Additional Notes About 3D Studio MAX

This document contains information not available in the 3D Studio MAX[™] User's Guide or in online Help. It also notes changes to the User's Guide that occurred after publication.

Other sources for the latest information about 3D Studio MAX include:

- Your Authorized Kinetix dealer.
- Kinetix home page on the World Wide Web: http://www.ktx.com
- Kinetix forum on CompuServe®: GO KINETIX
- The 3DS MAX Product Support help file: This help file is frequently updated with the latest information, and answers to questions, about 3DS MAX. The file is available for download from both the Web and CompuServe locations listed above.

Hardware and Installation Issues

Windows NT 3.51 Required

The only operating system fully tested and supported for 3DS MAX is Windows NT[™] 3.51. Attempting to run 3DS MAX with other versions of Windows is know to cause loss of functionality and instability in 3DS MAX.

Swap File Size Affects Performance

Performance of 3DS MAX is reduced if the swap file is too small. *Setting Up 3D Studio MAX* recommends a swap file size of 100 mb, with an ideal swap file size of 200 mb to 300 mb. The general recommendation is that your swap file size should be at least 3 times the system RAM.

Revisions to Network Rendering

Be sure to read the Network Rendering help file, *max_nr.hlp*, before installing 3DS MAX network rendering functions. The Network Rendering help file is frequently updated with the latest instructions regarding the setup and use of 3DS MAX network rendering functions. The file is available for download from both the Web and CompuServe locations listed above.

Hardware Lock Must Remain Connected at All Times

3DS MAX periodically checks for the presence of the hardware lock. Depending on what you are doing at the time the check occurs, 3DS MAX might do one of the following:

- Warn that the lock is missing and provide the option to save your work before exiting.
- Exit without warning.

To avoid losing work due to a disconnected hardware lock:

- Make sure the lock is securely attached to the system parallel port.
- Avoid attaching the lock to switch boxes or other peripherals that might interrupt the connection.
- Save your work immediately if you suspect the hardware lock has been disturbed, or that the connection has been interrupted. After saving, make sure the hardware lock connection is secure.
- You can also use the Auto Backup feature in the Preference Settings dialog to save your work

at regular intervals. See "Saving Your Scenes" on page 2-24 of the *User's Guide* for information about using this feature.

Hardware Lock Conflict with Printers

If a printer is connected through the same port as the hardware lock, one or both of the following conditions might be necessary for the lock to work correctly:

- The printer is turned on.
- The printer is online.

Hardware Lock Conflicts with External Parallel Port Drives

A number of popular external drive devices can be connected to your computer through the parallel port. Examples of these devices include: lomega[™] ZIP drive, Bernoulli[™] drives, CD-ROM drives, and tape drives.

You are strongly advised to connect these devices to a parallel port different from the port to which the 3DS MAX hardware lock is connected. If you must connect the hardware lock to the same port as an external drive device, the following information will help you to avoid damaging the hardware lock:

- You must place the hardware lock between the computer and any external drive connected to the same port. An example of such a connection might be: [Computer]---[Hardware Lock]---[External Drive]---[Printer]
- Do not place the hardware lock on the external drive's pass-through connector. By doing so you risk burning out the memory in the hardware lock.

If your hardware lock is damaged, contact your Kinetix 3DS MAX dealer for a replacement.

GLiNT® 3D Accelerator Support

The following 3D accelerator graphics cards, using the 3DLabs GLiNT chip, have been tested by the Kinetix QA department. To obtain the latest drivers and information for the cards listed, see the manufacturer's web site.

- ELSA Gloria http://www.elsa.com
- Fujitsu Sapphire 2SX http://www.fujitsumicro.com
- Omnicomp 3Demon http://www.3dlabs.com

GLiNT notes:

- Computers with the Award BIOS or the Genoa P5 motherboard use a PCI-slot initialization system that has the potential to boot with the GLINT card rather than the VGA card. This prevents the system from booting correctly. To correct the problem, swap the PCI location of your VGA and GLINT card and reboot.
- Systems with an Award BIOS might not work with the PCI Disconnect function. If you
 experience random lockups with such systems, do the following:
 - 1. Make sure that 3DS MAX is not running.
 - 2. Use Notepad to open the *wglint.ini* file in the 3DS MAX root directory.
 - 3. Set PCI Disconnect to Disabled.

