

**A C.G.Station Family Product**

# **RenderStudio**

Version 1.01  
User's Guide Part I  
Overview  
Tutorial

**STUDIO PON**  
November 1994

# RenderStudio 1.01 for Windows™

User Guide Version 1.01, November 1994

Part Number: REN101DOC

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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).

# Contents

## User's Guide Part I

<b>Chapter 1. What's new?</b>	<b>5</b>
<b>Chapter 2. Overview</b>	<b>6</b>
<b>Chapter 3. Installing RenderStudio</b>	<b>8</b>
<b>Chapter 4. Tutorial</b>	<b>11</b>
4-1. Lesson 1 Launching RenderStudio	12
4-2. Lesson 2 Place a light, and shade first time	14
4-3. Lesson 3 Generating 3-D shapes	16
4-4. Lesson 4 Assigning materials	18
4-5. Lesson 5 Creating 3-D models	20

## User's Guide Part II

<b>Chapter 5. Reference</b>	<b>5</b>
5-1. Menu Bar	6
5-2. Tool Bar	26
5-3. Project Palette	27
<b>Appendix: The Specification of RenderStudio</b>	<b>29</b>

# 1. What's new?

Welcome to **RenderStudio** version 1.01 for Windows(tm).

The new **PRJ**(proprietary format) file of **RenderStudio** is not backward compatible with the old **PRJ** file of **ModelStudio**.

## 2. Overview

Welcome to **RenderStudio** version 1.01 for Windows(tm).

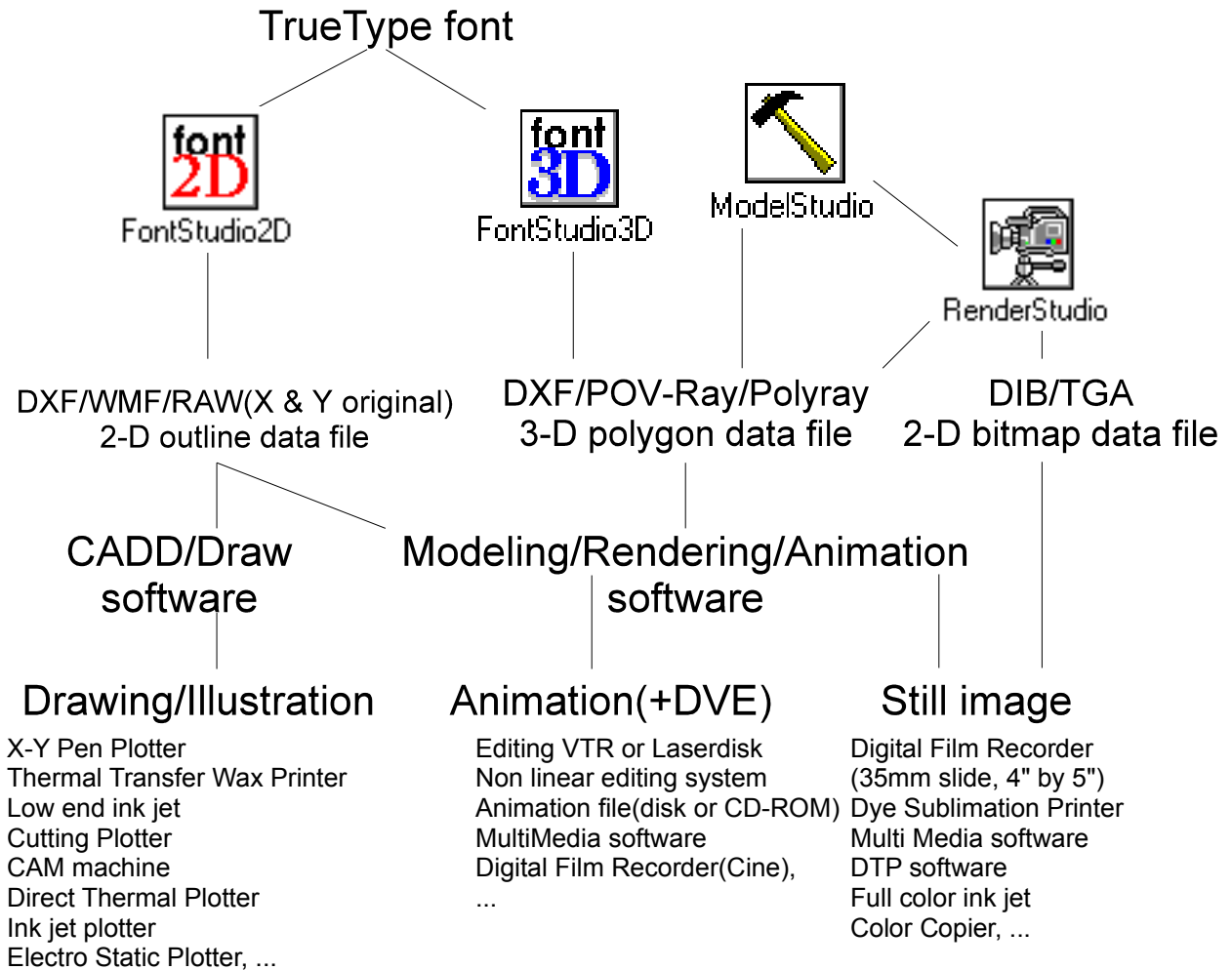
**RenderStudio** is the rendering utility for **PRJ**(the original file format for both **ModelStudio** and **RenderStudio**) file, which is created by **ModelStudio**. You can also export scenes as files, POV-Ray(tm) format, to exchange the generated 3-D polygon data into other 3-D modeling or rendering applications. In addition, RenderStudio can save rendered 2-D bitmap files as DIB(Device Independent Bitmap) and TGA(Targa) in 24-bit(16.7 million colors).

