Tips: Beam path optimization

The “beam path” is how the laser travels in drawing out all the lines in an image. There are two factors that control the beam path:

- The order in which objects are drawn in 3ds Max. Lasershow Converter MAX always processes objects in this order.
- Within objects, the drop-down list **Beam path for this object** (found in the Object point spacing panel) controls how the beam travels.

Controlling the beam path within an object

There are four settings for how the beam travels when drawing an object:

- **Keep path consistent**
- **Circular optimization**
- **Linear optimization**
- **Aggressive optimization**

Pangolin has spent a long time to develop the path generation algorithms employed in Lasershow Converter MAX. Every attempt has been made to make the default[1)] option, **Keep path consistent**, work well for most objects. Therefore it is recommended that you leave this selected most of the time.

However, in some animations you may notice a strange flicker or other visually disturbing effects. This can be an indication that the path is substantially changing from frame to frame. In such a case, try the **Circular optimization** option. This has some additional rules to try to enforce beam path consistency. You can use this even if the object is not circular or curved.

For large meshes like mountainous terrains, you might notice that the beam path is rather random. It may jump from one side of the screen to the other while drawing different parts of this. On something like this, try the Aggressive optimization option. This will keep the beam path as short as possible. Note that when **Aggressive optimization** is selected, it is possible that the beam path will change from frame to frame which is undesirable. However, if this mountainous terrain is just one part of a scene with many other objects, this beam path change may be completely unnoticed.

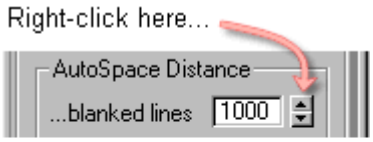
See Also

- Tips: Color and path consistency

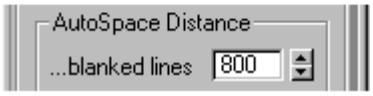
Go Back

1)

For any number value, you can return to the Lasershow Converter MAX default value by right-clicking on the up/down arrow:



... to return to default value



For non-numeric values, such as option buttons, check boxes, and drop-down lists, you cannot automatically return to the Lasershow Converter MAX default values. However, the pictures in this help file usually depict the default values, so you can reference the appropriate picture and manually set the default value.

From:
https://wiki.pangolin.com/ - **Complete Help Docs**

Permanent link:
https://wiki.pangolin.com/doku.php?id=tools:lcmax:tips_beam_path_optimization

Last update: **2021/05/02 23:37**