
Object **DANCER**™

Tutorial
Demo



ObjectDANCER Tutorial Demo

ObjectDANCER:

A dream of Joëlle de La Casinière

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Tutorial Demo

PREPARATION

This document guides you in creating your first animation with ObjectDANCER. Like animations, experiencing ObjectDANCER first-hand is crucial to understanding ObjectDANCER and its richness. Just as an animation is a live experience, so is ObjectDANCER. You will use the sample media folder, including PICTs, audio files, text clip, QuickTime movie, and a GX object, included on your ObjectDANCER CD-ROM to create follow along in this demo.



All sample objects, movies, or media contained within this CD-ROM are included for demonstration purposes only. They may not be used for professional-use. To use these objects in a manner other than that which is stated here, consult PaceWorks.

SYSTEM REQUIREMENTS

Refer to the *ObjectDANCER Reference Manual* for an even more comprehensive list of requirements and steps for installing and running ObjectDANCER.

Following is a list of required and recommended equipment. Ensure that your system configuration includes the listed minimum hardware equipment, and if not already installed, install the appropriate software listed.

- ✓ An Apple Macintosh© PowerPC, any model (or PowerPC clones), with a minimum of 5 megabytes (MB) of application RAM (8MB or more recommended).
- ✓ *Apple System Software 7.5* (or later) installed, which includes the following necessary extensions: *ColorSync™* system extension and control panel, *Sound Manager 3.2* (or later) system extension, and *Sound* control panel.

- ✓ *Apple QuickDraw GX* software installed, which comes packaged with System Software 7.5 or later (although QuickDraw GX is not automatically installed unless specified), **or** install the provided *GXGraphics INIT* system extension (refer to “Read Me.txt” file in the “GXGraphics INIT” folder on the CD-ROM).
- ✓ *QuickTime™ 2.0* (version 2.5 recommended), which includes: *QuickTime™* system extension, *QuickTime™ PowerPlug* system extension, *QuickTime™ Musical Instruments* system extension, *MoviePlayer 2.0* (or later) application.

In addition, PaceWorks recommends the following hardware, although not necessary:

- ✓ CD-ROM drive
- ✓ 17” or larger monitor
- ✓ external speakers

Building an ObjectDANCER Animation

During this demo, we will build a very basic project using the pre-collected objects in the “SampleObjects” folder provided on your ObjectDANCER CD-ROM. The purpose of this basic project is to get you acquainted with the ObjectDANCER project windows, and ObjectDANCER’s cursor and mouse movements. We will then compile the project into a movie.

After that, we will enhance the basic project to illustrate some of the special features and effects of ObjectDANCER animated objects. For example, we will show you how to place a rotational effect on an object, or evolve the font size of a text object, over time. You will learn how to select the color of one object, and then drop that same color onto a secondary object. And you will learn how to “decompose” a text object into individual letter objects.

Even with these examples of how to animate objects, this demo only scratches the surface of ObjectDANCER’s full potential. The only real limitation of ObjectDANCER’s potential is that of your imagination; the true potential for creating striking and impressive presentations with ObjectDANCER is boundless.

Basic Concepts

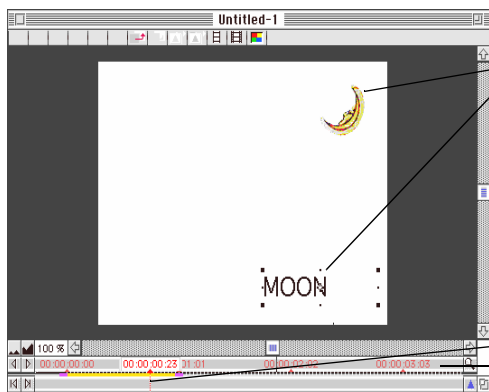
Upon launching ObjectDANCER, new “Untitled-1” project windows are displayed. These windows, the Compo and Synchro Windows, are the main project windows for building ObjectDANCER projects. The *Compo Window* is essentially your visual drawing pad for designing and manipulating imported objects over the time of a ObjectDANCER animation. An *object*, in ObjectDANCER, is any imported graphic, picture, glyph, video, or sound file that is brought together in the ObjectDANCER project.