- 4. Save the file.
- 3DS MAX does not support 8-bit color depth for GLiNT cards. There is no performance gain when the accelerator is set to 8-bit color, and such a setting can cause 3DS MAX to fail.
- Do not minimize the 3DS MAX application window while creating a preview. Doing so creates a

corrupt .avi file. You can cover the MAX viewports with other windows.

Potential Window Resizing Problem

On some systems it is possible to cause 3DS MAX to fail by slowly resizing the window numerous times. This problem does not occur if you are using a GLINT card.

Viewing the Accom WSD Help File

3D Studio MAX ships with a plug-in device driver supporting the Accom Work Station Disk(WSD[™]) recorder. General information about connecting these types of devices is found in *"Setting Up 3D Studio MAX"*. Specific instructions about connecting to, and testing the Accom WSD are found in the *accom.hlp* file. You can view the Accom Help information in two ways:

To view the accom.hlp file directly:

- 1. Launch the File Manager.
- 2. Double-click the accom.hlp file in the \Help directory below the 3DS MAX program directory.

To install and view the accom.hlp file in the 3DS MAX Plug-in Help list:

- 1. Launch and exit 3DS MAX at least once. This creates the initial *plugin.ini* file.
- 2. Launch Notepad.
- 3. Choose File/Open and select *plugin.ini* from the 3DS MAX program directory.
- 4. Add the following line below the [Help] section: Accom WSD Device=help\accom.hlp
- 5. Choose File/Save and Exit Notepad. You can now view the accom.hlp file within 3DS MAX.
- 6. Launch 3DS MAX.
- 7. Choose Help/Plug-in Help
- 8. Select Accom WSD Device from the Plug-in Help list.
- 9. Click Display Help.

Setting Up 3D Studio MAX on a Laptop Computer

The setup process for 3DS MAX requires you to use a CD-ROM drive and a floppy drive simultaneously. Some laptop computers are not designed for simultaneous use of both a CD-ROM and a floppy drive.

To setup 3DS MAX on a laptop not supporting simultaneous use of a CD-ROM and floppy drive:

- 1. Install the laptop floppy drive.
- 2. Copy the entire contents of the 3DS MAX diskette to a temporary directory on your hard drive, such as c:\3dssetup
- 3. Remove the floppy drive and install the CD-ROM drive.
- 4. Follow the instructions for loading 3DS MAX software in Setting Up 3D Studio MAX.
- When you are prompted to insert the 3DS MAX diskette, enter the drive letter and path to the temporary directory on your hard drive and follow the on-screen instructions to complete setup.

General User Interface Issues

The following topics address changes to the general operation of the 3DS MAX user interface and conflicts between 3DS MAX and Windows NT.

Corrupt Region Selection with Applications Always On Top

Using Fence region selection mode becomes unpredictable if you click the title bar of another application set to Always on Top. The effect is that stray region selection lines appear in your viewports and do not disappear after you exit the selection.

To avoid corrupting Fence region selection:

- 1. Do not set other applications to be Always on Top.
- 2. If you do set applications to be Always on Top, position them so they do not overlap the 3DS MAX viewports.

To recover from corrupted Fence selection:

- 1. Press CTRL+Z to undo the selection.
- 2. Press 1 to redraw the screen.

Redefining the Spacebar Keyboard Shortcut

3DS MAX uses the SPACEBAR to toggle the Lock Selection Set state. This setting overrides standard Windows NT operation of using the SPACEBAR to toggle check boxes. If you want to use SPACEBAR to toggle check boxes, change the Selection Lock Toggle setting in the Preference Settings dialog to something other than SPACEBAR.

UNC Network Path Names for Bitmaps Required

3DS MAX requires the use of correct Universal Naming Convention (UNC) path names when accessing bitmaps across a network. Some network client programs that provide NFS[™] support for Windows NT do not properly support the UNC file naming convention. For example, you cannot access bitmaps using UNC file names on UNIX® systems when using Chameleon[™] or Interdrive[™].

