



# LightWave™ 10



**NewTek**

[www.newtek-europe.com](http://www.newtek-europe.com)



# LightWave™ 10



## Count on it.

**NewTek LightWave™** is the backbone of fast, efficient 3D pipelines. Day in and day out, LightWave artists deliver stunning graphics and animation on time and on budget. LightWave artistry is everywhere, from blockbuster feature films and primetime television, to the cover of Rolling Stone. The result of the collaboration between artist and LightWave is that more Emmy® Awards for visual effects and animation sit on the mantels of LightWave artists than any others.

Today, that mighty collaboration between artist and NewTek has created a new LightWave. LightWave 10 is innovative, interactive and immersive. Built on a NewTek tradition of pioneering ground-breaking 3D capabilities, LightWave 10 maintains the fast, efficient workflow and powerful, proven render engine you've come to depend on, with seamless integration into diverse pipelines.

**LightWave 10** benefits artists with unique features not found in any other 3D application, like Viewport Preview Rendering (VPR) and CG hardware enhancements that give you an immediate look at changes to your rendered scenes, and real-time OpenGL views of Ambient Occlusion, Bloom, Stereoscopic Anaglyph and HDRI background images. LightWave 10 delivers the power of Modeler and Layout with next generation CORE technologies, such as immersive real-time and game tools, Python-based expressions and scripting, Bullet rigid body dynamics and sophisticated UV mapping capabilities.

**LightWave 10 will breathe new life into your pipeline. Count on it.**



Luis Santos



Khalid Al-Muharrraqi



Neal MacCormack

## Model on it. Animate on it. Render on it.

*"WE USE LIGHTWAVE BECAUSE IT'S THE BEST OPTION, PLUS IT'S THE PLATFORM WHICH BEST COMBINES TIME AND PERFORMANCE. WE CAN ALWAYS COUNT ON IT TO GET US THE BEST RESULTS IN THE LEAST AMOUNT OF TIME."*

**- MAURO CORVELONI, ARTIST, BITT ANIMATION & VFX**



**LightWave 10** is the first release of LightWave 3D® to integrate NewTek's CORE technology with Modeler and Layout. The three elements work in unison to give you the workflow and functionality you're familiar with, along with the interactive power of the innovative CORE technologies. LightWave's speed, flexibility, value and control are the benefits you rely on and LightWave 10 delivers all that and more.



Khalid Al-Muharrraqi





# Television

LightWave is used consistently on Emmy® Award-winning shows. Teams of artists from LightWave facilities have taken home Emmy® Awards nine times in the last nine years for their stellar work in television shows such as: *Battlestar Galactica*, *Lost*, *Star Trek: Enterprise*, *Firefly*, *Frank Herbert's Children of Dune*, *Star Trek: Voyager*, and *Frank Herbert's Dune*. The winning trend continues this year with Emmy® nominations for LightWave artists working on *Caprica*, *CSI: Crime Scene Investigation*, *National Geographic Channel Alien Earths* and *V*.



V — image courtesy of Zoic Studios



## Win on it.

Production for television extends beyond Emmy®-winning shows, to the creation of commercials and music videos, where time and budgets can be incredibly short and tight. Here, the value, speed and flexibility of LightWave really shines. LightWave artists prove time and again that they deliver for their clients on projects from the latest ads, such as Volkswagen Amarok, featuring realistic LightWave elephants, to the newest music videos like Red's *Ordinary World*, and Iron Maiden's *The Final Frontier*.

