## Index

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<b>0-9</b> Page: 2D Textures Page: 3D Textures Page: 3Delight ROP image2020-10-21_12-30-33.png The 3Delight ROP The options defining the objects to render, rendering quality and image layers to produce are all contained as attributes of 3Delight Render Settings nodes. Outside the Houdini Render Settings window Create							ers to	A Page: AOV Selector image2020-10-21_12-37-38.png The AOV Selector. AOV Selector Custom Variables If you have custom shaders that produce other output variables, it is possible to expand the list of offered AOVs in the selector by providing a customAOVs.txt file in your 3Deli Page: Atmosphere image2020-7-3_21-23-24.png The 3Delight Atmosphere Shader To use Atmosphere, select it under Scene Elements, in the 3Delight ROP. 3Delight Atmosphere
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Page: Dis	emo Sce	enes ent Blend						E Page: Environment Page: Environment Variables Upon installation, there are no mandatory environment variables to set for the proper functioning of the plug-in. The following environment variable can be used when developing your own OSL shaders. Environment Variable Description _3DELIGHT_USER_OSO_PATH

F Page: Facing Ratio FacingRatio.png The Facing Ratio Utility shader. Facing Ratio Page: Flakes image2020-7-3_16-49-59.png Flakes 3D Texture Shader Flakes Page: Float dlFloat_Houdini_UI.png Float Page: Float Blend dlFloatBlend_Houdini_UI.png Color Blend Page: Float Math dlFloatMath_Houdini_UI.png Float Math	G Page: Geometry 3Delight for Houdini supports all Houdini geometry apart from NURBs. Geometry loading from BGEO, Alembic, USD is supported as well. Packed primitives and all flavours of geometry instancing (SOP, OBJ, instancefile) are supported and rendered using 3Deli Page: Glass glass_houdini_ui.png The full UI of the glass material. Only two main components: reflection and refraction, supplemented by a physically accurate thin-film interference and volumetric rendering aDeliath Class
H Page: Hair And Fur Hair & Fur Material.jpg 3Delight Hair and Fur shader. 3Delight Hair & Fur Page: Handling of Textures Handling of Textures Page: Houdini Compatibility Table below shows the Houdini version that is supported from specific 3Delight version. Download link are provided for the Windows versions of Houdini. Blue Field Version not supported. 3Delight Version Houdini Version 19.5 19.0 18.5 18.0 2.9.38 19.5.	rendering. 3Delight Glass  Page: Image Layers (AOVs) Image Layers Overview image2020-10-21_12-35-50.png The Image Layers group Image Layers (AOVs) List The second section of the Image Layers group is use to specify the list all the layers that will be generated during the rendering process (subject to the s Page: Index Page: Installation Installing 3DelightNSI consist of downloading the package (available here https://3delight.com/download) and running the installer. Once this is done, re-starting Houdini will make 3Delight available as a renderer. System Requirements Houdini versions: 17 Page: Introduction houdini_01.png 3Delight for Houdini is a flexible and easy to use rendering plug-in for SideFX's Houdini. It leverages the power of 3DelightNSI in support of the most demanding rendering pipelines. Here is an overview of the main components in 3Delight fo
J	К
L Page: Layered Material image2022-3-9_11-26-59.png The 3Delight Layered material 3Delight Layered Page: License Installation License Installation Page: Lights 3Delight for Houdini relies on Houdini's standard lights. This means that you use the same manipulators and parameters that you are used to. You can expect a very close lighting to Mantra's renders. Some of the parameters are not supported (she as Shadow	<ul> <li>M</li> <li>Page: Materials</li> <li>Page: Metal</li> <li>Metal Material.jpg 3Delight Metal with its four main sections: Coating Layer, Base Layer, Thin Film layer and Bump. Base layer allows for tempered (thin-film) metal simulation. The default values of the metal are these of copper. 3Delight Metal Included P</li> <li>Page: Multi-Light image2020-10-21_12-39-7.pngThe Multi-Light section of the Image Layers group of settings. Multi-Light An example of how this feature can be used is detailed in Multi-Light Rendering. Turning on the multi-light value will render all layers with each of the</li> </ul>
N	<ul> <li>O</li> <li>Page: Object Attributes</li> <li>3Delight adds some attributes to Houdini's geometry and transforms. These attributes allow to conveniently toggle</li> <li>3Delight features on a per-object basis. To control some of these attributes on several objects at once, please refer to Set-Based Attributes</li> <li>Page: Open VDB</li> <li>Using Open VDB assets with 3Delight for Houdini requires a geometry node with 3Delight vdbVolume shader assigned to node's material's attribute and inside this geometry node we should place a File node with the corresponding VDB file name that we want on</li> <li>Page: Output image2020-10-21_12-34-18.png The Output group The Output group of rendering options allows you to specify what you want to be outputted as a result of your rendering command. It can be an image on your screen (viewed through 3Delight Display), an image sa</li> <li>Page: Overrides * Overrides Intro image2020-9-21_3-21-55.png 3Delight's Overrides render settings. * Overrides</li> </ul>

