process. The reason is simple: when the system palette replaces the first image's colors with those of the second image, the first image no longer has the colors it needs to display properly.

To prevent palette shifts, create a common palette of 256 colors (using a program such as the Palette Editor provided with Asymetrix 3D F/X) and apply it to all of the images you're using, including snapshots and animations.

Note Palette shift only occurs on 8-bit display devices. To avoid it, use a 16-bit or 24-bit display device driver.



About Asymetrix 3D F/X About color in Asymetrix 3D F/X Changing a snapshot's color depth or size Generating a snapshot

#### Commands

Convert Snapshot
Generate Snapshot
Snapshot & Animation Settings

## Asymetrix 3D F/X User Manual Chapter 4, "Advanced projects"



## About object linking and embedding (OLE)

Concepts

Object linking and embedding (OLE) enables you to create an object in one application (the <u>server application</u>) and incorporate it into a file from another (the <u>container application</u>). Asymetrix 3D F/X is a server application.

If you link a scene, the Asymetrix 3D F/X scene information is stored in a different place than if you embed it. Whether you choose to link or embed your project depends on how you plan to use it. Asymetrix 3D F/X stores

embedded scenes in the container application's file, which maintains a link to Asymetrix 3D F/X. Embed a <u>scene</u> when you want to use it in only one container application, and also want to be able to update it.

linked scenes in a separate Asymetrix 3D F/X file; the container application stores only a reference to the linked scene location, the file name, and the server application name (Asymetrix 3D F/X). You can edit the original scene in Asymetrix 3D F/X and automatically update all links to the scene in the container application.

Link a scene if you want to use it in a number of container applications.

If you plan to distribute a file that contains a linked or embedded animation, make sure you distribute the

container application's file.



generated animation file.



**Note** If you import a generated <u>snapshot</u> or animation into another application, rather than embed or link it, the snapshot or animation is stored in the application, without a connection to Asymetrix 3D F/X. The only way to change an imported snapshot or animation is to modify the scene in Asymetrix 3D F/X, regenerate the snapshot or animation, and then reimport it.



About editing scenes in a container application
Displaying a scene or icon in a container application
Displaying a snapshot or animation in a container application
Editing embedded or linked Asymetrix 3D F/X scenes
Embedding a new scene
Embedding or linking an existing scene
Playing a linked or embedded animation
Updating your OLE registration database

#### Asymetrix 3D F/X User Manual

Chapter 2, "Linking or embedding scenes"



## About editing scenes in a container application

Concepts



Asymetrix 3D F/X supports in-place editing, a technique that allows you to edit a scene in the container application. If the container application also supports in-place editing, when you edit the linked or embedded scene, the container application's menus and toolbars are replaced by the Asymetrix 3D F/X menus and toolbars.

If the container application does not support in-place editing, Asymetrix 3D F/X appears in its own window.

Note Using in-place editing, you cannot change the on-camera area, have multiple Snapshot windows open, or hide the Asymetrix 3D F/X toolbar. In addition, the Asymetrix 3D F/X File and Window menus are not available.



About object linking and embedding (OLE)

Displaying a scene or icon in a container application

Displaying a snapshot or animation in a container application Editing embedded or linked Asymetrix 3D F/X scenes

Embedding a new scene
Embedding or linking an existing scene
Playing a linked or embedded animation

Updating your OLE registration database

#### Asymetrix 3D F/X User Manual

Chapter 2, "Linking or embedding scenes"



## About creating 3D graphics with Asymetrix 3D F/X

Concepts

Three-dimensional (3D) graphics produce the illusion of depth. Programs, such as Asymetrix 3D F/X, that produce 3D graphics and <u>animations</u>, contain mathematical formulas for calculating <u>perspective</u> and the interplay of <u>lights</u> and <u>surfaces</u> that contribute to the illusion.

Asymetrix 3D F/X creates 3D <u>models</u> by adding depth to flat shapes, such as text or outlines of graphics. The surfaces of the models are composed of polygons, such as triangles and rectangles. After a model has been created, you can cover its surfaces with colors or <u>bitmaps</u> to make it appear more realistic.