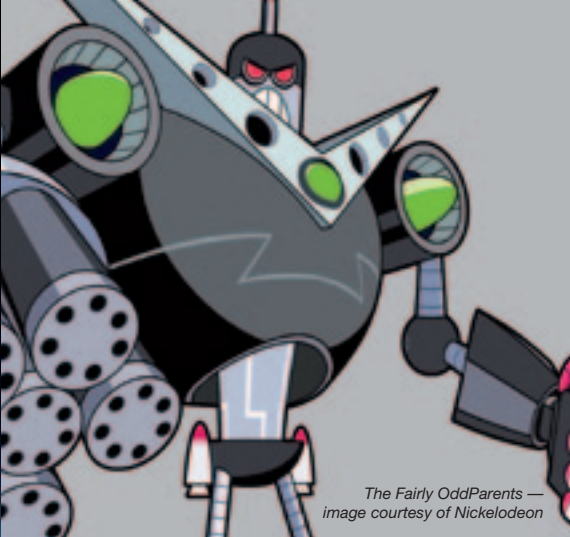


V — image courtesy of Zoic Studios



Volkswagen Amarok — image courtesy of Bitt Animation and VFX

**"WITH LIGHTWAVE, WE DON'T HAVE TO SACRIFICE QUALITY FOR SPEED. THE SPEED AT WHICH YOU CAN GENERATE CONTENT WITH LIGHTWAVE MAKES IT OUR TOOL OF CHOICE. THE DIRECTOR NEVER HAS TO FEEL A NEED TO SACRIFICE IDEAS, DUE TO SCHEDULE OR BUDGET CONSTRAINTS."**  
**- ERNEST CHAN, POST-PRODUCTION CG SUPERVISOR, NICK DIGITAL**



Ordinary World — image courtesy of Elevate Pictures



The Fairly OddParents — image courtesy of Nickelodeon



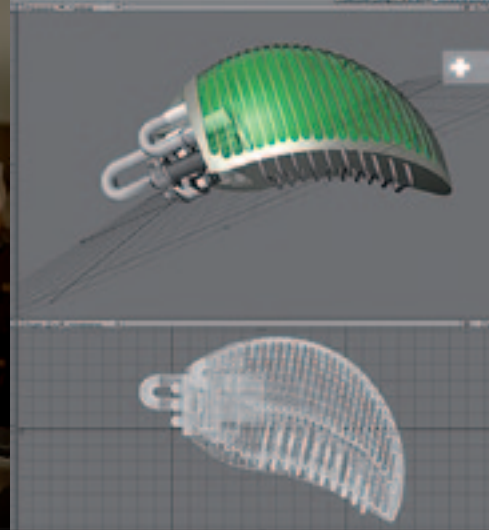


LightWave 10

MARINA BROH MARTIN RAPOLD



Repo Men — images courtesy of Universal Pictures



REPO MEN

### Innovate on it.

# Feature Film

Computer-generated visual effects are the “star” in many of Hollywood’s recent blockbuster films where LightWave played a key role, such as *Alice in Wonderland*, *Avatar*, *Repo Men*, and *Tintin*. LightWave 10 delivers robust modeling tools, photorealistic rendering, and easy data interchange, making it the perfect complement to any film production pipeline.

The Virtual Art Department (VAD) for James Cameron’s *Avatar* was conceived and created using LightWave as the primary tool for the modeling and creation of the virtual environments, providing Cameron with a virtual 3D set and the ability to view and control the action in real time.

Now, with LightWave 10 all 3D artists have the unique ability to create your own VAD with full support for the InterSense VCam™, virtual camera system built right into LightWave. Immerse yourself fully into LightWave scenes with real-time control of the camera, objects and light placement.

*"LIGHTWAVE IS EXTREMELY EASY TO USE. IT HAS A FULL-FEATURED MODELER, SOLID ANIMATION TOOLS, AND WHAT I THINK IS THE BEST INTEGRATED RENDER ENGINE OUT THERE ... I'M ABLE TO GET AN EXTREMELY PROFESSIONAL RESULT ... IF YOU SPEND AS MUCH MONEY AS I DO KEEPING A STUDIO AFLOAT, WITH THE DOZENS OF SOFTWARE LICENSES, HAVING FREE RENDER NODES IS A BIG DEAL!"*  
- **ANDREW CLEMENT, OWNER AND FOUNDER, CREATIVE CHARACTER ENGINEERING, SPECIAL MAKEUP EFFECTS DESIGN/CREATOR, REPO MEN**



Cargo — images courtesy of Atlantis Pictures



Image © Twentieth Century Fox





# Visualization and Design

The powerful renderer and precision modeler make LightWave a natural for visualization and design. From early sketches, to finished print resolution renders, the unique workflow in LightWave provides unmatched creative flexibility. LightWave 10 offers the exclusive ability to see your results instantly. With the new Viewport Preview Rendering (VPR), the



Craig Clark at ten24

## Build on it.

changes you make in your scene, from lights and shading, to scene set-up are done in real time. No more waiting on a final render to view your changes, VPR delivers them on the spot. New CG hardware support delivers real-time OpenGL view of Ambient Occlusion, Bloom, Stereoscopic Anaglyph, and HDRI background images.