If you want to use bitmaps across a network, they must reside on a system that supports UNC path names.

Long Path Names Not Accepted

Entering new paths in the Configure Paths dialog fails whenever you select a path name that is too long to display in the Folders edit field. Clicking OK when an ellipses (...) is displayed in the path causes 3DS MAX to display an error message stating, "Directory does not exist".

To enter long path names in the Configure Paths dialog:

• Type the path name rather than selecting a folder from the folder list.

Long File Names Not Accepted

Trying to write a file with a long file name to a system that does not support long file names causes 3DS MAX to post an error message claiming that the file does not exist. Click OK to dismiss the dialog and specify a new file name that is valid for your system.

Example 1: Trying to save a scene file with the name *My_Project.max* to a file system that only supports 8.3 format names will cause an error.

Example 2: When rendering an animation as sequential files to a file system that does not support long file names, limit the name of the output file to 4 characters instead of 8. 3DS MAX appends a four digit frame number to the file that might cause the file name to exceed 8 characters.

 Specifying an output file name of *Project.tga* will cause 3DS MAX to save output files using the

format *Project####.tga*. This will fail on file systems that do not support long file names.

Instead, specify a four-character output name such as *Proj.tga*. 3DS MAX will render the sequential files using the format *Proj####.tga*.

ALT+TAB Incompatible While Transforming Objects

Do not ALT+TAB to other applications while dragging an object in transform mode. This can cause 3DS MAX to fail when you return from the other application.

To avoid causing 3DS MAX to fail when you ALT+TAB to another application:

• Always release the mouse button before you press ALT+TAB.

Always Close the Select Objects Dialog Before Closing the Object Color Dialog

You can access the Select Objects dialog by clicking the Select By Color button in the Object Color dialog. You can then switch between the two dialogs to change the current color and see the selection of objects using that color.

Always make sure you close the Select Objects dialog before you close the Object Color dialog. Closing the Object Color dialog and leaving the Select Objects dialog open can cause 3DS MAX to become unstable.

Blank Icons on Minimized Windows

Minimizing windows in 3DS MAX might display a blank icon. The icon label is still visible; doubleclicking the blank icon properly restores the window.

Using Sound Files for 3DS MAX Render Termination Alert

You can assign a sound file that 3DS MAX plays when it completes a rendering job. If the sound can be assigned to other system alerts in the Windows NT Control Panel, then you should be able to use the same sound for render termination.

File I/O Issues

Using Save Selected

When you use File/Save Selected, all selected objects, and all objects the selected objects are dependent on, are saved to a new 3DS MAX scene file. The net result is that the new scene file might contain more objects than those you selected, but never fewer objects.

The following dependencies are preserved for a Save Selected operation:

- Ancestors of selected child objects are saved, all the way to the root of the hierarchy.
- Space Warps that selected objects are bound to are saved.
- IK follow objects that selected objects are bound to are saved.

Details of 3DS Import

When you import a .3ds or .prj file from earlier versions of 3D Studio® for DOS, the following information is imported:

- Backgrounds (solid, gradient, and bitmap).
- Fog, Layered Fog, and Distance Cue.
- Ambient light level.
- Basic material parameters such as color, surface properties, and shading modes.
- Gouraud shaded materials are converted to Phong.
- Subtractive transparency is converted to 3DS MAX "Filter" transparency and the filter color is set equal to the diffuse color.
- All map channels that are enabled.
- All map parameters, including UV transforms, Negative, Mirror, and Rotation. Some Map Parameters such as Blur, Luma, and RGB and Alpha work much differently in 3DS MAX. These values are converted to new values that produce a similar effect.
- Mask bitmaps are imported as a 3DS MAX mask texture.
- When materials with both Texture 1 and Texture 2 are imported, a composite texture is

created and added to the Standard material's Diffuse channel.

- Reflection maps, automatic reflections and flat mirrors.
- Automatic reflection map Nth frame and Map Size settings.
- SXP translation for Marble and Noise materials.
- 3DS R4 IK joint parameters.
- 3DSurfer[™] patch data.