The Asymetrix 3D F/X work space is called a scene. Your "view" of the scene is called the camera perspective. You can vary the camera perspective to change how the scene appears in the view.

Model's surfaces wouldn't be visible, or appear three-dimensional, without light sources to provide variation in shading. Asymetrix 3D F/X provides default lighting for all scenes.

The amount of detail in a scene (such as lights, models, and transparent or reflective surfaces) affects how long it will take to <u>generate</u> a <u>snapshot</u> or animation of it. Asymetrix 3D F/X offers several generating styles, which determine how much of a scene's detail is included in a snapshot or animation.

Generating style	Shows	Does not show
Wireframe	Model's geometry, perspective	Surfaces, <u>shadows</u> , applied or <u>ray</u> <u>traced</u> reflections, <u>environment</u> <u>map</u> , <u>dithering</u> , custom <u>color</u> <u>palettes</u> , or fog
Solid Models	Model's geometry, perspective, surfaces with rough color approximations	Shadows, applied or ray traced reflections, environment map, dithering, custom color palettes, or fog
Realistic	Model's geometry, perspective, surfaces, dithering, custom color palettes, fog, applied reflections	Shadows, ray traced reflections
Realistic w/Shadows	Model's geometry, perspective, surfaces, dithering, custom color palettes, fog, applied reflections, shadows	Ray traced reflections
Ray Traced	Model's geometry, perspective, surfaces, dithering, custom color palettes, fog, applied and ray traced reflections	Shadows
Ray Traced w/Shadows	Model's geometry, perspective, surfaces, dithering, custom color palettes, fog, applied and ray traced reflections, shadows	



About Asymetrix 3D F/X About camera perspective About imported models About simple models
About text and picture models
About the Position palette

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Chapter 1, "The basics"
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### About camera perspective

Concepts



The space in an Asymetrix 3D F/X <u>scene</u> is almost infinite. The camera perspective you choose (your observation point in the scene) determines how much of the space you see. The space is defined by X (width), Y (height), and Z (depth) axes that meet in an origin. The width and height of the scene at the origin are always approximately 1000 units. You can view a scene using one of three camera perspectives:

Normal, which places the camera approximately 500 units in front of the origin, and includes 56 degrees of the scene.

Wide Angle, which places the camera approximately 250 units in front of the origin, and includes 90 degrees of the scene.

Telephoto, which places the camera approximately 1000 units in front of the origin, and includes 28 degrees of the scene.

You can move <u>models</u> anywhere within the scene space. However, Asymetrix 3D F/X cannot draw models if they are placed closer than 385 units from the camera or farther than 100,000 units from the camera.



About Asymetrix 3D F/X About creating 3D graphics with Asymetrix 3D F/X
About the Position palette

Command

Camera Perspective

Asymetrix 3D F/X User Manual Chapter 1, "The basics""



## About simple models

Concepts



A simple model is the geometry that results from an equation for a cube, ring, cylinder, or sphere. Asymetrix 3D F/X calculates each equation using default values, then approximates the model's shape using a series of triangles. Each time you modify a simple model using a dialog box, you are changing the values Asymetrix 3D F/X uses to draw the model.

The more triangles that compose a simple model (controlled by fineness for spheres, and divisions for cubes, cylinders, and rings), the smoother and more flexible the model becomes. Unfortunately, the more triangles, the more memory (RAM) and time the calculations require. Experiment with the number of triangles to find a value that gives you a good balance between detail and time to generate.



About imported models About text and picture models

Commands

Create Simple Model submenu
Modify Cube (dialog box)
Modify Cylinder (dialog box)
Modify Ring (dialog box)
Modify Sphere (dialog box)

Asymetrix 3D F/X User Manual Chapter 1, "The basics"



## About text and picture models

Concepts

Asymetrix 3D F/X creates text and picture models by adding depth to two-dimensional shapes.

Asymetrix 3D F/X creates a text model by drawing an outline of the characters you enter, making a copy of the outined characters to serve as the back face of the model, and then applying a side <u>surface</u> to connect the front and back faces.