The other main project window, the *Synchro Window*, is used for synchronizing project objects’ movements and attributes with the desired effects and styles. The changes in any object’s position, size, scale, skew, shape, color, rotation or other attributes over time are known as *dances*. The current time within ObjectDANCER projects is tracked by the *red current time indicator*, or *RCT indicator*.

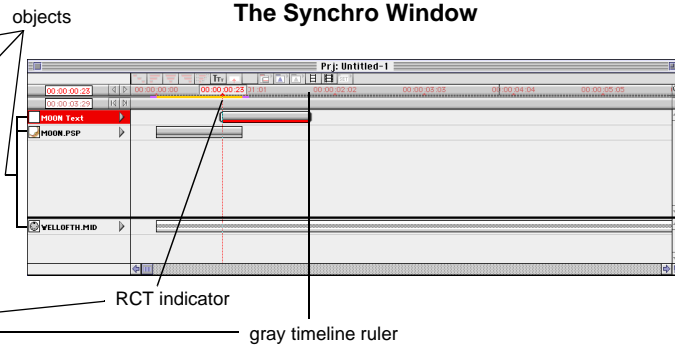
The following figure illustrates the Compo and Synchro Windows. Notice how the objects in the Compo Window have a corresponding object label entry in the Synchro Window. Also notice that both windows have an RCT indicator along their *gray timeline ruler*, indicating the current position and effect imposed

on the objects within the project windows.

The Compo Window



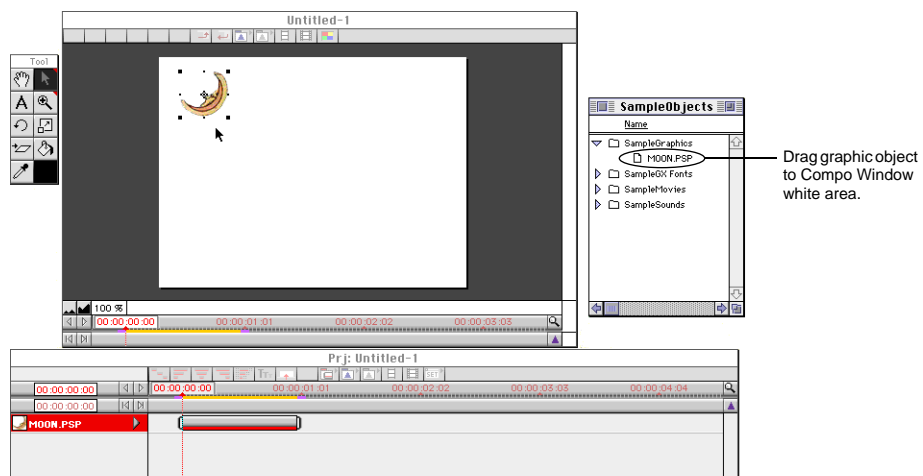
The Synchro Window



Basic Animation Demo

With ObjectDANCER launched, and an empty Compo and Synchro Window displayed, perform the following steps:

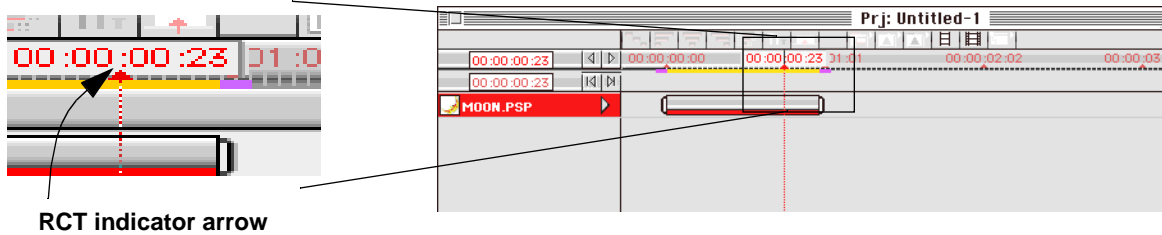
1. Drag and drop the MOON.PSP file (a Photoshop PICT file) from the “SampleObjects” folder on the CD-ROM to the upper left corner of the *Compo Window white area*.





