

Chapter 3: Lesson – A Simple Block of Digital Clay



Before launching into a tutorial in which you will make an actual model, it would probably be a good idea for you to just get to know the FreeForm modeling system first. After all, you've probably never experienced anything *quite* like this before. Whether you are an old hand with computers or a relative novice, you will find that FreeForm modeling, based on SensAble's 3D Touch™ technology, is a unique experience.

There is no substitute for actually using the FreeForm application and the PHANTOM Desktop, so rather than continuing to attempt the impossible—describe with mere words what can only be seen and felt—let's start playing with the digital clay.

Important Note: Help is always available to you. If you ever need help while using the FreeForm application, press the **F1** function key or select **FreeForm Help** from the **Help** menu to display the application's online help system.



Starting FreeForm Modeling

From your Windows Desktop, click on the **Start** button and select **Programs**, then **FreeForm** and **FreeForm** again. (Or, from the Explorer, select **Program Files/SensAble/FreeForm/FreeForm.exe**. Your installation may vary.) The FreeForm application is displayed as shown in Figure 3-1 below.

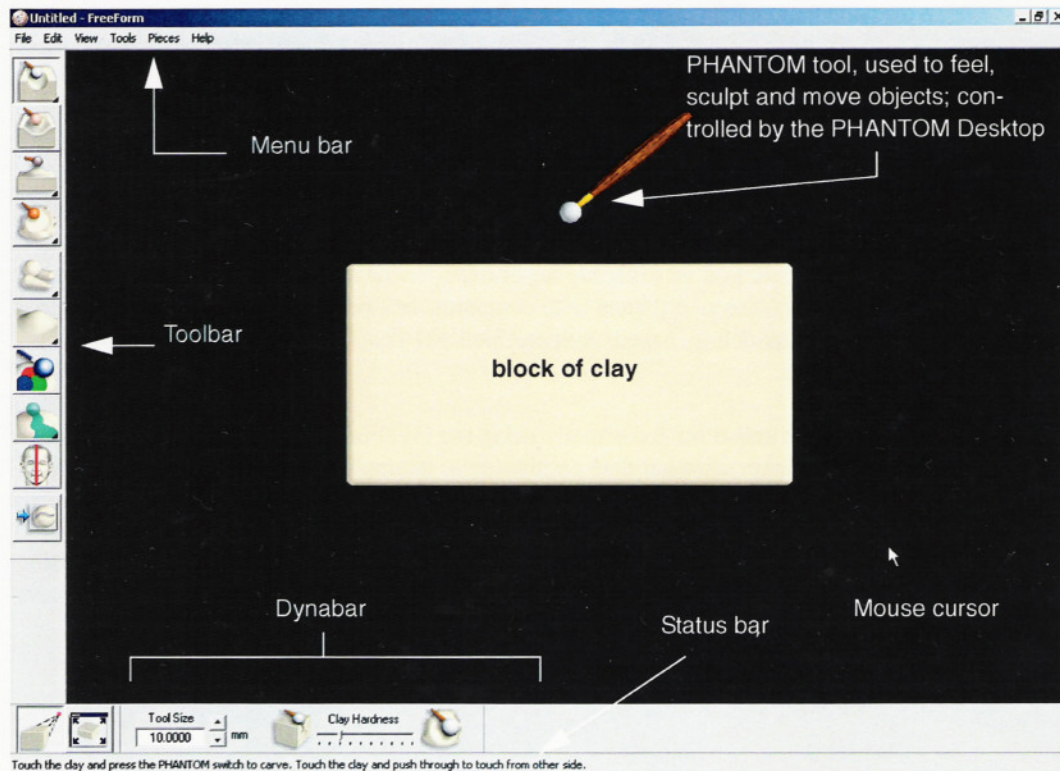


Figure 3-1: The FreeForm Application Window when you first open it

Moving Your Model

The buff-colored block of digital clay in the middle of the window is the model that comes up when you first open the FreeForm application. Before touching or sculpting it, you'll want to explore the different ways you can move the model within the FreeForm window.

Note: Technically, you don't *move* the model within the window, but rather change your view of it, as if you had a camera trained on the model and were moving around it, panning or zooming in and out. For sake of simplicity, however, we will refer to these procedures as moving the model.

Moving Your Model with the Mouse

Grab the mouse and make sure the mouse cursor is somewhere over the FreeForm window. Then hold down the left mouse button and move your mouse. The block of clay rotates.

Experiment with the mouse to rotate the block to any position. Now release the mouse button, press and hold down the right mouse button, then move your mouse closer to you and then away from you. As you can see, the block grows and shrinks, getting larger when you move the mouse closer to you and smaller when you move it away from yourself. This is called zooming.