**RenderStudio** is very easy to learn and use.

To use **RenderStudio**, you need to have **ModelStudio**, an appropriate PC and DOS/MS-Windows 3.1(English) or higher. We recommend to keep enough free disk space on your hard disk.

To use DIB, TGA or other files of **RenderStudio** on other platforms, for instance on the Macintosh(TM) or Indigo(TM), please convert your file from MS-DOS file format into an appropriate file format for your destination.

## 2-1 Sample work flow



### A sample work flow of C.G. Station

(Note: ModelStudio and RenderStudio do not export Polyray.)

**FontStudio2D** is a 2-D outline generator from TrueType(tm).

**FontStudio3D** is a 3-D font generator that loads TrueType(tm) font, and extrudes them into 3-D polygon data. Then, you need to use a 3-D modeling program and/or rendering/animation program to get photo realistic image/animation. If your 3-D modeling program has different coordinate system, you can exchange or reverse specified axis. For instance, you need to reverse Z axis for POV-Ray. When you beveled edge in the front face only, your beveled edge should be back side without reversing Z axis.

**ModelStudio** is a collection of 3-D modeling tools. To composite data from both FontStudio3D and ModelStudio3D, you need to composite in a text editor or rendering/animation program, such as POV-Ray, 3D Studio(TM), ...

**RenderStudio** is a rendering utility for **ModelStudio**. This utility is also a very useful tool as a scene editor for POV-Ray.



### 3. Installing RenderStudio

Installing **RenderStudio** is easy.

You need to copy **RENDER.EXE** program module onto your hard disk, create new group and new item in Program Manager, and enter the serial number and the verify number in **RenderStudio**. Until you enter the serial number and the verification number with the registered user name (and company name, if applicable), the registration reminder dialog will be displayed, and you can not save at all.

To use **RenderStudio**, you need to have **ModelStudio**, an appropriate PC and DOS/MS-Windows 3.1(English) or higher. We will recommend to keep enough free disk space on your hard disk while you are using.

To install **RenderStudio** on your hard disk drive:

**1)** Copy **RENDER.EXE** file and other files onto your hard disk. We recommend to create a dedicated directory for **RenderStudio** before starting installation.  
(Example: C:\PON\REN101)

**2)** Under the **Program Manager** of Windows, create new group and new item using **FILE/NEW** menu.

(Example:       Group name:   STUDIO PON  
                  Program name: RenderStudio 1.01)

**Note:** If you can not understand the above two steps, please read your MS-Windows manual.

**3)** Double click **RenderStudio** icon.  
*The registration reminder dialog is displayed.*

4) Click **Register...** button.  
*Registration dialog is displayed.*

5) Enter **User Name**, **Company**(if applicable. In the case of no company name, please enter **User Name** again.) name, **Serial#** and **Verification#**, then click **OK** button.