Page: Prelit Workflow         Composed Image Prelit_Composed.jpg HDR Background Plate         BG_3_16-9_hd.jpg Rendered AOVs prelit_AOVs.jpg Scene         Geometry matching_geometry.jpg HDR 360 Environment         Env_panorama_360.jpg Sample Composition - Fusion         9prelit_composition.png Prelit Tag on Environm         Page: Primitive Attribute         AttributeRead.PNG The Primitive Attribute shader. This node is         meant to read attributes that are attached to the underlying         geometric primitive, commonly referred to as primvars. Name The         name of the attribute to read.         Page: Principled         houdini_principled.png 3Delight Principled Material 3Delight	<b>Q</b> Page: Quality The settings in this section directly affect image's quality. By definition, image quality settings also affect image rendering speed. image2020-10-21_12-31-51.png 3Delight's Quality render settings. Quality - Motion Blur Motion Blur Enables motion blur
R Page: Ramp ramp_houdini_ui.png Ramp Page: Random Color RandomColor.png Random Color Utility Shader Random Color Page: Random Material random_material_ui_houdini.png The 3Delight Random Material. 3Delight Random Material Page: Remap Remap Page: Rendering with 3Delight 3Delight renderings can be launched and stopped through the 3Delight Shelf, the 3Delight menu, or in the Render Settings themselves. Starting a rendering with a specific Render Settings will always set it as active in the Houdini Render Settings window. S Home page: Root	<ul> <li>S</li> <li>Page: Scene Elements</li> <li>The Scene Elements group of rendering attributes specifies which scene objects will be used for rendering. A particular render can include only a subset of the scene's objects and lights. This could be useful to render the scene in layers (foreground, bac</li> <li>Page: Shaders</li> <li>3Delight for Houdini provides a rich variety of shaders, including materials for physically plausible shading, high performance volume shaders and utility nodes. They are all efficient OSL based shaders. For custom materials, users can define their own OS</li> <li>Page: Skin houdini_skin.png The 3Delight Skin attributes Skin</li> <li>Page: Sky</li> <li>Sky-light.jpg The 3Delight Sky Environment Shader We support Houdini's sky light 3Delight Sky</li> <li>Page: Solid Ramp solid_ramp_houdini_ui.png Solid Ramp</li> <li>Page: Stand-in ROP</li> <li>3Delight Stand-in ROP is used to export your working scene geometry and the shaders attached to them on an NSI file. image2020-11-17_16-26-13.pngYou can export one file or a sequence of files using the buttons on the ROP ui. Also you can select the object</li> <li>Page: Substance</li> <li>Substance.png 3Delight Substance</li> </ul>
T         Page: Texture texture_houdini_ui.png Texture         Page: The 3delight.config File The 3delight.config File         Page: Thin thin_houdini_ui.png The 3Delight Thin material. 3Delight Thin         Page: Toon Toon Material.jpg Toon         Page: Triplanar houdini-triplanar.png image2020-9-17_19-21-5.png The input points of Triplanar node (color_texture, float_texture and height_texture) are File-Image data type and does not require any node connection to them, so they have to be ignored from this aspect.         Page: Tutorials 3Delight for Houdini Tutorials by Lewis Taylor (Vimeo). https://vimeo. com/tinyhawkus https://vimeo.com/tinyhawkus 3Delight For Houdini Tutorials by Right-Brained Tutorials (Youtube). https://www.youtube. com/playlist?list=PLyH0C6d0_ZdTYoPGP_qmgAY7CG2f7HX5t         V         Page: Viewport ROP The Viewport ROP starts a 3Delight IPR render directly into the viewport, à la Solaris. The Viewport ROP icon in the toolbar is a quick and easy way so start and stop such an IPR render. One can also create the ROP manually and start the render from ther	U Page: Utility Page: UV uv_houdini_ui.png UV
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