

Table of Contents

Introduction	xiii
I LightWave Modeler	1
Understanding Modeler	2
Key Areas of Modeler	2
3D Modeling in LightWave	3
LightWave v10 Modeler Interface	4
Tabs and Menus	15
Create Tab	16
Modify Tab	18
Multiply Tab	19
Construct Tab	20
Detail Tab	22
Map Tab	24
Setup Tab	26
Utilities Tab	28
Selection Tab	29
View Tab	30
Points, Edges, and Polygons	32
Selection Modes	32
Modeler General Commands	35
Using and Understanding W, T, M, C, S	39
Modeler Options	40
The Next Step	42
2 LightWave Layout	43
Understanding Layout	44
LightWave Layout Interface	44
Menus and Tabs	54
File Menu	55
Edit Menu	56
Windows Menu	60
Help Menu	60
Surface Editor	60
Image Editor	62
Graph Editor	62
Virtual Studio	63
Scene Editor	64

Parent in Place	66
Items Tab	67
Modify Tab	68
Setup Tab	72
Utilities Tab	73
Render Tab	74
View Tab	76
Modeler Tools Tab	78
Preferences	79
The Next Step	81
3 Texture Creation	83
Using the Surface Editor	85
Organizing Surfaces	85
Selecting Existing Surfaces	87
Working with Surfaces	88
Working with VIPER	94
Common Surface Settings	100
Introducing the Node Editor	110
The Next Step	118
4 Lighting	119
Working with Lights	120
Light Color	122
Light Intensity	122
Adding Lights	123
Clone Lights	124
Mirror Lights	125
Ambient Light and Ambient Color	125
Lens Flares	126
Volumetric Lights	126
Global Illumination Options	126
Global Light and Lens Flare Intensity	127
Radiosity and Caustics	127
Applying Lights in LightWave	128
Simulating Studio Lighting	128
Enhanced Lighting with HDR	133
Using Projection Images on Lights	135
Using Area Lights	138
The Next Step	141

5	3D Cameras	143
	Focus on Cameras	144
	Setting Up a Camera	144
	Motion Effects	158
	Stereo and Depth of Field (DOF)	160
	Camera Concepts	164
	Additional Camera Types	168
	The Next Step	171
6	3D Animation	173
	Creating Motion with Keyframes	174
	Automatic Keyframing	175
	Manual Keyframing	180
	Control Curves with the Move TCB Tool	187
	Navigating the Graph Editor	189
	Working with Channels	191
	Working with the Graph Editor	193
	Adjusting Timing in the Graph Editor	194
	Copy Time Slice	198
	Navigating the Curve Window	202
	Exploring Additional Commands in the Graph Editor	202
	Footprints	203
	Using the Curves Tab	205
	Editing Color Channels	211
	The Next Step	213
7	Motion Graphics	215
	Modeling 3D Text	216
	Working with Backdrops in Modeler	217
	Building Over Images	219
	Pivot Points in Modeler	227
	Importing EPS Files	228
	Animating Text	228
	Lighting, Motion, and Backgrounds	228
	The Next Step	229

8 Modeling Everyday Things	231
Modeling Fruit	231
Begin with Bananas	232
Orange You Glad You Got This Book?	243
Create a Cluster of Grapes	249
Building a Fruit Bowl	256
Building a Set for the Still Life	261
The Next Step	265
9 Particle Animation	267
Particles In LightWave	268
Creating a Basic Particle-Motion Scene	268
Working with Particle Wind	274
Introducing Particle Collisions	278
Surfacing Particles	281
Using Images on Particles	285
Editing Particles	286
The Next Step	288
10 Dynamics in Motion	289
Dynamics in LightWave	290
Understanding Dynamic Controls	290
Hard-Body Dynamics	291
Soft-Body Dynamics	309
The Next Step	312
11 Bones and Rigging	313
Understanding Bones	314
Creating Hierarchies	318
Creating Multiple Hierarchies	321
Bone Weights	325
Applying Weight Maps	327
Skelegons	332
The Next Step	338

12	The LightWave Render Engine	339
Working in the Render Globals Panel	340	
Setting Up an Animation to Render	341	
General-Purpose Rendering	342	
Saving Renders	346	
Thoughts on Rendering	349	
The Next Step	349	
A	Plug-ins and Additional Resources	351
Exporting Scenes and Objects	352	
Package Scenes	352	
Working with Plug-ins	353	
Where to Find LightWave's Plug-ins	354	
Loading Plug-ins	355	
LScripts	356	
Learn Your Tools	356	
More References You Can Use	356	
Reading References	356	
Audiovisual References	357	
Web Resources	358	
What's on the DVD	359	
Technical Support Issues	359	
DVD Contents	360	
Using the Video Files	360	
System Requirements	360	
Loading the DVD Files	360	
Index	361	