**Note:** You must use exactly same **User Name** and **Company** name when you ordered. Your **serial number** and **verification number** with the registered user name and company name should be on the mail via CompuServe or regular mail from STUDIO PON. These two items are case sensitive. When you got an error message, please check your **User Name**, **Company**, **Serial#** and

**Verification#**. And, please check the version of your **RenderStudio**. STUDIO PON will not support foreign language DOS and/or Windows. Please use MS-Windows 3.1 in English.

Now, the installation procedure is done completely.  
Please enjoy to use **RenderStudio**.

## 4. Tutorial

This tutorial consists of four lessons:

- 4-1. Lesson 1 Launching RenderStudio
- 4-2. Lesson 2 Place a light, and shade first time
- 4-3. Lesson 3 Changing the camera and the target position
- 4-4. Lesson 4 Assigning materials
- 4-5. Lesson 5 Save a rendered image

## 4-1. Lesson 1 Launching RenderStudio

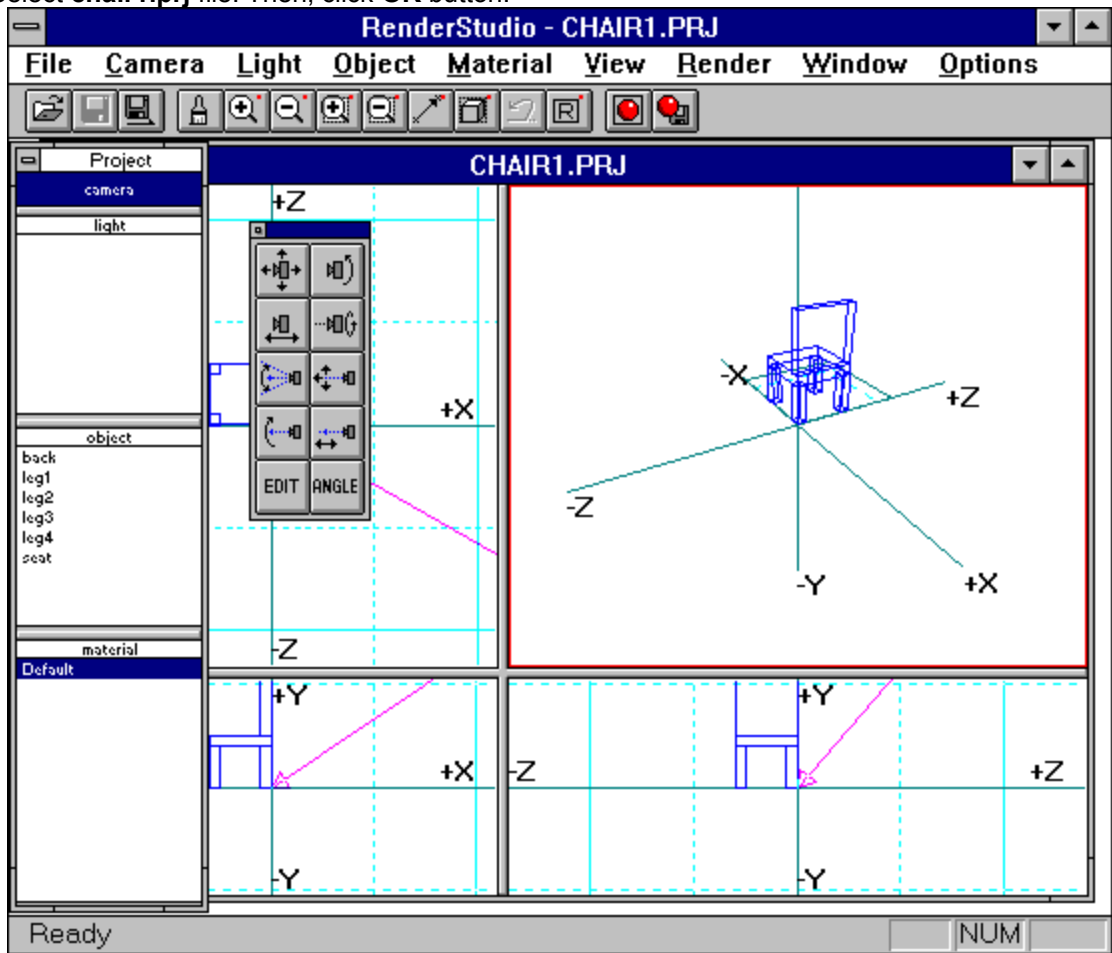
To start **RenderStudio** program module, you just double click **RenderStudio** icon in the group, which you created new item in **Program Manager** at Chapter 3.