**LightWave 10** also provides the freedom to move between applications easily, using MDD with powerful, new capabilities including support for Autodesk® Geometry Cache, COLLADA™, FBX® and ZBrush®. Expand the reach of your 3D pipeline with easy transfer of camera data, lights, objects placement, image and UV maps, parenting hierarchies and more.



Khalid Al-Muharraqi



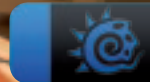
Christian Schrul



Cesar Alejandro Montero



Larry Vasquez





LightWave 10



The Raven — Images courtesy of Pixelhanger

# Short Film

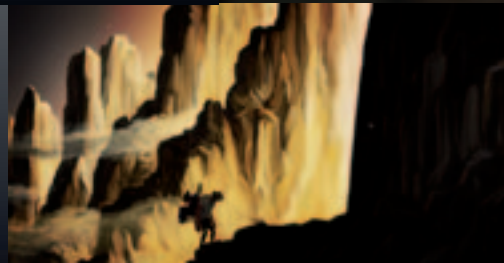
As an independent short filmmaker you want to see your vision on-screen without compromise. LightWave gives you the ability to control every aspect of your production, so you may realize your dreams on your own or with a small production team. From the visually striking, emotionally-charged short film *Urs*, to the kinetic, action-packed *THE RAVEN*, independent filmmakers find that LightWave delivers the perfect solution.

## Dream on it.

LightWave 10 presents a virtual soundstage with real-world camera and lights, allowing you to create your universe and direct the action, all from an elegant interface. With a production-proven photoreal render engine, a time tested production workflow, 999 render nodes and free technical support, you can deliver your masterpiece on time and on budget.



"LIGHTWAVE WON ME OVER WITH ITS POWERFUL MODELING TOOLS AND REALLY FAST NAVIGATION. I LOVE TO DO CAMERAWORK IN IT, SINCE IT IS INCREDIBLY INTUITIVE AND FUN TO WORK WITH. THE SHADING SYSTEM AND RENDERING POSSIBILITIES ARE ABSOLUTELY FANTASTIC, MAKING LIGHTWAVE THE MOST RELIABLE TOOL IN MY PIPELINE." — MORITZ MAYERHOFER, ARTIST/DIRECTOR, *URS*