Whenever you import an object into the Compo Window, the same object is also be reflected in the Synchro Window, or vice versa. These windows are essentially mirrors of each other, each allowing you to manipulate the objects in different ways.

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2. Drag the RCT indicator line (just below the red arrow) to the right along the *gray timeline ruler* at the bottom of the Synchro (or Compo) Window to change the current time.





 **Note**

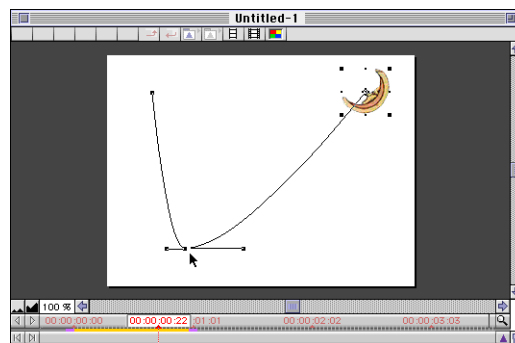
When dragging the RCT indicator line just below the red arrow, the cursor should look like this:  .

3. Drag the moon object to the right. A line from the original location to the new location shows the *object's path*.



We can adjust the object's path to move in a curved motion.

4. Drag a point on the path (not the anchor point) while holding down [option]. This will create a *bezier curve*, as shown. (The cursor changes from  to  .)



Now let's add some text to the project. You can copy and paste text (or other) objects into the project windows.¹

5. Highlight the word "MOON" in the MOON.PSP filename.
6. Select the **Copy** command (or press ⌘C) from the *Edit Menu*.
7. Click the cursor in the Compo Window.
8. Select the **Paste** command (or press ⌘V) from the *Edit Menu*. The MOON text object appears in the Compo Window.

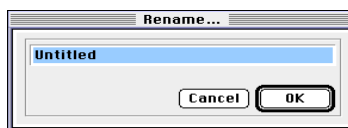


You can adjust the position of an imported object by dragging it in any direction within the Compo Window. Let's try this.

9. Drag the newly imported MOON text object to the lower right corner of the Compo Window.

Notice that the MOON text object is titled "Untitled" amongst the Synchro Window's object labels.

10. To rename this text object (or any other object), double-click on the object's label and a *Rename...* dialogue box is launched.



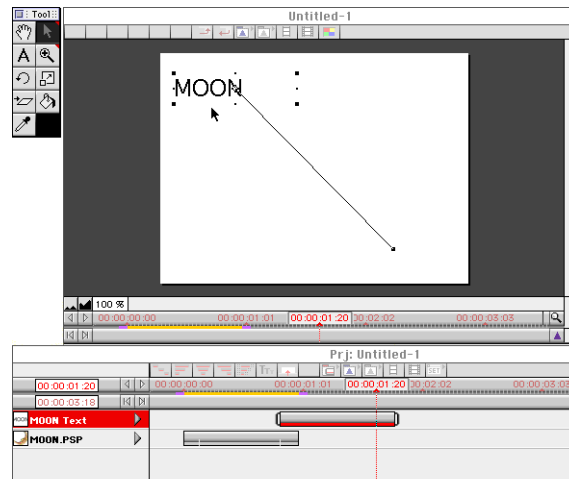
11. Type in "MOON Text" to rename the "Untitled" text object.

Just as you created a path for the MOON.PSP graphic object, let's create a path for the MOON Text object.

12. Drag the RCT indicator arrow to the right along the *gray timeline ruler* (about an inch over).

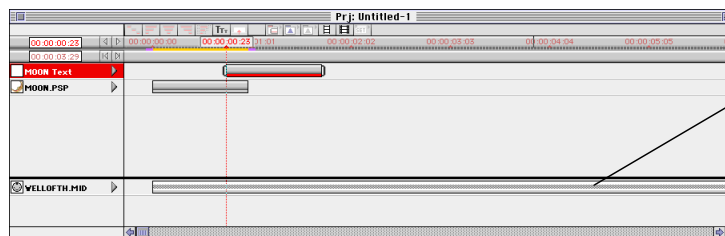
1. Text objects can also be created through direct input using the Text tool accessed through the **Show Tools** command on the *Windows Menu* (see page 11). Click on the Text tool, then click in the Compo Window and type in some text. A corresponding text object appears in the Synchro Window.