**Note:** If you did not register, the registration reminder dialog should be displayed on this main window. You need to enter registration information(**User name**, **Company name**, **Serial number** and **verification number** after you read Chapter 3 carefully.

*The **File Open** window is displayed.*

You need to select a project file(**.PRJ**) which is created by **ModelStudio**.

Select **chair1.prj** file. Then, click **OK** button.



**Menu Bar:**

It is at the second from the top of the screen and includes nine categories.

**Tool Bar:**

There are fourteen icons under the **Menu bar**.

**Status Bar:**

It is at the bottom of the screen and displays information about commands.

**Project Palette:**

It is a floating style palette, including four functions(camera, light, objects and material).

**Sub Palette:**

It is a floating style palette to assist **Project Palette**.

## 4-2. Lesson 2 Place a light, and shade first time

In this lesson, you will learn how to add a light.

1. Click **light** in the **Project Palette**.

2. Select **NEW** icon in the **Sub Palette**.

*The **Light Parameters** window is displayed.*

3. Click **OK** button, using these default parameters.

**Note:** Without light in a scene, you can not see objects. This is also true in the real world. Before starting rendering, you must have a light.

4. Select **Render** icon.

*A rendered image is displayed in the upper right window. This is your first rendered image using **RenderStudio**.*

When you want to resize Camera view size, you can drag the center of four views.

When you want to resize Camera view size horizontally or vertically, you can drag the border between Camera view and another.



### 4-3. Lesson 3 Changing the camera and the target position

In this lesson, you will learn how to control the camera and the target position.

1. Click **camera** in the **Project Palette**.

*The **Sub Palette** for camera is displayed.*

2. Select **Move Camera** icon in the **Sub Palette**.

3. Move camera(drag a red rectangle) position in the top view.

Set the view like the above figure.

4. Select **Render** icon.

*You will get a rendered image.*

It is bit dark. Because the light is at back side of the chair. Now you need to move the light.

When you get a message "UNREGISTERED COPY", you are not using registered copy. Please register!

5. Click **light** in the **Project Palette**.

6. Select **Move Active Light** icon in the **Sub Palette**.

7. Move light(drag a green circle) position in the top view.

8. Select **Render** icon.

*You will get a rendered image.*

It looks a good image. Because the light is at the same side of the camera.

## 4-4. Lesson 4 Assigning materials

In this section, you will learn how to assign materials(colors) onto objects. The all new objects are assigned the default material(Red: 1, Green: 1, Blue: 1). Let's create new material.

1. Click **New** icon in the **Sub Palette**.

*Edit Material window is displayed.*

2. Enter **Red** in **Name** field.

3. Set three RGB value like below. Then, click **OK** button.

*New material, Red is added in the material.*

4. Select **object** window. Then, click **Select All** icon.

5. Click **Assign Material** icon.

*The selected objects and available materials are displayed.*

6. While pressing SHIFT key, click all object names. Then, click Red.

*Wood material is assigned to all objects.*

7. Select **Exit** button.

8. Select **Render** icon.

*You will get a rendered image. The actual rendered image quality on your display is depending upon your graphics card and settings.*

## 4-5. Lesson 5 Save a rendered image

In this section, you will learn how to save your rendered image onto your hard disk as a 24-bit bitmap file.

1. Turn on **Grid Snap**(1st in row2) .

*The **Render to File** window is displayed.*

2. Enter **chair1.bmp** in the **File Name:** filed. Then, click **OK** button.

*The **Image Format** window is displayed.*

3. Click **Go !** button.

*The rendered image is saved as a 24-bit DIB, the name is "chair1.bmp". To look the saved image, you need to use Paintbrush or other paint program of MS-Windows 3.1.*