Asymetrix 3D F/X creates a picture model by first extracting shapes from a graphic file. For a <u>bitmap</u>, Asymetrix 3D F/X converts the image to black and white, then <u>traces</u> around the black to create two-dimensional shapes. For a graphic file drawn with polygons and lines (such as a <u>metafile</u>), Asymetrix 3D F/X uses the shape information in the source file. A file containing multiple shapes results in a model with <u>sub-parts</u>. Asymetrix 3D F/X makes a copy of the shapes in the file to serve as the back face of the model or its sub-parts, then applies a side surface to connect the front and back faces.

Asymetrix 3D F/X can also add beveled edges to text and picture models.



About imported models About simple models Creating a picture model Creating a text model Importing a model

#### Commands

Create Text Model
Create Picture Model
Modify 3D
Modify Letter Model (dialog box)
Modify Picture Model (dialog box)
Modify Text Model (dialog box)

# Asymetrix 3D F/X User Manual Chapter 1, "The basics"



## **About imported models**

Concepts



Imported models are 3D clip art <u>models</u> created in other programs, such as Autodesk 3D Studio (.3DS format) and AutoCAD (.DXF format). Imported models have 3D geometry, and may include <u>surface</u> information. You can apply new surfaces, <u>move</u>, <u>scale</u>, <u>rotate</u>, and <u>warp</u> imported models in Asymetrix 3D F/X. Imported models are composed of sub-parts called <u>meshes</u>.



Step by step
About simple models
About text and picture models

Commands

Import Model
Imported Model Surface (dialog box)
Modify Imported Model (dialog box)

Asymetrix 3D F/X User Manual Chapter 1, "The basics"



## **About surfaces**

Concepts

A <u>model's</u> surface is a thin layer, placed over the model's geometry. A surface can be a color, <u>bitmap</u>, or material. You can also layer additional effects on a surface to change its appearance. Surface layers can include

a bump texture, which is a bitmap that defines a gray pattern. A bump texture can be placed over a surface to make it appear textured.

a reflection map, which is a bitmap that defines a simulated reflection. A reflection map can be placed over a model's reflective surface to make the surface appear to reflect the image in the reflection map, rather than the <u>scene</u>.

an environment map, which is a bitmap that defines a simulated reflection. An environment map is a reflection map that is applied to an entire scene. All models with reflective surfaces in the scene appear to reflect the image in the environment map.



Applying a surface to a model Adding a texture to a model's surface Making a surface reflect a bitmap

Making all models in a scene reflect a bitmap

Modifying a model's surface

#### Commands

Modify Surface & Color Snapshot & Animation Settings

# Asymetrix 3D F/X User Manual Chapter 1, "The basics"



## **About the Scene Contents window**

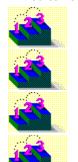
Concepts



The Scene Contents window lists all scene attributes such as the backdrop, lights, and soundtrack; and all models and their attributes such as surfaces, warps, and animation paths.

Double-clicking each icon in the Scene Contents window will display its elements. Double-clicking an icon's text displays the element's Modify dialog box, if available.

You can also use the Scene Contents window to duplicate or copy some scene elements. You can



A simple model

duplicate any model by dragging and dropping its icon onto the Scene icon.

duplicate any individual light by dragging and dropping its icon onto the Lights icon.

duplicate any path of a model by dragging and dropping its icon onto the model's Paths icon.

copy any surface, path, or warp from one model to another by dragging and dropping the surface, path, or warp icon onto the second model's icon.

