Tips: Scan speeds and LC4D

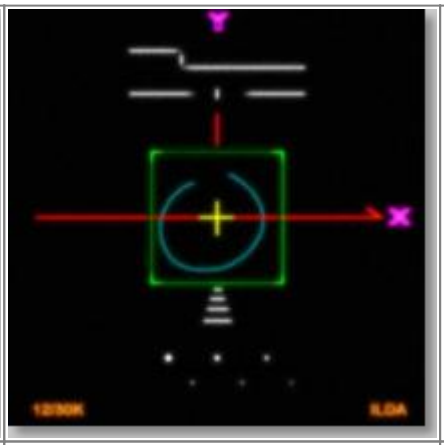
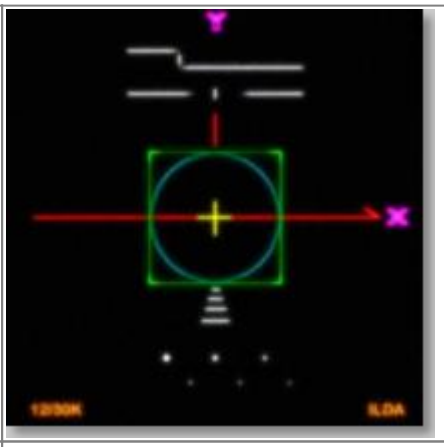
Lasershow Converter 4D's default[1] settings assume that:

1. your scanners are tuned to the ILDA 30K standard, and
2. you are scanning at an output rate of 30,000 pts/sec

If you are using differently-tuned scanners, or a different scan rate, then you need to make some adjustments. But first, some background.

Scanner tuning vs. scan speed

The ILDA 30K tuning standard says that your scanners can show the ILDA Test Pattern in a specific way (circle touching the sides of the square), when the ILDA Test Pattern is displayed at 30,000 points per second:

		
Scanning too slow: Circle outside of square	Scanning too fast: Circle can't touch square	Scanning correctly: Circle touches midpoint of square

The ILDA 30K speed is used when tuning. **It does not mean that all frames must be shown at 30,000 pts/sec.** Now, some people may adopt a scan speed of 30,000 points per second. In fact, this is Pangolin's suggestion. But you do not have to do this.

So there are two cases: You tune and project at 30,000 points per second, or you prefer other speeds for tuning and/or projection.

Base recommendation

Pangolin suggests that all BEYOND users be using at least ILDA 30K-tuned scanners, AND that images be projected at the same scan rate that they're rendered in Lasershow Converter MAX. This is usually 30,000 points per second.

Lasershow Converter MAX's default settings follow this recommendation. You can find these default settings by looking in the picture on the Object Point Spacing topic page.

Better scanners give better results

Lasershow Converter MAX gives the best results if your scanners are tuned perfectly, and the bearings are in good shape. Please make sure that the low frequency damping and high frequency damping are adjusted properly for “critical damping.” Pangolin recommends ScannerMAX Saturn-series scanners for best results.

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1)

There is no special “Reset” function in Lasershow Converter 4D for returning to default values. Once you changed the settings you can return to the previous values simply by using Cinema 4D's **Undo** function.

If you make changes in the **Object Tag** and you find the results unsatisfactory, simply delete the Object Tag from the **object manager** list and apply a new Object Tag. The tag can be removed by clicking on the tag icon and press the <Del> key.

In addition, the **Render Settings** can simply be reset by selecting the Lasershow Converter 4D in the **Post Effects** dialog of the Render Settings menu and choose **Remove Selected**. Reselecting Lasershow Converter 4D enables a new post render effect with default values.

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