

A C.G.Station Family Product

RenderStudio

Version 1.01
User's Guide Part II
Reference

STUDIO PON
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RenderStudio 1.01 for Windows™

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This user guide explains how to set up and use the RenderStudio software under the MS-Windows 3.1 English environment. This manual is written that you already know how to use MS-Windows and a personal computer. If you do not know how to use MS-Windows, please read manuals for MS-Windows before you start RenderStudio. To read/print this file, you need to set the display as VGA(16 colors).

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5. Reference

RenderStudio is a powerfull 3-Dimentional modeling tool. You can save as PRJ(proprietary file format of **RenderStudio**), and export polygon data as file, DXF(TM) or POV format, to exchange the generated 3-D.

At start up time of **RenderStudio** for Windows(TM), the menu bar, tool bar, and window tools are displayed.

In this chapter, there are three(3) sections as follows:

5-1. Menu Bar

There are nine(9) functional categories in the menu bar, File, Camera, Light, Object, Material, View, Render, Window and Options. Clicking any of the Menu Bar drops down a menu of related commands.

5-2. Tool Bar

There are three(3) categories in the tool bar, File, View and Render. Tool Bar provides quick and easy access to **RenderStudio** system.

5-3 Project Palette

This is a floating palette, which includes four(4) categories.

5-1. Menu Bar

There are nine(9) functional categories in the menu bar, File, Camera, Light, Object, Material, View, Render, Window and Options. Clicking any of the Menu Bar drops down a menu of related commands.

5-1-1. File Menu

File/Open...

Opens existing project files(Ctrl+O).

File/Close

Close the active project.

File/Save

Saves the active project(Ctrl+S).

File/Save As...

Saves the active project with a new named file.

You can save the project as **ModelStudio/RenderStudio** format(.prj).

File/Export...

Saves the active project with a new named file as POV-Ray format(.pov).

Note: When you need to export your 3-D model data as new file format other than POV-Ray, please send us your detailed written request with the complete format information. We might consider for it.

File/Export.../Setup(for POV)

Saves the active model as POV-Ray file format.

Setup(for POV)/Generate Comments

Inserts a comment into .POV file.

Setup(for POV)/Material Name Options/Append '_' char at top

Adds an underscore character in front of material names to avoid assigning duplicated material names with reserved words of POV-Ray.

Setup(for POV)/Material Name Options/Replace blanks to '_' char

Replaces space characters to underscore characters to avoid error in POV-Ray.

Setup(for POV)/Object Options/Append bounded_by statements (good for POV-Ray 1.0 users only)

Adds "bounded_by" statement onto each objects.

Setup(for POV)/Tolerance of Triangle:

To avoid "Degenerate triangle on line xxxx, ..." error, sets the tolerance.

Setup(for POV)/POV-Ray version

Sets POV-Ray's syntax version. Even if you saved as POV 1.0, you can render by POV-Ray 2.2 using "+mv1.0" switch or the "#version" directive. Please read the manual of POV-Ray. If you can not understand what it is. Please use exactly matching version with your POV-Ray version.

File/Exit

Quits RenderStudio(Alt+F4).

5-1-2. Camera Menu

Camera/Camera/Move

Moves the position of the camera(viewer).

Camera/Camera/Rotate Around Target

Rotates the position of the camera(viewer).

Camera/Camera/Distance to Target

Moves the position of the camera(viewer) with fixed angle between the camera(viewer) and the target.

Camera/Camera/Spin

Sets the tilt.

Camera/Camera/Change View Angle

Changes view angle.

Camera/Target

Camera/Target/Move

Moves the position of the target.

Camera/Target/Rotate Around Target

Rotates the position of the target.

Camera/Target/Distance to Target

Moves the position of the target with fixed angle between the camera(viewer) and the target.

Camera/Edit Parameters...

Camera/Custom View Angle...

5-1-3. Light Menu

Light/New...

Add new light. You can not use the invalid name of light for POV-Ray if you want to export/render by POV-Ray.

Light/Select...

Selects an existing light.

Light/Rename...

Renames the light name.

Light/Delete...

Deletes the specified light.

Light/Light/Move

Moves the position of the light.

Light/Light/Rotate Around Target

Rotates the position of the light.

Light/Light/Distance to Target

Moves the position of the light with fixed angle between the light and the target.

Light/Light/Change Intensity

Changes the intensity of the light.

Light/Target/**Light/Target/Move**

Moves the position of the light.