Urs — Images courtesy of Moritz Mayerhofer



The Good Knight Story — Image courtesy of Shoham Blau



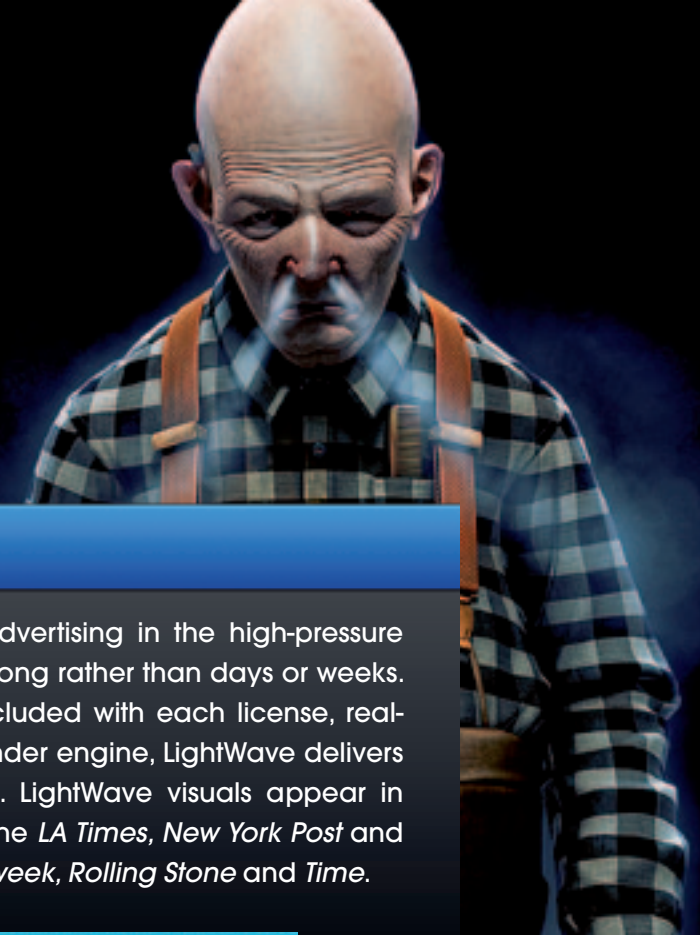




LightWave 10



Elvis Blazencic



Luis Santos

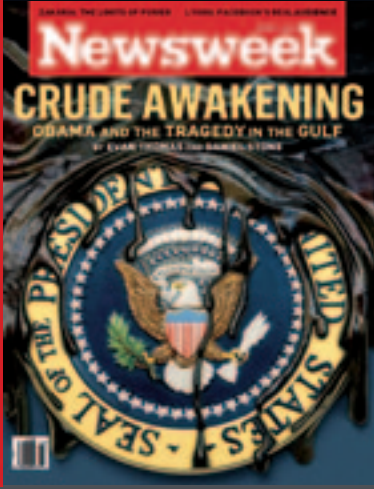
# Print Graphics

**Design on it.**

LightWave is used for informational graphics and advertising in the high-pressure world of publishing, where deadlines are often hours long rather than days or weeks. With native support for both Windows® and Mac® included with each license, real-world camera and lighting effects, and a powerful render engine, LightWave delivers the speed and flexibility perfect for graphic design. LightWave visuals appear in publications the world over, in daily newspapers like the *LA Times*, *New York Post* and *Wall Street Journal*, and magazines like *Fortune*, *Newsweek*, *Rolling Stone* and *Time*.



Time, Newsweek,



Entertainment Weekly — images courtesy of Joe Zeff Design



based on photograph by Gavin Bond



William Vaughan

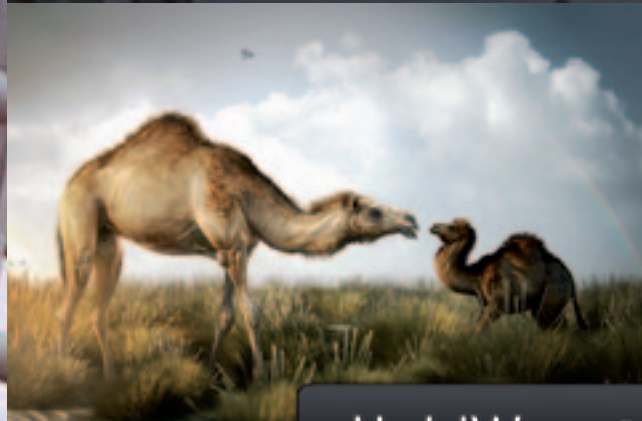
"WE HAVE USED LIGHTWAVE TO CREATE COVERS FOR DOZENS OF MAGAZINES FROM ROLLING STONE AND FORTUNE, TO TIME AND NEWSWEEK, AS WELL AS ADVERTISING IMAGES FOR PORSCHE, M&M'S, PEPSI AND MERCEDES-BENZ. IT IS THE MOST RELIED-UPON PIECE OF SOFTWARE IN OUR STUDIO. WE COULDN'T IMAGINE WORKING WITHOUT IT." — JOE ZEFF, JOE ZEFF DESIGN





Khalid Al-Muharrqi

Neal MacCormack



## LightWave 10 Facts

**LightWave 10** provides a motion-picture-quality render engine that supports Windows® 64 and 32-bit and Mac® UB 64 and 32-bit, and is a leader in multi-core technology support. In addition, LightWave offers free, 999 cross-platform render nodes, making it the highest quality, most affordable, and efficient render pipeline in the 3D market.