13. Drag the MOON Text object to the upper left corner. A line from the original location to the new location shows the *object's path*.




Let's add some music to the project.

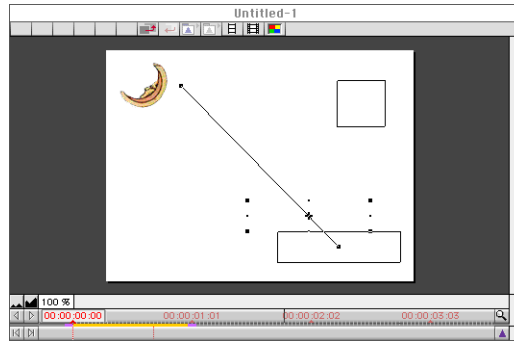
14. Drag the RCT indicator arrow to the beginning of the *gray timeline ruler* so the imported sound plays from the beginning of the project (movie).
15. Drag the "WELLOFTH.MID" file, a MIDI musical file, into the Synchro Window. It appears in the bottom half of the Synchro Window (as will all imported sound objects).




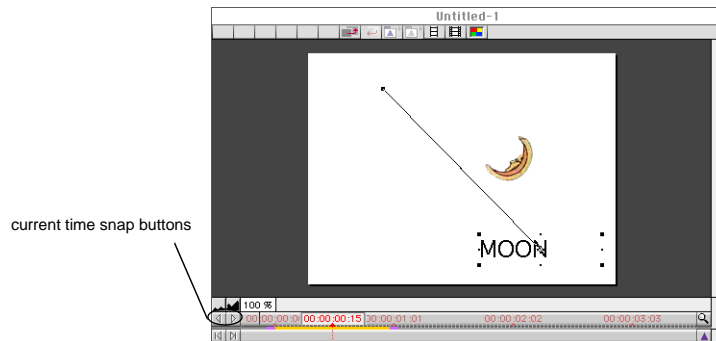
Sound objects are separated from the rest of the project objects, below the bolded line.

To preview the animated movements of the objects within your project so far, choose from one of two options:

- Select the **Show Preview** option from the *Output Menu* (or click on the **Show Preview**  smart icon at the top of the Synchro Window). A wireframe preview of the project is displayed. (To stop the preview, click the mouse anywhere.)




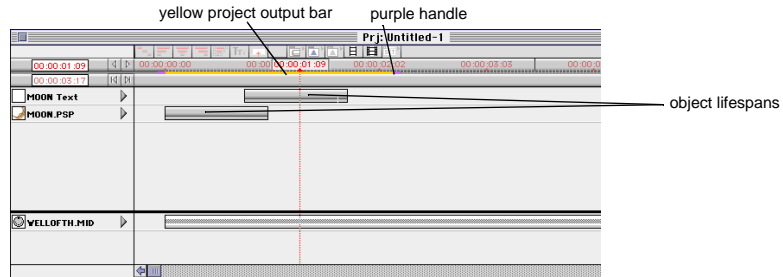
- Click on either of the *current time snap buttons*  within the Compo (or Synchro) Window to review your project frame by frame.




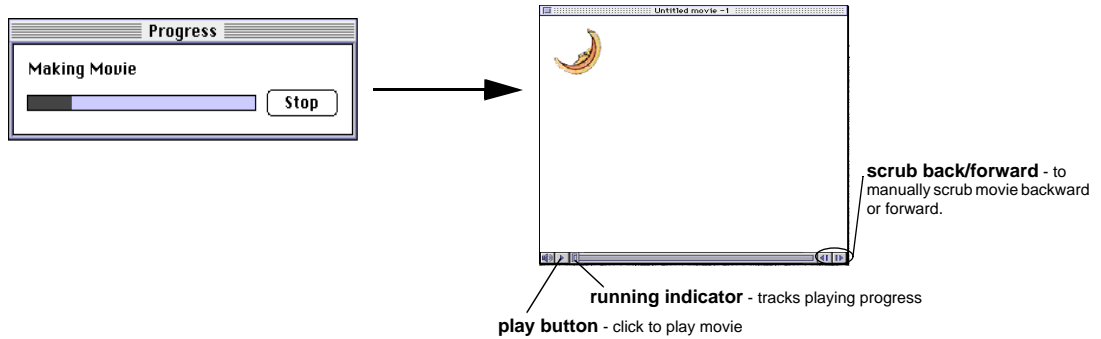
Let's make a movie of the project you have created so far.