The following information is ignored when importing .3ds and .prj files:

- Map channels that are turned off in the .3ds file.
- Custom .*cub* cubic maps.
- Decal transparency using the RGB color of the upper left pixel of a map.
- Morph keys.

Problem with 3DS R4 Save Selected Files

Files that have been saved using the 3DS R4 Save Selected command do not import correctly into 3DS MAX.

To make .3ds files created with Save Selected usable by 3DS MAX, do the following:

- 1. Load the .3ds file back into 3DS R4.
- 2. Save the file using the standard Save command.

Details of 3DS Export

When you export 3DS MAX scenes to .3ds files, the following items govern what is saved:

Position, Rotation and Scale animation.
 If the controller is a TCB controller, the TCB, Ease In, and Ease Out values are also saved. If the controller is any other type of key controller, the keys are saved but the tangent information

is lost. If the controller is not a key controller, only the object's transformation at frame 0 is saved.

- Basic material color/parameters from the Standard material.
- Single maps with their amount, offsets, scales, etc.
- Composite and procedural maps don't export.
- Automatic reflections and flat mirrors export.
- UV mapping coordinates don't export.
- Grouped object transformations don't export to the 3D Editor because there's no concept of group hierarchy in the 3D Editor. Groups do export to the Keyframer because the Keyframer understands hierarchies.
- Target cameras, target spotlights, and omni lights. Most "static" parameters for cameras and lights, and animation tracks for Roll, Falloff, Hotspot, and FOV are exported. Global shadow parameters are not exported.
 - All non-mesh geometry, such as procedural primitives and patches, are exported as meshes.
- Objects are exported as they exist on the frame 3DS MAX displays at export time. If you
 want
 - to output morph targets, go to each frame and export the target to a different filename.
- Meshes are saved with edge display information and smoothing groups.
- Object instances are saved as Keyframer instances.
- Object references are saved as unique objects.
- Lights and cameras are saved as unique lights and cameras regardless of whether they were instances or references.

Problems with DXF Export

The following items apply to the export of 3DS MAX scenes to .dxf files:

 AutoCAD® cannot load .dxf files created by 3DS MAX is you choose the By Object option of DXF Export and your 3DS MAX object names are not valid AutoCAD layer names. If you want to use the By Object option for DXF export make sure your 3DS MAX object names are valid

to use the By Object option for DXF export, make sure your 3DS MAX object names are valid as AutoCAD layer names.

- Some AutoCAD binary .*dxf* files do not properly import into 3DS MAX. If you have difficulty loading a binary .*dxf* file, return to AutoCAD and save the file as an ASCII file.
- 3DFACE entities defined by three vertices have normal vectors pointing in the opposite direction from 3DFACE entities defined by four vertices.

Directly Loading Automatic Backup Files

You can directly load automatic backup files and Hold files (files with an *.mx* extension) from the File/Open dialog. It is not necessary to rename the file to use a *.max* extension, as stated on page 2-24 of the *User's Guide*.

Active Grid State Not Saved

3DS MAX files always load with the Home Grid active, regardless of whether the file was saved with a grid object active.

AVI Alpha Channel Not Supported

Alpha and Mask channels are not supported in any type of .avi file read or written by 3DS MAX.

Modeling Issues

The following topics discuss any changes affecting how you create, modify, and transform objects in 3DS MAX.

Star Hedras Are Invalid as Boolean Operators

Star hedra objects cannot be used as Boolean operators. Star hedra geometry is non-convex and includes many self-intersecting faces, which is a worst-case situation for Boolean operations.

Using Named Sub-Object Selection Sets

You can create named sub-object selection sets for sub-objects in the Edit Mesh and Edit Patch modifiers. Named sub-object selection sets are not supported for the Edit Spline modifier.

When using the Edit Patch modifier, named sub-object selections are retained only until you change the topology of the patch. For example, subdividing edges clears named sub-object selections from the Edit Patch modifier.

Inconsistencies in Object Selection Filters

When you set the Object Selection filter to something other than All, selected objects that do not match the selection filter are cleared from the selection by some selection functions.