Note You can change the Scene Contents window font to any font installed on your system. Right-click the Scene Contents window away from all scene elements, choose Select Font, select a font to use, and then click OK.

lcon	Represents	Double-click
	The entire scene and all its sub-parts	The icon to collapse or expand the view of the scene's elements, or double-click the text to open the <a href="Snapshot &amp; Animation">Snapshot &amp; Animation</a> <a href="Settings">Settings</a> dialog box.
43	The scene's backdrop	To display the <u>Modify Backdrop</u> dialog box.
	The soundtrack that will be included with the scene when it is generated as an animation	To select a file to use as a soundtrack in the Modify Soundtrack dialog box.
433	The group of lights included in the scene	The icon to view the individual lights in the group, or double-click the text to modify the lights.
-<>≯	A single light	The text to modify the light.
A	A text model	The icon to view the model's elements, or double-click the text to display the <a href="Create"><u>Create</u></a> <u>Text Model</u> dialog box.
433	A picture model	The icon to view the model's elements, or double-click the text to display the <a href="Milester">Create</a> <a href="Picture Model">Picture Model</a> dialog box.
	A simple model based on a sphere	The icon to view the model's elements, or double-click the text to display the <u>Modify</u> <u>Sphere</u> dialog box.

The icon to view the model's elements, or

	based on a cube	double-click the text to display the Modify Cube dialog box.
	A simple model based on a cylinder	The icon to view the model's elements, or double-click the text to display the Modify Cylinder dialog box.
<b>()</b>	A simple model based on a ring	The icon to view the model's elements, or double-click the text to display the Modify Ring dialog box.
	An imported model	The icon to view the model's elements, or double-click the text to display the Modify Imported Model dialog box.
<b>%</b>	The sub-parts of an imported model	The icon to view the model's elements.
**	A sub-part of an imported model	The icon to view the model's elements, or double-click the text to display the Modify Imported Model dialog box.
4	A surface of a model	The text to display the Modify Surface & Color dialog box.
	A sub-part of a model	The icon to view the model's elements, or double-click the text to modify the model.
	A model's group of animation paths	The icon to view the individual paths in the group, or double-click the text to display the Modify Animation dialog box.
	A single animation path	The text to display the Modify Animation dialog box.
	A model's warp	The text to display the <u>Modify Warp</u> dialog box.



About Asymetrix 3D F/X Creating and modifying a Catalog

Making a model a sub-part of another model

Selecting models

Command

Scene Contents

Asymetrix 3D F/X User Manual Chapter 1, "The basics"



## **About the Position palette**

Concepts



The Asymetrix 3D F/X Position palette allows you to rotate, move or scale models in the Scene Preview window. You can use the Position palette in one of three ways:

Click a tool on the Position palette to change the cursor, then use the mouse to rotate, move, or scale a model.

Click the expand button

on the Position palette to display additional graphical control buttons, then click the buttons to rotate, move, or scale a model.

Click the expand button

on the Position palette to display additional graphical control buttons; click the graphical/numerical toggle

to switch to numerical controls; and then enter numbers to precisely rotate, move, or scale a model. Note If you choose to use the Position palette's numerical controls to rotate a model, you may notice that entering a value greater than 90 degrees for rotation about the Y-axis rotates the model to the position you indicated, but Asymetrix 3D F/X changes the X, Y, and Z values you see.

Due to mathematical constraints in the way Asymetrix 3D F/X calculates a model's orientation, rotation about the Y-axis is never expressed as a rotation greater than 90 degrees, or less than -90 degrees. When you enter a value greater than 90 for rotation about the Y-axis, Asymetrix 3D F/X expresses the orientation in terms of rotation about the X and Z axes.

For example, when you rotate a model 180 degrees about its Y-axis, its orientation can also be expressed as rotating 180 degrees about the X-axis, 0 degrees about the Y-axis, and 180 degrees about the Z-axis.



button

Step by step
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Commands
Camera Perspective
Position Palette

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## Eight ball snapshot





**EIGHT BALL** Scene:

Generating setting: Realistic w/Shadows

We started by creating a plane for the billiard table, then added a picture model for the table's rail. Finally, we added a sphere model with a bitmap surface and reflection map for the billiard ball.

For related procedures, click See Also above.

