## Which licenses are needed to run which product?

The following table illustrates shows the license string required for each product type: *Note*: Renderer is Mantra renderer.

License Category	Product Name	Product License String	Default Qty
Commercial	Houdini FX	Houdini FX	
		Renderer	
		Karma Renderer	
	Houdini Core	Houdini Core	
		Renderer	
		Karma Renderer	
	Houdini Engine	Houdini Engine	
		Renderer	
		Karma Renderer	
	Houdini Engine for Unity/Unreal	Houdini-Engine-PlugIn-Free	
Limited	Houdini Indie	Houdini Indie	
		Renderer (Non-Commercial)	
		Karma Renderer (Non- Commercial)	
Commercial		Houdini Core Renderer Karma Renderer Houdini Engine Renderer Karma Renderer Houdini-Engine-PlugIn-Free Houdini Indie Renderer (Non-Commercial) Karma Renderer (Non-Commercial) Houdini Engine Indie Renderer (Non-Commercial) Karma Renderer (Non-Commercial) Houdini Engine Indie Renderer (Non-Commercial) Houdini Education Houdini FX (Non-Commercial)	
	Houdini Engine Indie	Renderer (Non-Commercial)	
Educational	Houdini Education	Houdini Education	
		·	
		Renderer (Non-Commercial)	1

		Karma Renderer (Non- Commercial)	10
	Houdini Engine Education	Houdini Engine Education	1
		Renderer (Non-Commercial)	1
	Ü	Karma Renderer (Non- Commercial)	1
	Houdini Apprentice	Houdini FX (Non- Commercial)	1
Non- Commercial		Renderer (Non-Commercial)	1
		Karma Renderer (Non- Commercial)	1

## **About Houdini product keystrings**

A new keystring begins at the keyword: SERVER, LICENSE, UPGRADE or EXTEND.

The **SERVER** keystring is a keystring which authenticates the computer to run Houdini licenses.

A Houdini product keystring begins with the word **LICENSE**. The LICENSE keystring has an ID associated to it called the **License ID**. This is how we track the product, quantity, version, expiry, and support status of the license.

Action keystrings begins with **UPGRADE** or **EXTEND** or **CHANGEIP**. These are applied to a currently installed License ID (or, product keystring).

When you return a license (/faq/question/how-do-i-return-my-licenses/), you must return the License ID itself. This will return the product keystring.