

Landscape Maker

Landscape Maker is a utility tool designed to provide an easy means to create complex three dimensional surface objects in the *trueSpace* ASCII file format.

To Learn more about how to use this tool, click on the topics below.

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LOAD Command

The LOAD Command will display a dialog box that will allow the user to select and load a Windows Bitmap to be used as the Source file.

The Loaded bitmap will be displayed in the *Landscape Maker* viewing area. If the bitmap is larger than the viewing area, it will be clipped to the size of the viewing area. To see the entire picture, click on the bitmap in the viewing area and drag it until the desired portion of the picture is contained in the viewing area.

The entire bitmap is used when Generating the Object file whether or not it is completely displayed in the viewing area.

The LOAD Command can be initiated by either clicking on the LOAD button or selecting the LOAD option under the FILE drop down menu.

GENERATE Command

The GENERATE Command will display a dialog box that will allow the user to select a filename for the Object file that is to be generated. *Landscape Maker* will then generate the Object file.

The GENERATE function is not enabled until a Source File has been Loaded.

The GENERATE Command can be initiated by either clicking on the GENERATE button or selecting the GENERATE OBJECT option under the GENERATE drop down menu.

ATTRIBUTES Command

The ATTRIBUTES Command will display a dialog box which will allow the operator to view attributes of the Source and Object files.

The Source file box will be empty if no Source file has yet been loaded.

The Object file box will be empty if no Object file has yet been generated or the *Landscape Maker* settings have been changed since the last generation was done.

The ATTRIBUTES Command can be initiated by selecting the ATTRIBUTES option under the FILE drop down menu.

SETTINGS Command

The SETTINGS Command will display a dialog box that will allow the user to set the control settings for the *Landscape Maker* tool. These settings will affect how *Landscape Maker* will interpret the Source file and generate the Object file.

The SETTINGS Command can be initiated by either clicking on the SETTINGS button or selecting the SETTINGS option under the GENERATE drop down menu.

Click on the settings topic below for further information.

[Maximum Height](#)

[Vertex Density](#)

[Color Filter](#)

Maximum Height Setting

The Maximum Height control setting will set the Z axis value of the vertex that is assigned to a white pixel. This setting has a range for 0 to 10 grid Units.

Black pixels will always receive a vertex Z axis value of 0.

Gray Scale pixels will receive a vertex Z axis value that is scaled between 0 and the Maximum Height value based on the relative amount of whiteness of the pixel.

For the other color scales, pixels will receive a vertex Z axis value that is scaled between 0 and the Maximum Height value based on the relative amount of the primary color of the selected filter.

Vertex Density Setting

The Vertex Density control setting will set the total number of vertices that will be created for every inch of the bitmap. This setting has a range from 1 to 15 vertices per inch.

With a bitmap resolution of 75 pixels per inch, the maximum vertex density is 1 vertex every 5 pixels.

Color Filter Setting

The Color Filter control setting will set the type of color filter that is applied to the Source file bitmap prior to assigning the vertex Z axis value.

- **Gray Scale**
The Gray Scale mode will average together the color component values for the Red, Green and Blue colors of the pixel to assign the vertex Z axis value.
- **Red Scale**
The Red Scale mode will use only the Red component of the pixel color to assign the vertex Z axis value.
- **Green Scale**
The Green Scale mode will use only the Green component of the pixel color to assign the vertex Z axis value.
- **Blue Scale**
The Blue Scale mode will use only the Blue component of the pixel color to assign the vertex Z axis value.
- **Yellow Scale**
The Yellow Scale mode will average together the Red and Green components of the pixel color to assign the vertex Z axis value.
- **Magenta Scale**
The Magenta Scale mode will average together the Red and Blue components of the pixel color to assign the vertex Z axis value.
- **Cyan Scale**
The Cyan Scale mode will average together the Green and Blue components of the pixel color to assign the vertex Z axis value.
- **Auto Scale**
The Auto Scale mode will use only the greatest color component value (Red, Green or Blue) of the pixel to assign the Z axis value.