## Scene element details **Backdrop**



Color: brown (Red 51, Green 34, Blue 19)



Shape: Size X = 300; Size Y = 300; Size Z = 5



Surface: Color, Def. Green2; Highlight Size, 100% Small; Highlight Intensity, 100% Dull



Orientation: X Axis = 40; Y Axis = 0; Z Axis = 0



Position: X Axis = 0; Y Axis = -74; Z Axis = 0



Scale: X Scale = 153; Y Scale = 99; Z Scale = 99

Picture model



Surface: Wood; Wood Color, dark brown (Red 125, Green 93, Blue 31); Grain Color, light brown (Red 25, Green 16, Blue 0); Highlight Size, 80% Large; Highlight Intensity, 80% Shiny



Orientation: X Axis = 30; Y Axis = 0; Z Axis = 0



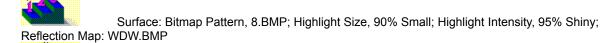
Position: X Axis = 0; Y Axis = -62; Z Axis = 0



Scale: X Scale = 52; Y Scale = 35; Z Scale = 11



Shape: Fineness = 5





Orientation: X Axis = -10; Y Axis = 10; Z Axis = 90

Position: X Axis = 0; Y Axis = -66; Z Axis = -28

Scale: X Scale = 128; Y Scale = 128; Z Scale = 128

Adding a preset model
Applying a surface to a model
Arranging a model in a scene
Building a scene
Creating a picture model
Generating a snapshot
Making a surface reflect a bitmap
Modifying a model's surface
Modifying a simple model's shape

## Commands

Create Picture Model
Create Simple Model submenu
Generate Snapshot
Modify Cube (dialog box)
Modify Sphere (dialog box)
Modify Surface & Color
Position Palette

#### Asymetrix 3D F/X User Manual

Chapter 1, "The basics"

{ewl ewl, ewBitmap, 8ball.bmp}
If you do not see an example snapshot, you do not have file 8BALL.BMP.



## Patterned ring snapshot





**PATTERN** Generating settings: Ray Traced

Number of ray traced reflections: 2

We started by creating a plane for the reflective floor, then added a ring model with a tiled bitmap pattern surface, and tiled bump texture.

For related procedures, click See Also above.

## Scene element details **Backdrop**

Gradient: circular, center in upper left corner, Major Color: dark blue (Red 0, Green 0, Blue 51),

Minor Color: white Lights

Left light: upper left corner

Plane

Right light: front right corner, close to model; Color, blue (Red 13, Green 22, Blue 51)

Shape: Size X = 300; Size Y = 300; Size Z = 5

Surface, 100% Light; Enable Optical Effects When Ray Tracing = On, Intensity, 100% Mirror

Surface: Color, Black; Highlight Size, 95% Large, Highlight Intensity, 99% Shiny, Unhighlighted



Orientation: X Axis = 40; Y Axis = 0; Z Axis = 0



Position: X Axis = 0; Y Axis = -168; Z Axis = 0

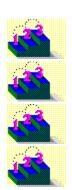


Scale: X Scale = 157; Y Scale = 100; Z Scale = 73



Shape: Major Divisions, 24; Minor Divisions, 23

Surface: Bitmap pattern: CLRPAT.BMP, Tiled 3 times; Highlight Intensity, 100% Shiny, Unhighlighted Surface, 97% Light, Bump Texture: BWPAT.BMP, Tiled 3 times



Orientation: X Axis = -40; Y Axis = 0; Z Axis = 0

Position: X Axis = -1; Y Axis = 69; Z Axis = 0

Scale: X Scale = 128; Y Scale = 128; Z Scale = 128

Adding a preset model
Adding a texture to a model's surface
Applying a surface to a model
Arranging a model in a scene
Building a scene
Generating a snapshot
Making a surface reflective
Modifying a model's surface
Modifying a simple model's shape

#### Commands

Create Simple Model submenu
Generate Snapshot
Modify Ring (dialog box)
Modify Surface & Color
Position Palette
Snapshot & Animation Settings

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{ewl ewl, ewBitmap, ring.bmp}
If you do not see an example snapshot, you do not have file RING.BMP.



## Helicopter with moving background animation





Scene: HELICOPTER

Generating setting: Realistic w/Shadows

We started by creating a plane with a marble surface to use for the sky and clouds, then added a helicopter model from the Catalog. Finally, we applied animation paths to both models to simulate movement.

For related procedures, click See Also above.

