Lasershow Converter MAX *software*
Create laser shows using standard computer graphics

*L*asershow Converter MAX lets you turn standard computer graphics, created using AutoDesk *3ds Max* software, into sophisticated laser images and animations. You can make anything from a simple logo, to a complex animated fly-through of a city.

Laser graphics are vector graphics

Laser projectors do not work like TV or video. Instead, the laser's light is moved around by two tiny mirrors. The mirrors follow X-Y coordinates just like a connect-the-dots drawing. This creates cartoon-like outlines -- vector graphics instead of TV/video raster graphics. The pictures at right show a space station and a cartoon head converted from *3DS Max* (left) to laser (right).

Automatically convert from 3ds Max raster, to laser vector graphics

The magic of *Lasershow Converter MAX* is that it uses highly sophisticated techniques which have been optimized for laser's special requirements. This auto-conversion has many benefits:

- It is easier for most computer animators to work in *3ds Max*, than to learn a new, laser-only software system.
- Thousands of pre-built objects are available. You don't have to "recreate the wheel".
- The results are super-high quality, with features such as true hidden line removal and accurate perspective, as well as lighting, shadows and textures.
- You can create multimedia shows that mix video and laser-overlaid highlights, from the same *3ds Max* file. For example, one object in a scene could be rendered in video as a "hole"; the laser then renders only this object. At the show, the laser object glows in a way that is unachievable with conventional video.

Quick conversion

Working with lasers within *3ds Max* is fast and natural. It typically takes less than one second to convert a computer graphics frame into laser graphics. Hidden line removal and object occlusion ("masking") is automatic. An entire laser animation can be quickly stored, then played back in real-time to check object motion.

Once laser frames are rendered in *3ds Max*, they can be saved to LD2000 or ILDA format. For performance playback, LD2000's *Showtime* program lets you add additional laser graphics, beams, abstracts and events such as DMX lighting cues.

For multimedia blending video and laser, *Showtime's* unique video sync capability ensures that the laser overlays are always exactly synchronized with their corresponding video frame.
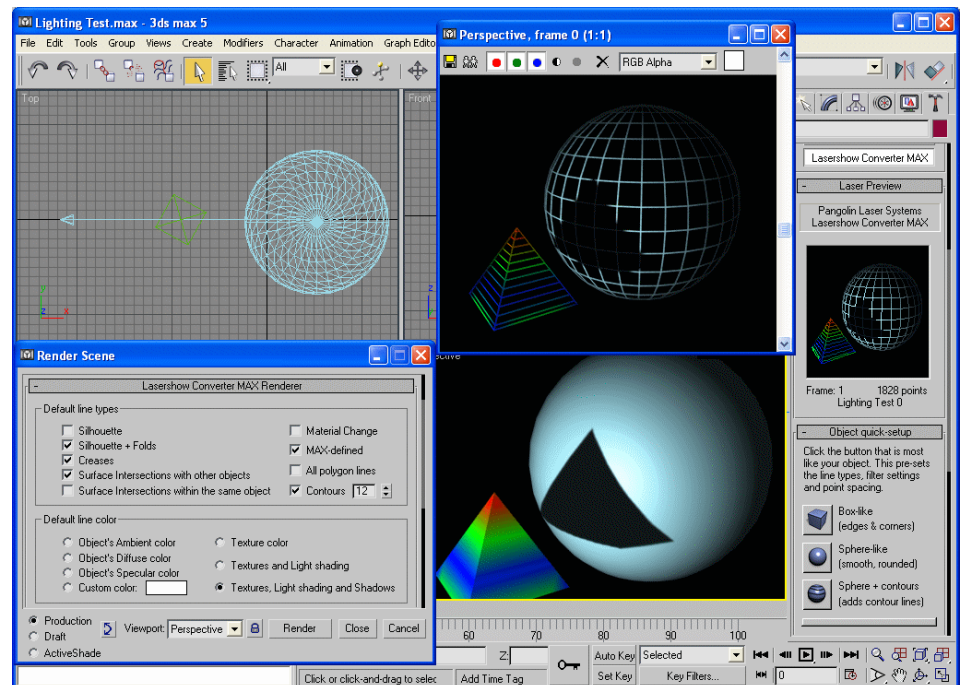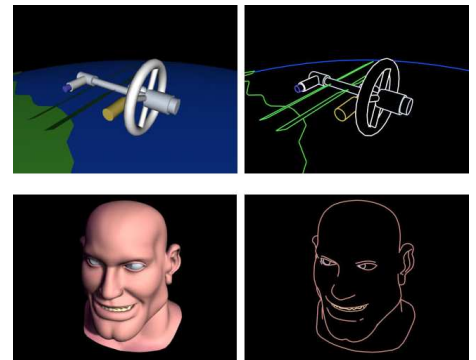
This 3ds Max scene has a multi-colored pyramid casting a shadow on a sphere (lower window). Since laser vector graphics consist only of lines, Lasershow Converter MAX turns this into a multi-colored pyramid of lines, plus a gridded sphere. Note that the colors, lighting and shadows are perfectly converted.