Source File

The Source File must be a standard Windows Bitmap graphic file with a resolution of 75 pixels per inch. The generated object will be scaled so that one Bitmap inch equals one *trueSpace Unit*.

Object File

The Object File is a *trueSpace* ASCII formatted file. The Object file contains all of the vertex, texture and face information created by *Landscape Maker*. The Object file can be directly loaded into *trueSpace*.

Units

Units refers to a unit of the *trueSpace* XYZ grid.

Vertex

Vertex refers to a point in the *trueSpace* XYZ grid. The X and Y coordinates are assigned based on the size of the Source file bitmap and the Vertex Density setting. The Z coordinate is assigned based on the corresponding bitmap pixel color and the Maximum Height setting.

Viewing Area

The viewing area is an area on the Landscape Maker main window where the loaded bitmap is displayed. This area only displays the bitmap for viewing. The bitmap can not be modified from here.

Red Green Blue

Red, Green and Blue color component values refer to the amount of Red, Green or Blue color in any pixel. Each of these three colors has 256 levels of intensity that, when mixed together, make all other colors.

Why Register Landscape Maker

Why should you register *Landscape Maker*?

Landscape Maker is not crippled in any way. The HELP utility is fairly complete and *Landscape Maker* is simple enough to use anyway so there are no manuals. There are also none of those annoying nag messages. (*I just hate those, don't you?*).

There are really only two reasons to register this software. First, if you plan on continuing to use *Landscape Maker*, it is just the right thing to do. Second, it will show your support for the continued development of this line of automatic object generators.

Waiting in the wings I have a *Tree Maker* tool that I am working on. Still on the drawing board I also have a *People Maker* tool being designed. Weather or not I complete these tools and release them will largely depend on the response I receive from *Landscape Maker*. Basically, if nobody seems interested, then I won't bother with it. But, if you have ever spent hours trying to get objects like landscapes, trees or people to look just right, you will certainly appreciate this tool and the others as well when they come out. If you would like to see a sample of the early versions of *Tree Maker* and *People Maker*, just view the DEMO.BMP file included with this package. If you would like to see these tools become available, let me know by registering this one!

Well, that's it for my registration pitch. Enjoy this tool and have fun creating your masterpieces. If you do create any works of art with the aid of this tool, upload them! I'd love to see what you came up with.

Sincerely,
Kevin O'Toole

[How to Register Landscape Maker](#)

How to Register Landscape Maker

Its easy to register *Landscape Maker*.

To register this software just send \$5.00 to the following address.

**Kevin O'Toole
260 Old Village Rd
Columbus, OH 43228**

You should include your full name and address and your on-line address. The registration code will be sent to your on-line address via e-mail or, if you prefer, it can be sent to your home address via US Mail. Just specify which you would prefer.

Any comments or questions on this tool can be sent to the above address or sent to my CompuServe address (75744,2633).

And as always, thank you for your support.

Suggestions

To get the best affect from *Landscape Maker*, I recommend the following:

Use full 24 bit color bitmaps for the source file. Avoid using dithering in the source file Bitmap. True color pixels will be more predictable and dither patterns can create a "spike" affect in the generated object.

How closely the generated object shape matches the source Bitmap is, of course, dependent on the ratio of vertices to pixels. An exact match will only occur with a 1-1 ratio. The best ratio the *Landscape Maker* has been set up to provide is a 1-5 ratio. This is the ratio that I felt provided the best balance between the object resolution and object size. A ratio of 1-1 would result in 75 vertices per Bitmap inch and could quickly result in a huge object file which could bring your computer to its knees. If you find that the 1-5 ratio is not enough resolution for you, try expanding your source Bitmap. If you double its size, you will also double your objects resolution.

Mapping your source file Bitmap onto your generated object produces an interesting affect. If your rendered object looks blocky, try Triangulating the object to improve its smoothness. You can also add a bump map to hide the blocky affect.