For example: assume you have a scene with multiple objects and lights. If you select a sphere and then set the Object Selection filter to Lights, the following behavior is observed:

- Choosing Edit/Select All selects all lights and leaves the sphere selected.
- Choosing Edit/Select None clears all lights from the selection but leaves the sphere selected.
- Choosing Edit/Select Invert inverts the selection pattern of lights but leaves the sphere selected.
- Clicking a light or dragging a region selects and deselects the sphere.

The last behavior is inconsistent with the use of Object Selection filters.

Non-Uniform Scale Causes Improper Display of Face Normals

Using non-uniform scale prevents the proper display of normal vectors and shaded surfaces in the 3DS MAX viewports.

- Display of normal vectors for the scaled object will no longer be perpendicular to the surface.
- Shaded surfaces will not shade properly.

This only affects viewport display. The 3DS MAX renderer calculates normals and shading correctly.

To use non-uniform scale without corrupting viewport normals:

- 1. Apply an XForm modifier to the object.
- Non-uniform scale the XForm Gizmo. Using the XForm modifier is the recommended method for scaling objects.

Lathing Multiple Splines Displays a Single Gizmo

You can apply a Lathe modifier to a selection of multiple shapes, but Lathe is designed to work with only a single shape. Lathe operates on each object's local orientation. When Lathe is applied to a selection of multiple shapes, it displays one modifier gizmo based on only one object. However, all selected objects are correctly lathed.

Patch Capping Rules for Extruded Shapes

Capping with the Extrude modifier fails under the following conditions when Patch output is selected:

- Nested shapes don't cap.
- Extremely concave shapes don't cap correctly. The concave portion might have a web of faces

passing through it. The vertices on the boundary of extremely concave shapes sometimes do not have a clear line of sight to the center. If the edge of a cap face has to cross the shape boundary to reach the center, the cap fails.

These capping restrictions do not apply when you use Mesh output with the Extrude modifier.

Incorrect Controller Figure in Chapter 32, User's Guide.

The figure of a Length/TCB controller on page 32-10 incorrectly shows a Length/Bezier controller.

Display and Rendering Issues

Ray-Traced Shadows Do Not Block Volume Light Effect

Using ray-traced shadows with volume lights casts shadows on objects, but has no effect on the fog in the volume. This means you see no shadowing of the volume fog and the volume effect is visible behind all shadow casting objects.

If you want accurate shadow effects when using volume lights, always use shadow-mapped shadows.

Duplicate Maps Cannot Use Different Gamma Settings

When you load or view a bitmap, you can click the Gamma button in the File Selector to choose an option for how the image should be gamma corrected.

The options are:

• Use the file's own gamma (the default).

- Use the 3DS MAX input gamma, set in the Preference Settings dialog.
- Override current gamma settings with any arbitrary value.

If there are multiple versions of a bitmap loaded, they all share the gamma value specified the first time the map was loaded. However, the Gamma dialog that appears when you load another copy of the bitmap allows you to choose gamma options that have no effect.

The gamma setting for the first instance of the map is the only setting that has any effect.

View Last Rendered Image Doesn't Work with Video Post

The CTRL+I keyboard macro for bringing up the Last Rendered image works for directly rendered images only. Video Post renders in a different way that is incompatible with the CTRL+I macro.

False Extra Frame in Preview Files

When viewing preview files, the Media Player scale indicates the file is one frame longer than what was rendered. If you choose Device/Properties from the Media Player menu bar, the information area of the dialog displays the correct number of frames.

Video Post Frames Ruler

Video Post measures time in frames exclusively. The Video Post frame ruler and parameter fields display and accept entries specified as frames only. Settings in the Time Configuration dialog affect display in the Start, End, and total Frame fields in the Status / Prompt line of the Video Post window.

Additional Features in 3dsmax.ini

The following topics present 3DS MAX features that are implemented only in the *3dsmax.ini* file. Some of these topics are covered in the *User's Guide* but they are also repeated here for completeness.

