

PlayStation Development Plug-ins

for LightWave 3D

Version 1.2(Intel,Alpha,SGI,Mac) May 1, 1997

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Installation:

1. Copy the plug-in files from the "PlayStation Development Plugins (Ver.1.2)" floppy to the hard drive of the computer containing LightWave3D. The plug-in directory is under the NewTek directory in "C:\NewTek\Plugins". (On a PowerMac, the directory is HD:\NewTek:Programs:plug-ins).

Copy the following files to Plugins\Modeler:

RSDLOAD.P	(loads RSD files from the modeler)
RSDSAVE.P	(saves RSD files from the modeler)

Copy the following files to Plugins\Layout:

TIMIMAGE.P	(loads and saves TIM image files)
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2. Registering RSDLOAD.P and RSDSAVE.P in the modeler

Start up the LightWave 3D modeler. Select "Add Plugin" from the "Objects/Custom" menu to call up a selector for registering plug-ins. Select "RSDLOAD.P" and "RSDSAVE.P" from the NewTek\Plugins\Modeler directory. When the plug-ins have been installed, an "RSD EXPORT (Ver.1.0)" entry should appear in the "Object/Custom" menu. No RSDLOAD.P menu will be displayed. The plug-in features will still be available after restarting the modeler.

To see how the plug-ins have been registered, use a text editor to open the "LWM.CFG" file in the NewTek\Program directory. The file contains plug-in registration definitions.

3. Registering TIMIMAGE.P in Layout

Startup LightWave 3D Layout. Select "Add Plug-ins" from the "Options" menu to call up a file selector for registering plug-ins. Select "TIMIMAGE.P" from NewTek\Plugins\Layout. Upon successful registration, a "24bit\_TIM(.tim)" menu will be added to the "RGB Image Format" pop-up menu. The plug-in features will still be available after Layout is restarted.

To see how the plug-ins have been registered, use a text editor to open the "LW.CFG" file in the NewTek\Program directory. The file contains plug-in registration definitions.

Using the plug-ins:

The RSD format is a geometry data file format used by the Sony PlayStation and consists of the following four file types: (.rsd), (.ply), (.grp), (.ply).

RSDSAVE.P allows objects created using LightWave3D to be saved as RSD files from the modeler. Choose "Custom" from the "Objects" menu and select "RSD EXPORT(Ver.1.0)". After a panel for selecting options, a file selector for saving files is displayed.

<Description of options>

Polygon Mesh:

Default	Saves to file without changing polygon shapes.
Triangle	Triangulates polygons before saving to file.

Surface:

Default	If a surface has the LightWave3D "Smoothing" option set, normal vectors of points are calculated. The degree of smoothing depends on the setting of the "Max Smoothing Angle".
Flat	Polygon surface normals are assigned to all points.

Material:

Texture Mapping	The UV parameters for texture mapping assigned by LightWave are calculated and output to a (.MAT) file. The image file must be in .TIM format. The (.MAT) file type will be "textured polygon" (TYPE T). The following mapping methods are supported.
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"Planar Image Mapping"  
"Cylindrical Image Mapping"  
"Spherical Image Mapping"

Colored Texture	"Surface Color" is output to the (.MAT) file in addition to the UV texture mapping parameters. The (.MAT) file type will be "textured polygon" (TYPE D).
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The (.MAT) file will be set to "no texture" (TYPE C) if the above options are not specified, if surfaces are not textured, or if the file is not in TIM image format.

<Other attributes>

The following attributes of material applied using "Surfaces" in LightWave3D will be automatically converted to the (.MAT) format.

"Double Sided"	Double-side polygons specified. The double-sided polygon bit will be set for the "Back Face" setting in the (.MAT) file.
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"Transparency"	If the "Transparency" value is > 0%, the semitransparency flag bit will be set to ON in the (.MAT) file.
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RSDLOAD.P is used to load RSD files into the modeler. To load an object, click the "Load" button from the "Objects" menu, and a file selector will be displayed. Select the (.rsd) file to be loaded from the list of files. RSDLOAD will automatically load associated (.ply) and (.grp) files.

NOTE: Because the PlayStation and LightWave use different methods for texture mapping, texture data cannot be restored from an RSD file. RSDLOAD will only load the (.ply) polygon data (excluding normal vectors) and (.grp) group data

into the modeler.

TIMIMAGE.P is used to load and save Sony TIM image files from LightWave. TIM texture files created using this function can be used for texture mapping in LightWave. Rendered images saved in TIM format can also be used to create background images for games.

The following TIM types are supported by TIMIMAGE.P.

Load:	4bit CLUT (look-up table)
	8bit CLUT
	16bit Direct color
	24bit Direct color
Save:	24bit Direct color

To load a TIM image file into LightWave, click the "Load Image" button from the "Images" menu to display a file selector. Select a TIM image from the list and click the OK button.

To save a rendered image as a TIM image file, click the "RGB image format" button from the "Record" menu. Select "PlayStation(.tim)" from the list and specify a file name for saving via "Save RGB images".

On using this software:

The use of this software is restricted to authorized domestic users of LightWave3D who have also signed a PlayStation Developers Agreement with SCE (Sony Computer Entertainment). The distribution of this software to third parties without the consent of D-Storm is prohibited. We do not accept responsibility for damage resulting from the use of this software.

Questions, bug reports, and requests regarding this program should be directed to the contact shown below (please use e-mail if possible).

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