## Scene element details Backdrop



Default white

Plane

Shape: Size X = 500; Size Y = 500; Size Z = 5

Surface: Solid Material; Marble, Stone Color, white, Vein Color, light blue (Red 24, Green 202, Blue 229); Scale 25% to right; Vein Curliness fully to right; fully Transparent

Orientation: X Axis = 0; Y Axis = 0; Z Axis = 0

Pos

Position: X Axis = 266; Y Axis = -263; Z Axis = 300

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Scale: X Scale = 173; Y Scale = 145; Z Scale = 100

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Path: 45 seconds, Leave Scene to center upper left; Spin Entire Model, 0.3 turns, Propeller

Imported model (whole)



Model: MD 500H



Surface: Default surfaces



Orientation: X Axis = 1; Y Axis = 0; Z Axis = 0



Position: X Axis = 4; Y Axis = -51; Z Axis = 0



Scale: X Scale = 883; Y Scale = 883; Z Scale = 883

Path 1: 4 second Enter Scene from lower center; Offscreen Orientation enabled, rotated 90 degrees toward back

Path 2: 0.1 second Don't Move

Path 3: 4 second Don't Move; Spin Entire Model, -0.5 turns; Spin Left/Right

Path 4: 0.1 second Don't Move

Path 5: 0.5 second Don't Move; Spin Entire Model, -0.03 turns; Propeller

Path 6: 6 second Leave Scene to upper left back

Imported model (parts)
Mesh: rhub

Mesh: cyclics

Path: 15 second Don't Move; Spin Entire Model, 15 turns, Spin Up/Down

Path: 15.02 second Don't Move; Spin Entire Model, 15 turns, Spin Left/Right

Adding a preset model
Animating a model
Applying a surface to a model
Arranging a model in a scene
Building a scene
Creating a text model
Generating an animation
Modifying a model's animation path
Modifying a model's animation path sequence
Modifying a simple model's shape

#### Commands

Create Simple Model submenu
Generate Animation
Modify Animation
Modify Cube (dialog box)
Modify Surface & Color
Position Palette



## Switching text animation





Scene: SWITCHING TEXT
Generating setting: Realistic w/Shadows

We created two text models, then added animation paths that made one model appear to replace the other onscreen.

For related procedures, click See Also above.

## Scene element details Backdrop



Gradient: Gradient blue (from Catalog)

**Text Model 1** 

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Text: Why Limit Your (Font = Arial, Size = 34); Imagination (Font = Arial, Size = 37)

F

Face and Back Surfaces: Color, dark blue (Red 25, Green 0, Blue 127); Highlight Size, 85% Large,

Highlight Intensity, 85% Shiny



Side Surfaces: Color, black



Orientation: X Axis = 0; Y Axis = 0; Z Axis = 0



Position: X Axis = 0; Y Axis = 0; Z Axis = 15



Scale: X Scale = 200; Y Scale = 200; Z Scale = 200



Path 1: 1 second, Wait Offscreen



Path 2: 2 second, Enter Scene



Path 3: 2 second, Don't Move



Path 4: 2 second, Don't Move, Spin Entire Model, 0.25 turns, Spin Up/Down



Path 5: 0.1 second, Don't Move



Path 6: 0.2 second, Wait Offscreen lower right corner

**Text Model 2** 

Text: Asymetrix (Font: Arial, Size 34); 3D F/X (Font: Arial, Size 64)

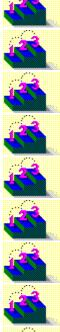
Face Surfaces: Color, dark blue (Red 25, Green 0, Blue 127); Highlight Size, 85% Large, Highlight Intensity, 85% Shiny



Side and Back Surfaces: Color, black



Orientation: X Axis = 90; Y Axis = 0; Z Axis = 0



Position: X Axis = 0; Y Axis = 0; Z Axis = 17



Scale: X Scale = 200; Y Scale = 200; Z Scale = 200



Path 1: 7 second, Wait Offscreen



Path 2: 0.1 second Enter Scene from top left back



Path 3: 2 second Don't Move, Spin Entire Model, 0.25 turns, Spin Up/Down



Path 4: 2 second, Don't Move



Path 5: 3 second Leave Scene; Spin Sub-parts Only, custom spin, 0.3 turns; Stagger In Random Sequence applied to motion and spin, Stagger Factor 10%