Light/Target/Rotate Around Light

Rotates the position of the target of the light.

Light/Target/Distance to Light

Moves the position of the light with fixed angle between the light and the target.

Light/Edit Parameters...

Edits parameters for the light.

Light/Light List...
Lists all existing lights.

5-1-4. Object Menu

Object/Select...

Selects objects.

Object/Select by Material...

Selects objects by the specified material name.

Object/Select All

Selects all objects.

Object/Deselect All

Deselects all objects.

Object/Pick

Selects an object by pick.

Object/Rename...

Renames the specified object name.

Object/Assign Material...

Assigns a material name onto the specified object.

5-1-5. Material Menu

Material/New...

Creates new material.

Material/Select...

Select materials.

Material/Rename...

Renames the specified material name.

Material/Delete...

Deletes the specified material.

Material/Edit...

Edits the specified material.

Material/List...
Lists all materials.

5-1-6. View Menu

View/Redraw

Redraws all objects(R).

View/Zoom-In

Enlarges your view of the project:

Zoom-In	× 50%
Zoom-Out	Incrementally PgUp
Scroll	By Frame

View/Zoom-Out

Reduces your view of the project:

View/Scroll

Scrolls the active view:

/+Left, /+Right, /+Up, /+Down

Scrolls the active view a quarter of size of screen.

/++Left, /++Right, /++Up, /++Down

Scrolls the active view a screen size.

View/Pan

Moves your view by two points in the window.

View/Go to Previous

Recalls to the previous view.

View/Fit All

Fits all objects into the window.

View/Reset

Resets view.

5-1-7. Render Menu

Render/Render

Starts to render the image.

Render/Render to File...

Starts to render the image in 24-bit mode, and saves a file as DIB or Targa format.

Render/Ambient...

Sets the intensity of ambient light.

Render/Background...

Sets the color of background.

5-1-8. Window Menu

Window/New Window

Opens a new window for the active project.

Window/Cascade

Displays project windows in a stepped sequence.

Window/Tile

Displays project windows side by side.

Window/Arrange Icons

Rearranges the project icons in the main window of **RenderStudio**.

Window/Tool Bar

Displays the Tool Bar. This menu toggles the display.

Window/Status Bar

Displays the Status Bar. This menu toggles the display.

Window/Project Palette

Displays the Project Palette. This menu toggles the display.

5-1-9. Options Menu

Options/Window Setup...

Sets options about Window settings.

Options/Zoom Options...

Sets options about Zoom settings.

Options/Reference Grid Options...

Sets options about Grid settings.

Options/Pick Options...

Sets options about Pick settings.

Options/About RenderStudio...

Provides information about RenderStudio.

5-2. Tool Bar

There are three(3) categories in the Tool Bar.

Note: Icons which have a red dots on the upper right corner, there is an option settings for the icon. When you want to change the settings, just click the icon while you are pushing Ctrl key.

File/Open
File/Save
File/Export

View/Redraw
View/Zoom-In
View/Zoom-Out
View/Zoom-In/By Frame
View/Zoom-Out/By Frame
View/Pan
View/Fit All
View/Go to Previous
View/Reset

Render/Render
Render/Render to File

5-3. Project Palette

There are four(4) areas in the Project Palette:

5-3-1. Camera

The camera in the project palette has a sub palette which consists of ten(10) icons. To edit camera position and other camera property, click the camera area in the project palette or select the **Camera** menu.

5-3-2. Light

The light in the project palette has a sub palette which consists of twelve(12) icons. To add/edit/delete light position and other light property, click the light area in the project palette or select the **Light** menu.

5-3-3. Object

The object in the project palette has a sub palette which consists of six(6) icons. To select/deselect objects, assign materials onto objects and rename object names, click the object area in the project palette or select the **Object** menu.

5-3-4. Material

The material in the project palette has a sub palette which consists of six(6) icons. To add/edit/delete/rename/list material and set back ground, click the material area in the project palette or select the **material** menu.

Appendix: The specification of RenderStudio

Addressable coordinate:

Double floating real

Maximum number of lights:

20(Intensity level: 0.0 to 1.0, parallel light type only)

Maximum rendering size:

4096 by 4096 in 24-bit color mode
(no dither display, just GDI)

Note: If your memory configuration is insufficient, the system will use the virtual memory quite often. It causes almost hung-up condition. Because the system should be busy to swap memory.