Corona 11

Product document

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Corona

Product description

Corona is an intuitive render engine tailored to the archviz community. While also capable and well-liked in the fields of automotive and product visualization, the UI, feature set, pricing, and ease of use are primarily driven by what architectural visualizers require.

Corona now also benefits from being part of the Chaos ecosystem, giving its users access to many of the industry-standard tools created by Chaos.

What it's used for:

Architectural visualization

Television ads and title sequences

Automotive and product design

Look-dev work (e.g. film and games)

Corona users

Corona customers are professionals, usually in the field of archviz, who are freelancers or smaller studios with a need to account for the cost and ease of use of their software without sacrificing the quality of their images and animations.

- They are usually more artistic than technical, and do not want to spend time adjusting parameters and settings; they want to be more like photographers than programmers.

- They require photorealistic results without compromises; "just good enough" is not good enough!

- They are freelancers or smaller studios, so budget is a consideration for them. This also means they are less concerned with software fitting into a pipeline for moving from department to department.

- Their time is more valuable than their computer's time; they are less concerned with render speed, and more concerned with the ease and speed with which they can set up scenes.

- Many may use the host software more as a scene assembly tool - premade materials, assets, easy tools to create gardens, grass, etc. are more important to them than the modeling and creation of new assets.

Key benefits for users

Easy to use.
Targeted for specific markets, Corona offers the most streamlined and easy-to-use UI without clutter and unnecessary parameters. It lets users approach their work like a photographer in a virtual world, so they can be artists and not technicians.

Post-process their renders without the need for a separate tool.
The Corona VFB (Virtual Frame Buffer) offers light mixing, a range of tone mapping controls, and effects such as bloom and glare. This reduces or even removes the need for them to go back and forth between their 3D software and image-editing software.

Tight integration.
Corona is tightly integrated into both 3ds Max and Cinema 4D, meaning it can render most native lights, objects, materials, etc. from the host software and works seamlessly inside the UI of the host. Many Cinema 4D users describe it as the best-integrated render engine they have used.

Helping users get faster.
Corona users are more concerned with speeding up their workflow than getting the fastest render times, as their time is more valuable than that of their machine. Corona delivers this through the combination of pre-made content (from the Material Library, Chaos Cosmos, and Chaos Scans) plus workflow tools for scene assembly such as Chaos Scatter, Corona Pattern, etc.

Truly photorealistic results.
Corona users work for clients who demand renders that could be mistaken for photos. This is exactly what Corona is built to do, focusing on quality without any compromise.

Interoperability with other Chaos products

- Corona supports many tools and provides optimized support for numerous third-party plugins.

- Fluid, fire, and smoke simulations can be added by Corona for 3ds Max users with Chaos Phoenix.*

- Professional image sequencing can be carried out in Chaos Player.*

- Corona supports Chaos Scans which allows for the most physically accurate materials to be used.*

*included in the Premium license

Features list

Rendering - Corona's powerful CPU-only rendering delivers maximum realism with minimum effort from the user. Corona adaptively uses processing power where it is needed the most to optimize speed without compromising on quality.

- CPU rendering, Resumable rendering, Denoising, Caustics

Lighting & illumination - Corona pioneered the most modern procedural Sky in any render engine, creating everything from dawn/dusk to full noon. A variety of other light types and support for many native 3ds Max and Cinema 4D lights give users all the options they need, while LightMix lets them adjust the color and intensity of lights before, during, and after rendering.

- Accurate lights, Global Illumination, Procedural sun and sky, Adaptive light sampling, LightMix

Cameras & optical effects - The Corona camera acts like a modern real-world camera and can be controlled through simple Exposure stops, through to full shutter speed, f-stop, and other controls. These are completed with advanced controls for camera effects such as Motion Blur and Bloom & Glare

- Lens effects, Photorealistic camera, VR, Fisheye, Panoramic

Materials - The Corona Physical Material is built from the ground up to be physically realistic, while there is the option to use specialized shaders for skin, hair, and others. Many V-Ray materials can be rendered without conversion. Presets within the Physical Material and complete materials in the Corona Material Library, Chaos Cosmos, and Chaos Scans mean users never have to start from scratch.

- Physically based materials, Corona Hair material, Metalness, Displacement, Corona Converter, Corona Material Library, Chaos Cosmos, Chaos Scans

Textures - Corona is compatible with almost all native 3ds Max and Cinema 4D shaders and has its own memory-efficient Corona Bitmap shader for loading images. A collection of utility texture maps allow textures to be layered, mixed, color corrected, and more.

- Memory-efficient textures, Triplanar mapping, Rounded corners, UVW Randomizer

Geometry - Corona works with any native geometry, and also includes proxies, volume grids, scattering, patterning, slicing, etc.

- Proxy geometry, Corona Slicer for render-time booleans, Hair and Fur, Scatters, Patterns

Atmospheric & volumetric effects - Users can choose between simple and fast-rendering volume effect in the Corona Sky to simulate atmospheric haze or the full control of a volumetric material for more complex results.

- Volume rendering, Aerial Perspective, Crepuscular rays, fog, mist

Render Elements - For adjusting images in video or image editing software, Corona offers many Render Elements (3ds Max) and Multipasses (Cinema 4D), including Virtual Beauty, matte passes, separation of scene illumination, depth information, and more.

- Render Elements, Cryptomatte, Normals, Depth, Direct, Indirect

What's new in Corona 11?

More freedom, more creativity

Corona 11 brings a new level of creative freedom and control for artists, architects, and designers. Equipped with a powerful set of tools, it helps create and detail scenes with greater ease and speed than ever.

Powerful detailing of scenes

- **Easily create stunning bathrooms, kitchens, walls, and floors** with procedural tiles thanks to Corona Tile Map.
- **Easily apply effects like weathering and staining** to the edges of objects with Edge Map/Edge Shader.

New Scatter controls

- **Define upper and lower limits for scattering,** creating more realistic nature scenes with Scatter Altitude.
- You can now **have scattered items look in the same direction** quickly and easily using Scatter Look At.

Simulations

- **Add an extra layer of action to your scenes with smoke, fire**, and other Pyro simulations directly in Corona for Cinema 4D.

Improved workflow

- Corona 11 for 3ds Max comes with a set of handy scripts called Corona Power Tools, **designed to speed up and replace repetitive and tedious design adjustments.**

Other improvements

- **Improved Normal / Bump filtering reduces the loss of detail in those channels** that can come with using a smaller render resolution or moving an object further away from the camera.
- **With the new Intel Denoiser**, you get improved results and it can run on CPU or NVIDIA GPU.
- **Users can now take advantage of the color management options** offered by the latest versions of Cinema 4D and 3ds Max.
- **Improved Lister in Corona for Cinema 4D.**

Why should users choose Corona?

- Corona offers the most streamlined, simplified UI so that users can be artists rather than software technicians.

- The Corona VFB's user-editable tone mapping stack reduces or removes the need to use external image or video editing software.

- Artists can manipulate different lighting scenarios interactively, even after rendering, without having to render again. By using the Corona Image Editor, they don't even need to open their host DCC.

- From a single render, users can simulate many light environments and instantly tweak specific parts of their scene.

- Access to Chaos Cosmos, the Corona Material Library, Corona Material presets, and compatibility with Chaos Scans means users can jump-start their scenes with assets and materials.

- Chaos Scatter is a powerful way to distribute random or organized content in scenes without the need to purchase additional software.

- Users can easily avoid seams in their textures with texture randomizations and Triplanar mapping.

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Create your world.