Before outputting a movie, however, we need to adjust the *project output area*. The project output area is represented by the *yellow project output bar* with purple handles at the top of the Synchro Window (and at the bottom of the Compo Window).

16. Drag on the rightmost purple handle of the yellow project output bar to extend the project area beyond the range of the *object lifespans* in the Synchro Window. (When you drag the right purple handle,  appears.)

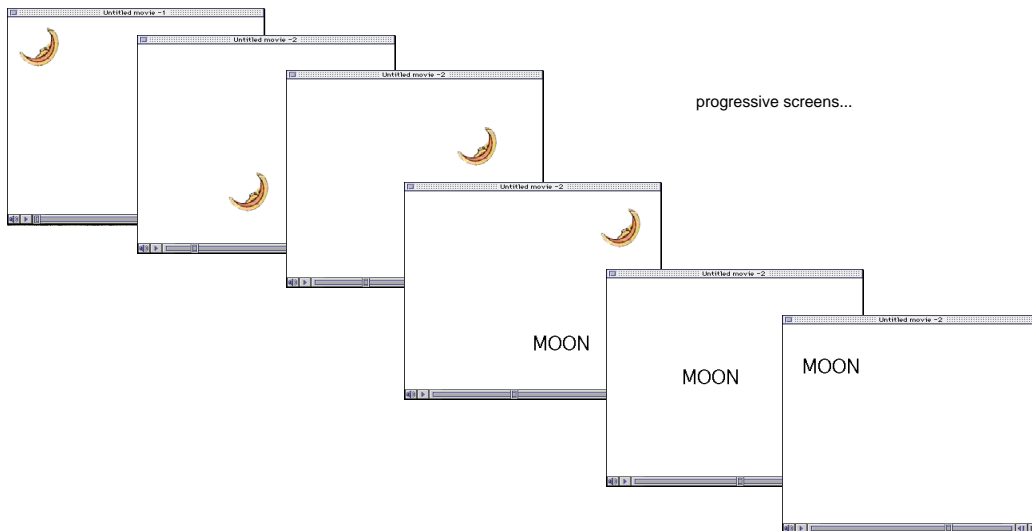


17. From the *Output Menu*, select the **Make QT Movie** command (or click on the **Make QT Movie**  smart icon at the top of the Synchro Window). A “Making Movie” progress screen is displayed, and then a small movie window is displayed.



18. Click on the *play button* in the movie window, and your movie is played.

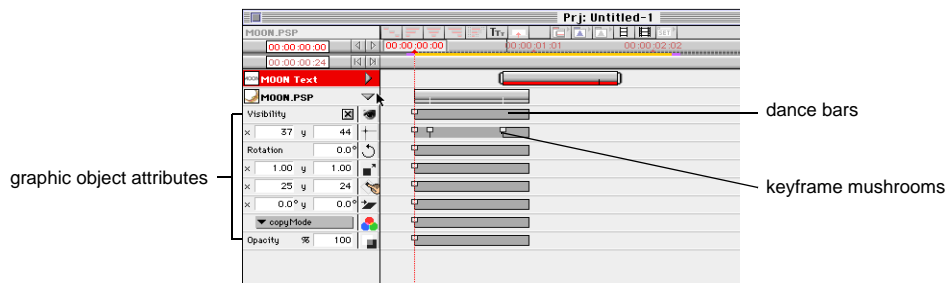
The *running indicator* on the bottom scroll bar will move to the right while the movie plays. (If no sound is heard, ensure that your speakers are properly connected and configured on your computer.)