Using the Editable Mesh (Emesh) Object

The Editable Mesh (Emesh) object is a beta feature that improves performance and reduces RAM consumption inherent with using an Edit Mesh modifier when editing large meshes made of greater than 5,000 faces.

This is a beta feature and should only be used if you are performing extensive face and vertex editing on large mesh objects. In such situations, using an Emesh object will increase interactivity and file I/O performance and reduce RAM and disk space consumption. The Emesh object is not feature complete, nor has it been fully tested. Use at your own risk.

The Emesh object will be completed and made officially available in a future release of 3DS MAX.

Add the following statements to 3dsmax.ini:

[EditableMesh] Enabled=1

When Enabled is set to 1, collapsing the modifier stack or importing a mesh from another file creates an Emesh object.

When Enabled is missing or set to 0, normal 3DS MAX meshes are used.

If an Emesh object is loaded into 3DS MAX after Emesh has been disabled, the Emesh object will load properly and behave as a normal mesh object. When the same object is loaded into 3DS MAX with Emesh enabled again, the object returns to being an Emesh object and retains all edits

performed on it in the previous session.

An Emesh object contains the functionality of the Edit Mesh modifier as the parameters of the object. This enables vertex-level editing without having to use the RAM and performance overhead of applying Edit Mesh to large meshes. The drawback is that changing the base parameters of an Emesh object is a permanent change. You cannot remove the changes once the scene has been saved and reloaded. Veteran 3DS R4 users will find using Emesh objects similar in performance to the Modify/Vertex, Face, and Edge commands of 3DS R4.

The Edit Mesh modifier generates RAM and performance overhead because it stores an internal copy of the original mesh so you can remove the modifier at any time and return to the original mesh. Use the Edit Mesh modifier whenever you want to make changes that can be removed from the object at a later date.

Read chapter 18, "Editing Meshes", in volume 1 of the *User's Guide* for information about using the edit buttons in the Parameters rollout of an Emesh object.

Don't Antialias Against Background

You might want the ability to generate output that's antialiased against itself but not against the environment background. This is a common technique used for rendering sprites in game development using a black background.

Add the following line below the [Renderer] section:

DontAntialiasAgainstBackground=1

When this parameter is set to 1, the outlines of scene objects are not antialiased against the environment background. Internal edges of objects and edges where objects overlap are rendered normally.

When this parameter is missing, or set to 0, objects are antialiased against the background in the normal fashion.

Using the Background Alpha Channel

Normal operation of the 3DS MAX renderer ignores any alpha channel information in an environment background. The rendered alpha of the background area of a scene is set to 0 (transparent). If your environment background image contains alpha information, you can add that information to the rendered scene.

Add the following line below the [Renderer] section:

UseEnvironAlpha=1

When this parameter is set to 1, alpha information from the environment background is combined with the alpha channel of the scene. If the environment background does not have any alpha channel, its default value is 1 (opaque).

When this parameter is missing, or set to 0, background alpha is set to 0 (transparent).

Using a Red Time Slider When Animating

The Animate button and your current viewport frame both turn red when the Animate button is on. The red color indicates you are in animation mode and any changes you make to your scene will create animation keys. You can make animation mode more obvious by forcing the time slider background to also turn red when Animate is on.

Add the following lines to 3dsmax.ini:

[RedSliderWhenAnimating] Enabled=1

When Enabled is set to 1, the time slider background turns red whenever animation mode is on.

When Enabled is missing, or set to 0, the background color of the time slider does not change.

Changing Bone Color

You can specify the color used to display Bone objects.

Add the following line below the [Performance] section:

BoneColor=1.0 1.0 1.0

The above line is an example of setting the Bone color to white. The values are specified as RGB values with a range from 0.0 to 1.0.

Enabling Dual Planes Toggle Button

You can enable and disable dual plane support by setting the Use Dual Planes check box in the Viewports panel of the Preference Settings dialog. You almost always want this option checked.

If you use a 3D-accelerated graphics card, you might find performance is enhanced by turning off Use Dual Planes (unchecking the box) when working with very small scenes.

You are advised to leave Use Dual Planes on for most operations. In general, setting Use Dual Planes off reduces interactive performance.