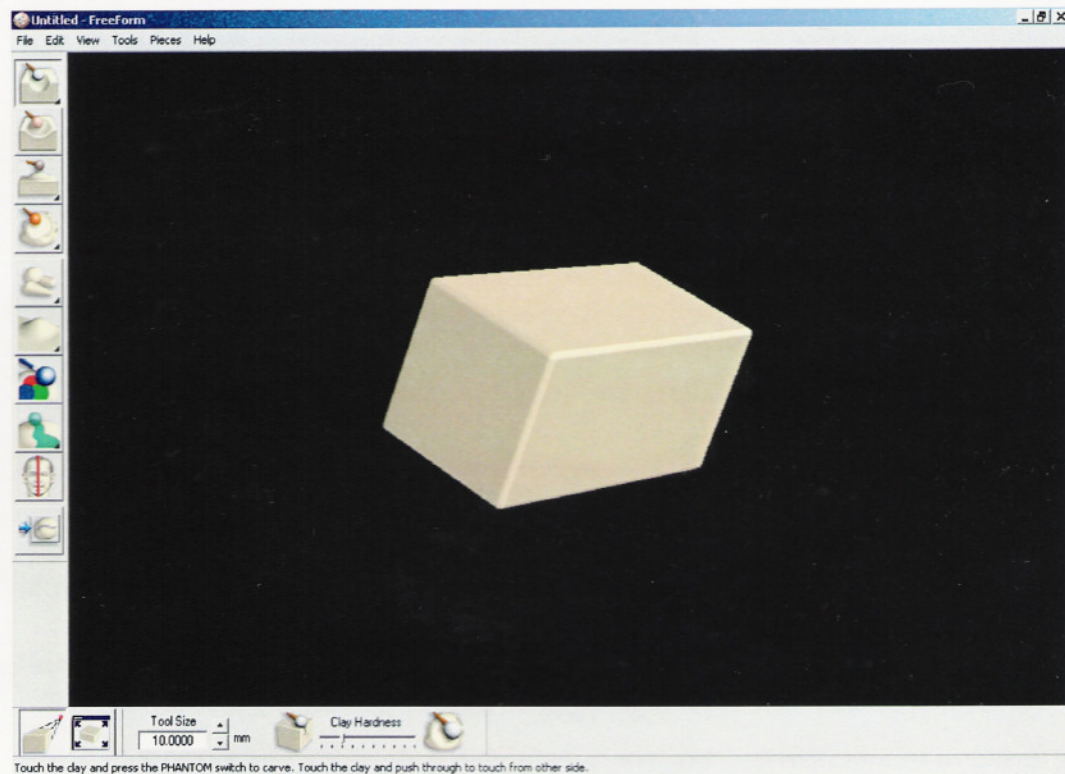


Figure 3-2: You can rotate, zoom and pan the view of the block

Now move your mouse while holding down the middle mouse button. The block travels across the screen. This is called panning.

To sum up, here are the ways you can move the block—or any FreeForm model, for that matter—using the mouse.

To **rotate** your view – move your mouse while holding down the left mouse button.

To **zoom** your view – move your mouse while holding down the right mouse button.

Chapter 4: Lesson – Sculpting a Basic Model



While providing you with some of the more fundamental aspects of using Free-Form modeling, this lesson focuses primarily on the sculptural, organic types of models the FreeForm system can make possible so easily.

When you have finished this chapter, you will have modeled a duck similar to the one shown in Figure 4-1.

The finished model is available as a FreeForm file called **painted duck.cly** in the folder named **Models**, which is a subfolder of the **Documentation and Tutorials** folder.



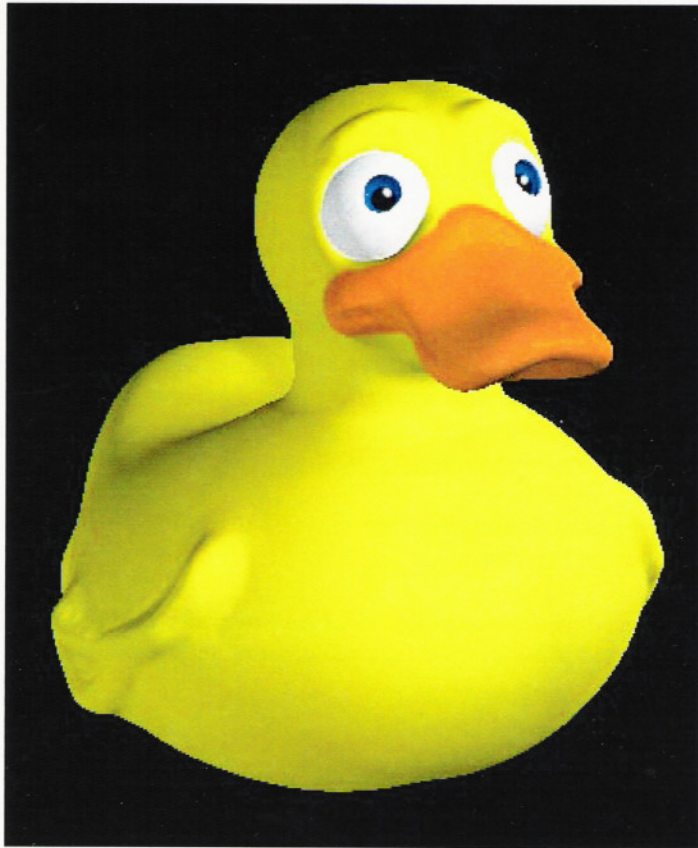


Figure 4-1: The finished model

What the Point of This Lesson Is *Not*

The point of this lesson is not for you to duplicate perfectly the duck model illustrated here. Rather, the point is to get you acquainted with FreeForm modeling and comfortable with using some of its tools. And to do that pretty quickly. If you have accomplished that by the end of this lesson, then you will have been successful... regardless of whether your model closely resembles this one.