Enhanced Animation Demo

Using the project you have created in the “Basic Animation Demo,” we can modify the attributes of the project objects to create many more interesting effects. The following steps give you a sampling of some of the effects that can be changed. Even with these examples, however, this demo will only scratch the surface of ObjectDANCER’s full potential.

1. Click on the ► arrow to the right of the MOON.PSP object label in the Synchro Window. The following attributes list is displayed.



With the expanded object, as shown in the above illustration, we introduce two new ObjectDANCER concepts: dance bars and keyframe mushrooms. *Dance bars* hold the animation dances (keyframe mushrooms) of an object’s attributes.² By moving the RCT indicator to a new position, and then entering a new value for a particular attribute, a new keyframe is created (and the attribute is changed in the animation at that particular time). These animated dances, marked by *keyframe mushrooms* along the dance bars, are imposed values during the animation when an object changes its position, color, size, rotation, etc. Values in between any two keyframes along a single dance bar are automatically interpolated.

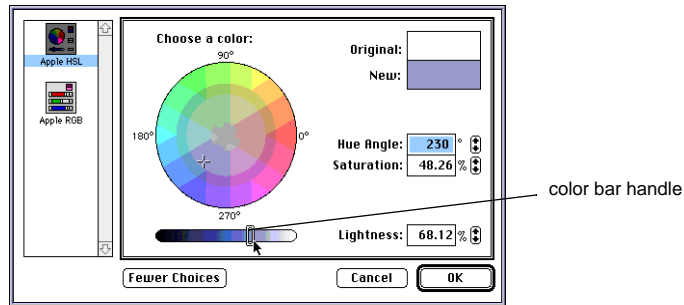
Let’s change the rotation of the MOON.PSP object, so the moon completes a 360° rotation from its starting to ending point.

2. Click on the last keyframe mushroom along the position dance bar (| + |). The RCT indicator line jumps in alignment with this mushroom.
3. Input 360° in the rotation input area (| ↻ |), then [return]. A new rotation keyframe mushroom appears along the rotation dance bar.

Next, let’s change the background color, to the color of the sky, for example.

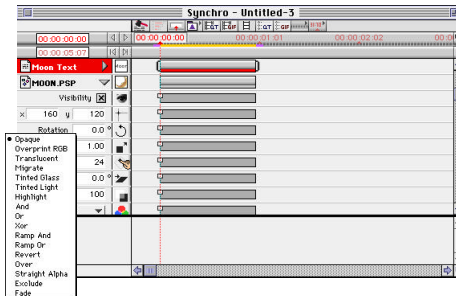
4. Click on the **Background Color...**  smart icon at the top of the Compo Window. A color picker dialog box is displayed.
5. Drag the handle along the color bar until a desired background color appears in the upper right “New:” box. Then press “OK”.

2. Note the info labels at the top left of the Synchro Window. These labels identify the names of the object attributes as you move the cursor over them.



If the current time is in a position where the moon is visible, the moon object’s background now appears white over the blue background. Let’s change the moon object’s background so it blends with the background color. By doing this, we will activate the *alpha channel*.


6. Move the RCT indicator to the beginning of the timeline by either dragging it there or clicking on the first keyframe mushroom on any attributes’ dance bar.
7. Select “Over” from the options in the transfer mode pull-down box. The moon’s object background now blends with the background color.

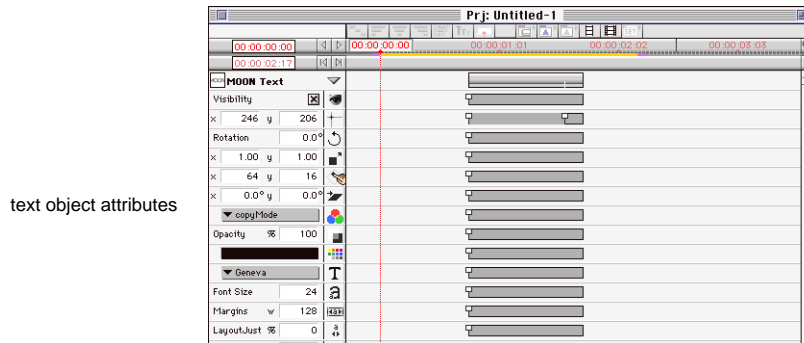


Just as we have made changes to the moon’s rotation and transfer mode, you can similarly make changes to any graphic object’s attribute, such as visibility, position, scale, skew, etc. by moving the RCT indicator to a new current time, and then inputting a new value (or toggling a toggle, as the case may be).

