

Iray Worlds-Plus User Guide

DEFAULT SCENES

These are very simple and easy to understand, the 1st is empty and the others have different types of trees, or skies added. These are either beginning scenes, or scenes to build on. Simply click on it and there is your scene.

SCALE

Note:- "Iray Worlds-Plus" is much smaller than the original "Iray Worlds SkyDome" for a number of reasons, just one being its impossible to cover a large area like the original Iray Worlds with 3d modeled grass and position scene trees and so on. But if you want to scale it up to the size of the original for some reason then select the IR-Base and hit the first scale icon "4 Plus SkyDome to Legacy" and that will bring it up to the original size.

Note:- If you do this, make sure you use the 1st empty Iray worlds-Plus icon called "1 SkyDome-Def" and then scale it. Don't scale it with trees and ground cover in, it will cause the trees and everything else to scale too..."The land of the Giants!!"

Note:- If you have a scene setup already with trees etc in it and decide to scale it, then unparent the extras like plants, trees etc...and just scale the Base, Dome, Skylight and Sun, then it should work fine. Mostly tho, you wont need to do that.

RENDER RATIOS

Below the Scale icons are 3 Render Setups, all of these are set up for Iray but mainly change the ratio of the view. The 3 that are provided are the most common for most types of rendering. You will note that in the Iray Worlds-Plus Parent Directory there are 12 sub folders. We will give a brief explanation of what they are for below.

1 IR Scenes

This folder contains 6 preset scenes, these are fully developed scenes that can be used. They are different than the 6 default scenes that are the main directory in that they are far more developed. So the ones in the main directory are more like a starting point, and these scenes are like a finished scene that you could add a house, castle, people to etc. Of course you can build your own scenes from scratch as well.

2 Add IR-Lights

This folder has 2 basic lights that are invisible, these can be used to light parts of the scene. Several of them can be loaded into the scene, so you can have multiple Sphere Lights and Tube Lights as well. The Sphere lights are quite large, so if you need to they can be scaled down, the tube lights are much smaller and can be used for lighting the side of a tree for example. These lights can also be made visible and invisible by selecting the light and double clicking on the last two icons. You can change the color by selecting the light and going to Surfaces/Emission/Emission Color.

2 IR Trees Single

This folder contains 7 Trees that are 2D/3D, that is they are not totally flat, but have a modeled irregular surface. This gives a very realistic appearance without using too many polygons in the scene. These trees were originally designed some time back and they have been re designed and set up for Iray Worlds-Plus. They are best used placed slightly in the background, not totally up front, the 3D trees are used in the foreground.

2 IR-Tree Clusters

This folder contains 2 sets of the same type of trees, but in large clusters, you can use these to fill your scene with trees very quickly. Again these are best used in the background or a mid part of the scene.

3 IR Trees-3d

This folder contains nine trees that can be used in the foreground, some of these icons contain a group of trees, for example the Palms contain 6 palms in a group, you can delete the ones you don't want and use whatever fits the scene the best. In this IR Trees-3d folder some trees are more detailed than others and if you want real close ups its possibly best to use the highly detailed ones. The most detailed are the "1 Mn-Tree, 2 BC-Trees, 7 WW-Tree-Dense, 9 Cyprus-Trees" but any of the Trees in this folder can be used for close ups if you wish.

4 IR-Ground Cover

This folder contains 13 types of ground cover including grass, plants, weeds, rocks etc. Basically add these to your scene and place them where you wish. Only one item needs some explanation, the Grass Cycle needs to be understood. Basically its a circular multilayered and multi UV'd geometry, when you first put it in a scene, it wont look like much. To understand how to use it first look at the pre-created scenes in the "1 IR Scenes" folder. But to further explain ..select the "IR-Grass-Cycle" then select "Parameters" and go to "Morphs" you will then see 15 morphs These morphs can make the grass look great from almost any camera angle, the main rule is keep your camera low, but thats a given anyway, if its too high you will not really need grass from an artistic point of view. If you dont know what morphs to use, go to the "Morphs-SetGrass" in the "5 IR Grass-MATS" folder and this will give you a set of morphs that should make the grass look very realistic.