About animation in Asymetrix 3D F/X Animating a model Arranging a model in a scene Building a scene Creating a text model

Generating an animation

Modifying a model's animation path

Modifying a model's animation path sequence Staggering when models enter a scene

#### Commands

Create Text Model Position Palette **Modify Animation** 

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## Water molecule animation





Scene WATER MODEL

Generating setting: Realistic

We used three spheres and two cylinder simple models to create a water molecule, and a text model to label the molecule. Then we made all the models sub-parts of a parent sphere. Finally, we added animation paths to the parent model.

For related procedures, click See Also above.

# Scene element details Backdrop



Gradient: Summer rain gradient (from Catalog)

Parent sphere



Shape: Fineness = 5



Surface: Color, Def. Green2



Orientation: X Axis = 0; Y Axis = 0; Z Axis = 0



Position: X Axis = 5; Y Axis = 96; Z Axis = 0



Scale: X Scale = 79; Y Scale = 79; Z Scale = 79



Path: 3 second Enter Scene from top center, Spin Entire Model 1 time, custom spin

Sphere 1 (sub-part of parent sphere)



Shape: Fineness = 5



Surface: Color, Def. Blue3



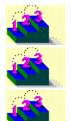
Orientation: X Axis = 0; Y Axis = 0; Z Axis = 0



Position: X Axis = 157; Y Axis = -98; Z Axis = 0



Scale: X Scale = 100; Y Scale = 100; Z Scale = 100 Sphere 2 (sub-part of parent sphere)



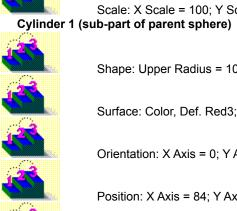
Shape: Fineness = 5

Surface: Color, Def. Blue3

Orientation: X Axis = 0; Y Axis = 0; Z Axis = 0

Position: X Axis = -175; Y Axis = -97; Z Axis = 0

Scale: X Scale = 100; Y Scale = 100; Z Scale = 100



Shape: Upper Radius = 10; Lower Radius = 10; Height = 300



Surface: Color, Def. Red3; Highlight Size, 85% Large, Highlight Intensity, 85% Shiny



Orientation: X Axis = 0; Y Axis = 0; Z Axis = 45



Position: X Axis = 84; Y Axis = -8; Z Axis = 0



Scale: X Scale = 126; Y Scale = 126; Z Scale = 126

Cylinder 2 (sub-part of parent sphere)



Shape: Upper Radius = 10; Lower Radius = 10; Height = 300



Surface: Color, Def. Red3; Highlight Size, 90% Large, Highlight Intensity, 80% Shiny



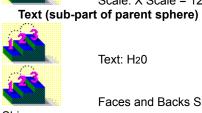
Orientation: X Axis = 0; Y Axis = 0; Z Axis = -45



Position: X Axis = -89; Y Axis = -8; Z Axis = 0



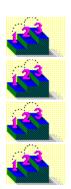
Scale: X Scale = 126; Y Scale = 126; Z Scale = 126





Faces and Backs Surface: Color, Def. Blue4; Highlight Size, 90% Large, Highlight Intensity, 90%

Sides Surface: Color, Def. Red3; Highlight Size, 90% Large, Highlight Intensity, 90% Shiny



Orientation: X Axis = 0; Y Axis = 0; Z Axis = 0

Position: X Axis = -10; Y Axis = -116; Z Axis = 5

Scale: X Scale = 227; Y Scale = 227; Z Scale = 227

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Creating a text model

Generating an animation

Making a model a sub-part of another model

Modifying a model's animation path

Modifying a model's surface

Modifying a simple model's shape

## Commands

Create Simple Model submenu

Create Text Model

**Modify Animation** 

Modify Cylinder (dialog box)

Modify Sphere (dialog box)

Modify Surface & Color

Position Palette

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