8. Click on the ▼ arrow to the right of the “MOON.PSP” object label. The attributes list will close.

Let’s change directions for a moment, and make some changes to the text object’s attributes.

9. Click on the ► arrow to the right of the “MOON Text” object label in the Synchro Window. The following attributes list is displayed. To increase the Synchro Window’s area, drag the  icon in the bottom right corner.

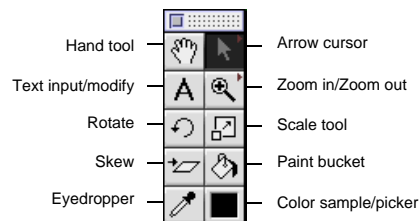


Let's change the font size, so the text grows larger from its starting to ending point.

10. Click on the first keyframe mushroom along the font size dance bar ().
11. Change the font size in the input area to "8" point, then press [return].
12. Click on the last (second) keyframe mushroom along the position dance bar (). The RCT indicator line jumps in alignment with this mushroom.
13. Input "24" point in the font size input area, then press [return].


How about changing the color of the text, from its starting to ending point. Let's change the color of the text object to match a color in the moon.

14. Select the **Show Tools** command from the *Windows Menu*. (This palette may already be displayed on your screen.) The *Tools palette* is displayed.



15. Click on the *eyedropper* tool ().
16. As you click on the different colors present in the moon object (in the Compo Window), the *color sample/picker* box adjacent to the eyedropper tool in the Tools palette changes to different colors. Click the moon graphic until orange is shown in the color sample/picker box.
17. Click on the *paint bucket* tool ().
18. Click on the last (second) keyframe along the position dance bar (). The RCT indicator line jumps in alignment with this mushroom.
19. Click on the MOON Text object in the Compo Window. The text changes to the orange color in the color sample/picker box, and a keyframe mushroom appears along the color dance bar, aligned with the position's second keyframe mushroom just above.


With this change, the MOON Text will gradually change colors from black to orange over the time between the two color keyframes in the animation.³


20. Click on the *arrow cursor* () in the Tools palette.

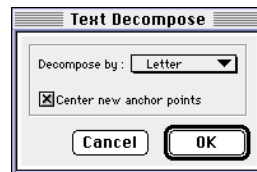
Similarly, you can change any and all other text objects in this same fashion.

In this demo, we have always aligned attribute changes with the ending position keyframe mushroom; although, you can insert a keyframe mushroom anywhere along an attribute's dance bar simply by moving the RCT indicator line to the current time location of your choice, and then inputting a new value of an attribute.

Let's experiment with one more ObjectDANCER feature before recreating your movie. This feature is called "Text Decompose". Text Decompose allows you to break down text objects into pieces whereby you can then to manipulate those objects' attributes in time to create interesting effects.

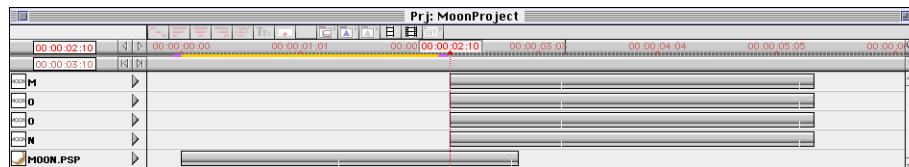
21. Click on the first keyframe mushroom along the position dance bar (). The RCT indicator line jumps in alignment with this mushroom.

