



 **v·ray** For  
3ds Max

**CHAO2GROUP**  
innovative rendering technologies

CHAOSGROUP



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## v-ray For 3ds Max

Chaos Group's flagship product, V-Ray® for 3ds Max, has made its mark in the Architectural, Automotive & Product Design industries because of its ability to quickly render realistic images without ever losing control of the production process.

V-Ray for 3ds Max's incredible stability and power provides visualization specialists with exceptional rendering capabilities. Renowned studios around the world, such as Blur Studio, Neoscape, IKEA, Pure, Citroën, Siemens AG, and Spine 3D, embrace the power of V-Ray in their production pipeline. V-Ray is a universal tool recognized for its speed, uncompromised precision, rich feature list and ease of use.

# V-Ray® for 3ds Max Key Features

## SHADING

**Efficient Shading System Optimized for Ray-Tracing** - specially optimized shaders to improve render speeds

**Support for Efficient Material Layering** - quickly render complex materials using the V-RayBlend material

**Fast Sub-Surface Scattering Shader** - V-RayFastSSS2 material uses a pre-pass to create fast and accurate subsurface scattering effects with support for both single and multiple scattering

**V-RayCarPaintMtl** - create stunning car paint shaders complete with base, flake and coat layers. Full mapping support allows for amazing flexibility and a wide range of effects

**V-RayHairMtl Shader** - render fully raytraced hair and fur with unprecedented control, quality, and speed using the V-RayHairMtl shader

**V-RayPtex** - use this texture to load Ptex files, an innovative texture format created by Walt Disney Animation Studios® that eliminates the need to assign UVs

**V-RayDistanceTex Texture** - use this procedurally generated texture to create a wide range of effects based on the distance between objects in the scene. The map is computed analytically without ray-tracing and can be used to drive other render time effects like V-RayFur and displacement mapping

**V-RayMultiSubTex** - use this V-Ray specific texture to assign different textures based on object ID

**Dispersion** - the new and improved V-Ray material comes with a complete support for light dispersion. This simple yet powerful feature allows you to create stunning close ups of refractive objects with caustics that dazzle the eye

## LIGHTS

**Physically Accurate Full Global Illumination Solutions** - create accurate GI solutions using a combination of the provided global illumination methods

**Physically Accurate Lights** - create realistic illumination using physically-based lights, including IES lights and true area lights with support for texture mapping

**Directionality Parameter for Rectangle V-Ray® Lights** - turn the V-Ray rectangle light into a textured directional light with the new directionality parameter

**Efficient Illumination from HDR Environments** - create accurate IBL solutions with sharp shadows at a fraction of the usual render times

**V-RayLightLister** - quickly set up and adjust complex lighting with the help of the new V-Ray Specific Light Lister

## RENDER OUTPUT

**Support for Additional Render Elements** - have full control in compositing by separating the render into render elements

**V-RayLightSelect Render Element** - become a master of lighting with the new V-RayLightSelect feature and extract the contribution of each light to the scene or compose all the lights back together and change their intensity in real time in any compositing software

**Ultimate Resolution of Any Issues Caused by Distributed Rendering** - the new V-RayDRBucket render element enables you to identify which render slave rendered each bucket in the final scene

## EFFECTS

**V-RayExposureControl Plug-In** - proper exposure of regular viewport and camera views, including orthographic views

**V-RayLensEffect Render Effect** - simulate the inherent imperfections of real world cameras by adding a full range of bloom and glare effects complete with light dispersion and obstacle mapping

**V-RayLensAnalysis Tool** - quickly create realistic (measured) distortion patterns for your V-Ray Physical Cameras. With the help of the V-RayLensAnalysis tool you can easily match the distortion of your real world and your virtual cameras

**Depth of Field with Bokeh Effects** - create fast and accurate physically based depth of field effects using the V-RayPhysicalCamera

**Accurate Motion Blur** - efficient and accurate physically based true 3D motion blur effects using the V-RayPhysicalCamera

## OPTIMIZATIONS

**Interactive Rendering on CPU & GPU** - V-Ray RT is a fully functional interactive rendering engine matching the production renderer results. With GPU acceleration, you can rely on a significantly faster interactive rendering process

**Stereoscopic Setup** - use the V-RayStereoRig helper to quickly set up stereoscopic images and animations. In addition, the built in support for shade maps allows for much faster rendering of depth of field and motion blur effects with or without stereoscopy

**Bidirectional Path Tracing (BPT)** - create accurate, unbiased light solutions with caustics that are so sharp that they are dangerous to view

**Dynamic Loading of Tiled OpenEXR** - load tiled OpenEXRs on the fly with the help of the new and improved V-RayHDRI texture

**On-Demand Geometry Loading from the Disk** - use V-RayProxy to render millions of polygons at maximum memory efficiency by storing the geometry on the hard drive

**Displacement Mapping** - precisely control the displacement on a per object basis with the V-RayDisplacement modifier

**Three Different Image Sampling Methods** - fast anti-aliasing engines to fit any case and requirements

At Chaos Group we work closely with our customers from around the world to ensure we are creating the best tools for their workflow. Inspired by their imaginative creations, we passionately pursue advances in rendering technology and continue to improve the software needed to communicate their vision.

*"V-Ray works best for Taylor James and we've used it for many years, with no other software coming close. It not only gives us great flexibility when controlling the rendering, but we can also rely on its speed and quality."*

Siear Waizy  
Taylor James Creative Studio

*"Since starting in the CG world – fifteen years ago now – I always dreamt about the day I could easily reproduce accurate, advanced materials and global illumination in a flexible, fast production environment, so that I could focus on what matters as an artist. My dream came true when I discovered V-Ray!"*

Alex Roman  
CG Artist



[youtube.com/ChaosGroupTV](https://youtube.com/ChaosGroupTV)