Add the following line below the [Performance] section:

DPButton=1

When DPButton is set to 1, a Dual Planes button appears in the status bar. Click this button to toggle the state of Use Dual Planes.

If DPButton is missing, or set to 0, no button is displayed.

Errata for English Language Manuals Printed in Europe

English language manuals printed in Europe, contain minor errors that were corrected in other manuals. The following items describe the changes:

User's Guide Change Pages

Page xiii (preface):	Under "Print," all but the first sentence that reads, "Prints the current
Page xiv (preface):	The title "CTRL + 39P" should be "CTRL + P"
Page xiv (preface):	Under the topic "CTRL + P," all but the segment of the first sentence that
	reads, "Prints the current topic." should be deleted.
Page xiv (preface):	The topic "PAGE UP" should be deleted.
Page xiv (preface):	The title "LEFT ARROW" should be "LEFT ARROW (or comma)"
Page xiv (preface):	The title "RIGHT ARROW" should be "RIGHT ARROW (or period)"
Section 1 opener:	Artist credit should be "Kelvin Cheung, Faith Design"
Page 2-29:	The title "Material ID" should be "Material Effects"
Page 2-29:	The title "Node ID" should be "Object"

Page 3-5:	The first caption of the page reading, "front view left view" should be "front view right view"
Page 4-3:	Final caption should read. "Example of Zoom Extents Selected All"
Page 11-19:	Caption under second figure of the first column which reads. "Loft with
i digo i i ioi	Smooth Length checked and unchecked" should be "Loft with Smooth
	Length unchecked and checked"
Page 11-19:	Cantion under the figure in the second column which reads. "Loft with
	Smooth Width checked and unchecked" should be "Loft with Smooth
	Width unchecked and checked"
Page 11-21:	Firet line of first figure caption which reads "length and width
	renest=1.0" should be "width renest=1.0"
Page 11-21:	First line of second figure cantion which reads "length and width
	reneat>1 0" should be "width reneat>1 0"
Page 20-28:	Lindor "Man Rice" in the first paragraph is a contence that reads
	"The Map Dias, in the first paragraph is a sentence that reads,
	cheuld road "The Man Pice value can be any floating point number.
	Should read The Map blas value can be any hoating-point number
	Delween 0 and 1,000.
Page 24-17.	A note should be added to the end of this topic.
	Note: Normany you apply the UVW Map modifier to a
	single object. You can apply it to a selection of multiple objects, but in
	this case the position and alignment of the overview that results is then
	one object in the selection set, and the mapping that results is then
D 04.00	applied to all the objects.
Page 24-23:	A note should be added to the end of the first column:
	Note: If you applied UVW Map to a selection of multiple
	objects, the alignment buttons work with respect to just one of the objects
	in the selection set, and the mapping that results is then applied to all the
	objects in the set.
Page 27-3:	Under the heading "Branch, the second sentence should read, "In the
	following figure, objects 1, 3, 6 and 8 represent a branch from the root to
	a leaf object."
Page 27-18:	The left-hand figure and caption of the Track View 1 window should
	be deleted.
Page 29-12:	First caption reading, "right-click filters button to display" should read
	"click filters button to display"
Page 29-19:	The text under the heading "Time Status field" should read:
	Time Status fields-When you select a key, its time and
	value are displayed in the Time Status fields. These fields are
	immediately to the right of the prompt line.
Page 29-20:	The title "Zoom Horizontal Extents (Range)" should read "Zoom
	Horizontal Extents Keys (Range)"
Page 33-15:	Under "Special Animation Functions," the title and words "turb (p,q,r)
	3D turbulence where" should be deleted
Page 35-5	Tip should be added to the end of the topic:
	Tip: If your environment map is a bitmap that has the
	same resolution as your rendered output, you can save rendering time by
	turning off bitmap filtering. Choose None as the option in the Filtering
	area of the Bitmap Parameters rollout.
Page 35-18:	Tip should be added to end of first column:
	light beams. (They do appear on objects within the beam.) To have the
	shadows appear within the beam as well as on objects. use shadow-
	mapped shadows.