10 Important Tips for Realistic Images in Twinmotion

The tips come from the 3 key system. The 3 key system refers to the three key elements that make or break a CGI. These keys are the bread and butter of high quality visualization which is explained more in the eBook 'How to add realism in Twinmotion," Just like V-Ray".

Key 1

1. The Model Detail

The 3D model is part of the puzzle to be able to make an image look realistic. All it takes to make your image look less realistic is if something in the model is of low quality. This is especially true for models closer to the camera. For example: If you have a camera view in the living room close to the sofa, then this sofa needs to be an extremely good detailed 3D model. This means the renders Software is able to create a great ambient occlusion pass/map, which helps the realism immensely.

2. The Model scale

Other 3D model mistakes can be furniture size. Let's say you have some great detailed chairs around the kitchen table but the scale is wrong, like it is too large or too small. Again our eyes will easy pick that up even if the rest of the image looks amazing.
You can easy check this by adding a sitting 3D person. Twinmotion people are designed, when in sitting position, to be at the correct most common height. For example if you add a person on a Sofa or chair and the feet are in the floor or hover above the floor, then the scale of your Sofa or chair is wrong. Of course if the feet are only a touch above or below then the scale should be fine and you can adjust the person slightly in scale.

3. The Model surroundings

Roads and driveways are usually another "give away" when looking at an image that lacks realism. Make sure you add detail there too: detailed curbs, road marking, add the odd detail like a small crack or some stains with the decal object from the TM library.

Key 2

4. The Textures

The right texture will enhance the realism immensely. This is because a texture that is too large, small, not seamless, repetitive, low resolution or not correct in some way will pop out in the image because you are drawn to it.

5. The Textures Size

When you add textures make sure they are of decent quality. You need a minimum of 2K texture size. I do not recommend going too large. 6K sounds great but it is rarely needed and only increases your file size.

Similar to the 3D modelling, if you get close to an object with the camera it is very important to have a larger texture size. For example, if your camera is next to a brick wall in a living room, make sure the brick texture has at least 4K resolution.

6. The Textures "Look"

With the look I mean how a texture looks when repeated along the X, Y or Z direction. A common "fault" is repetitive textures. This REALLY stands out and all the effort you put into that visualisation is undone with a repetitive texture! A repetitive texture is when certain parts of the texture repeat over a short distance in X, Y or Z direction. For example, some brick textures can have a certain small darker or lighter area, or a dark dot or other markings. If you repeat this texture, especially over a larger surface this small darker or lighter area on the texture will clearly show up as repetitive.

Key 3

7. The Scene Lighting

Lighting up the scene correctly is the most crucial part. Even if you have a great 3D model and great textures, without the right light, the scene or image will look flat. I recommend spending 30% of the time on your 3D model, 30% on the textures and 40% on the scene lighting.

8. The Primary Light

It is important before you start your lighting of the scene to determine the primary light. The primary light will determine where the main shadows fall.

9. The Secondary and Fill Light

Place and work on the lights AFTER you have determined the primary light. If the primary light changes so do the secondary and fill lights, they all go hand in hand to create a realistic image.

Conclusion - The 3 Key System

The conclusion is that you need, what I call, **The 3 Key System** to create a successfully highly realistic 3D image. These 9 points are only the "tip of the iceberg". There is a lot more to it when creating a high end realistic image.

If you are keen to add this extra knowledge to produce your next image in Twinmotion, check out the eBook

HOW TO ADD REALISM IN TWINMOTION – JUST LIKE V-Ray