5 IR Grass-MATS

This folder contains 9 grass MATS and one multi morph setup icon we just spoke about. First select the "IR-Grass-Cycle" and apply the any one of the MATS for a different grass appearance, and you can apply that "Morphs-SetGrass" icon at the bottom for a good set of morphs applied all at once to make the grass look ultra realistic, or you can manually tweak the morphs as well.

6 IR Sky Emission

This folder contains 6 Sky Luminance MATS from Bright to dark, and 5 Skylight Luminance MATS as well, remember the Sky as well as the Sun throws out light, the Sky is a type of secondary light and affects the scene depending on the type of sky used, so this is just like in the real world. These MATS command the sky to throw out a lot of light or not much light, generally when the sky throws out a lot of light it will look very bright and almost dark when its throwing out very little light. If you want to know how much light the sky throws out simply load the "1 SkyDome-Def" Scene and turn of the "IR-Skylight and the IR-Sun" you will see that the scene is still fairly well light, thats the sky doing that. Now go back to the "6 IR Sky Emission" folder and apply the 6th icon to the sky "6-SkyDome-0 [Dark]" the scene will now be dark.

You can also experiment by leaving the default sky dark and now turn on the sun, you will now see what the sun light does, of course that changes according to the suns emission color and position, the point here is to understand how all these different main light sources affect your scene. Now finally in that default scene leave the sky dark, and also turn off the Skylight and Sun...your scene should be dark. Now turn on the Skylight and hit the Seventh Icon "7-SkyLight-2Mil [Bright]" you will now see how much the Skylight affects the scene as well, now go to Emission and change the skylights Emission Color to a bright color, maybe a blue or

6 IR Sky Emission (cont.)

green, you will now see that the whole scene takes on that color just by using the Skylight, and if you don't need to use it simply disable it or go to the 11th icon and that will make the skylight dark again.

By doing these experiments you will understand how "Iray Worlds-Plus" harnesses the power of Iray in so many different ways to create endless possibilities of lighting from ultra realistic to high fantasy. Light is singularly the most important factor in making a 3d scene look special, bad lighting creates a very flat looking 2d/3d image with not a lot of character whereas good lighting can make a fairly ordinary scene look great.

6 IR Sky MATS

This folder contains 9 different Skies and variations, simply select the "IR-Skydome" and apply one of them for a different sky. If you already have the "Iray SkyDome" and/or "Super PAK1" you can access to even more skies to apply to the "Iray SkyDome". They are completely compatible.

7 IR Sun-Positions

This folder contains 25 different Sun positions, simply select the IR-Sun and apply one of these sun position presets and the sun will move to that position accordingly. You will quickly see how it affects the light and shadows in your scene.

8 IR-Sun Emission+Color

This folder contains 27 files that can change the suns brightness (Luminance), Color and Visibility. So first select the IR-Sun and at the very top there are 2 Icons to either make the sun visible or invisible (it wont affect the light the Sun throws out) there are also 2 sets of Luminance Icons, standard ones up the top and more extreme ones at the bottom of the folder, there are also icons that change the suns color to further affect the scenes appearance.

9 IR-Adjusted MATS

If you don't have the original "Iray Worlds Skydome" and the "Iray SkyDome Super PAK" you can ignore this folder, because it wont work. If you do have those products installed then this folder contains 2 folders for Ground and Water textures to be applied to the IR-Base, these tile the textures that are in the original "Iray SkyDome, Super PAK 1" differently so they are completely compatible with the new Iray Worlds-Plus setup. Now one final thing that needs to be explained.... Select IR-Base, then select Parameters, then select Horizon-Morphs. You will now see 15 morphs for controlling the Horizons (there are now 5 Horizons).

The biggest changes in this new Iray Worlds-Plus is

1. Its smaller, but can easily be scaled to the original size.
2. It contains a Skylight for more control over the overall lighting in the Scene
3. It has more Horizons. There is a very good reason for all these additions, they are very powerful going forward. But right now the 5 horizons are not really in use, I have set it up so it operates like the original 2 Horizon "Iray-SkyDome". However if you play with these morphs you will get an idea of what they can do going forward.

NOTE: If you experience any kind of computer slowdown when setting up using this product then switch the main preview window to "Texture Shaded" while you are moving things around and then back to "Nvidia Iray" to check it from time to time until you render it.

Ok thats it for explaining how it all works, its very simple actually. Just read this explanation a bit and experiment a bit and you will be creating great scenes in no time.

Happy Rendering
Magix-101