Chris Lomaka



Antonis Kotzias

*"MY CONFIDENCE IN LIGHTWAVE AND ITS RENDERING SPEED IS WHAT MADE ME FEEL LIKE IT WAS REALISTIC TO TACKLE 'ORDINARY WORLD' UNDER SUCH A TIGHT DEADLINE ... THERE IS NO OTHER SOFTWARE OUT THERE THAT CAN DO AS MUCH AS LIGHTWAVE."* - **JEREMY HUGHES, DIRECTOR, ELEVATE PICTURES**



New Feature Benefits

LightWave 10

Feature	Benefit
<b>Interactive Display and Rendering Tools</b>	
Viewport Preview Rendering (VPR)	See instant results with realistic view of scenes and objects with interactive light, nodal shading and scene set up
New CG Hardware real-time viewport shading enhancements	Real-time OpenGL view of Ambient Occlusion, Bloom, Stereoscopic Anaglyph and HDRI background images
Linear workflow	Supports consistent gamma, color space, and custom Look Up Tables (LUTs) for more realistic lighting, and to maximize compositing flexibility in a professional pipeline
<b>Data Interchange Enhancements</b>	
MDD with powerful new enhancements include support for Autodesk Geometry Cache	Freedom to move deformations and transforms between applications allowing for an extremely flexible, extensible pipeline for animation, dynamics, effects, and rendering
FBX	Load and save camera data, lighting, objects with UV maps and image maps, parenting hierarchies, etc.
COLLADA	Easy transfer of camera data, lights, object placement, image maps, etc., from one application to another
Improved ZBrush Interchange	Easy transfer and manipulation of UV maps from ZBrush
Improved OBJ UV Support	Delivers the ability to import and export any number of UV maps
<b>New Immersive, Real-Time and Game Tools</b>	
Support for the InterSense VCam virtual camera system used in feature film Virtual Art Departments (VAD)	Gain a true "on location" experience through interaction with massive 3D scenes in real time with control of light placement and camera directly in your 3D application
Support for 3Dconnexion line of 3D mouse	Move through the virtual world and interact with models and scenes controlling cameras and lights in real time
SpriteGen	Automates creation of sprite animation images for real-time and game engines
<b>Bullet Rigid Body Dynamics</b>	
Integrated dynamics and simulation	Create dynamics, calculations and simulations for effects such as collapsing buildings, breaking glass, etc.
<b>UV Mapping Tools</b>	
Transform Scale Rotate Move Separate Stitch Relax UV Unwrap	Sophisticated tools for quick creation, editing and adjustment of UV maps to generate the best texture map layout for objects







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Model on it.  
Animate on it.  
Render on it.  
Win on it.  
Innovate on it.  
Build on it.  
Dream on it.  
Design on it.  
Count on it.

*"IN LIGHTWAVE 10, VPR ALLOWS ME TO SEE THE COMPLEX CREATURE RIGGING DEFORMATIONS IN A BEAUTIFUL REAL TIME RENDER. IT'S INCREDIBLE TO BE ABLE TO WORK ON THE CHARACTER RIG AND GET THIS ADVANCED LEVEL OF VISUAL FEEDBACK! INTERACTIVE LIGHTING, PROCEDURAL TEXTURES, REFLECTIONS, TRANSPARENCY, RADIOSITY, IT'S ALL THERE!"*

**- LINO GRANDI, FEATURE FILM CREATURE RIGGING AND VISUAL EFFECTS SUPERVISOR**

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Cover Art — LightWave 10 Alien Emissary, Leigh Barnforth

# LightWave™ 10



You've read the brochure, now try LightWave 3D for yourself with our free 30-day trial version, 200MB of royalty-free content and over 24 hours of training here: [www.lightwave3d.com/lwtrial](http://www.lightwave3d.com/lwtrial)

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