22. Click on the **Text Decompose**  smart icon. The following dialogue box is displayed.



23. Select "Letter" from the "Decompose by:" pull-down options.


24. Click on "OK". In the Synchro Window, there are now four text objects, one for each letter in MOON.

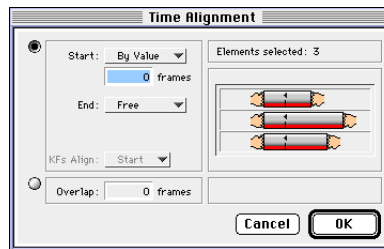


Next, we need to time align the decomposed text objects, so they are displayed gradually over time, instead of all four objects appearing at the same time.

25. While holding down [shift], click on each of the four text objects in the Synchro Window (they will be highlighted in red as each text object is selected).

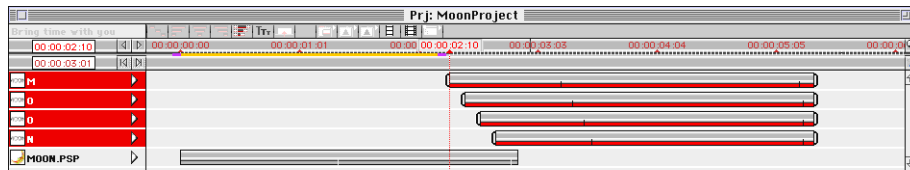
3. Another way to select a color instead of using the eyedropper tool, is to use the color sample/picker box tool. By double-clicking on the color sample/picker box, the color picker dialog box is displayed (as illustrated when changing the background, on page 10). Select a color, and then with the paint bucket tool, drop the color onto a selected object.

26. Click on the **Time Alignment...**  smart icon, and the following window is displayed.




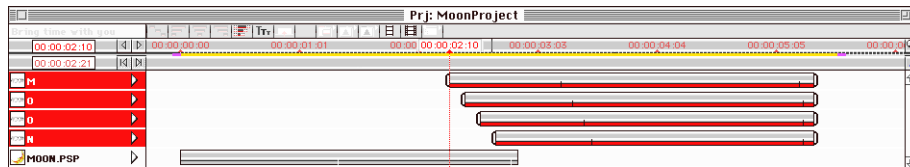
27. Input new values in the input boxes of the **Time Alignment...** window, and click on the “Lock end” and “Keyframe scaling” toggles.

28. Click on “OK”, and you will notice that the objects have been stepped in time in the Synchro Window.

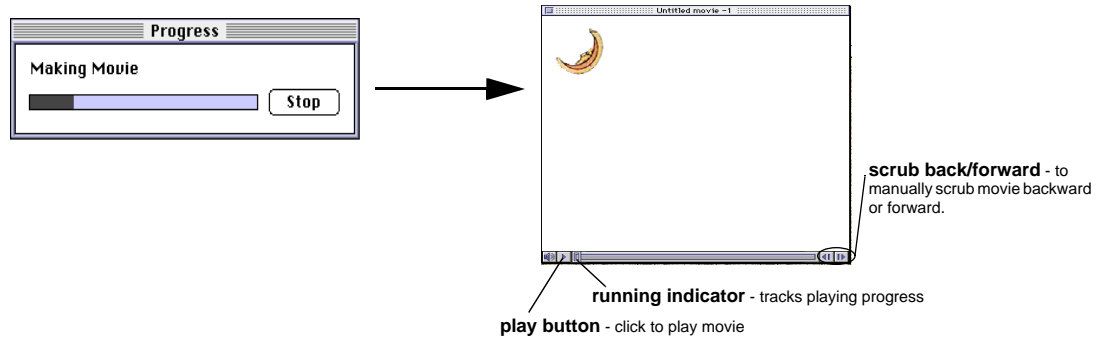


Let's now take a look at our project so far, as a movie. Once again, before outputting the movie, we need to readjust the project output bar, as we did with the basic animation.

29. Drag on the rightmost purple handle of the *yellow project output bar* to extend the *project output area* beyond the range of the *object lifespans* in the Synchro Window ( appears as you drag the purple handle).



30. Select the **Make QT Movie** command from the *Output Menu* (or click on the **Make QT Movie** smart icon at the top of the Synchro Window). A “Making Movie” progress screen is displayed, and then a small movie window is displayed.



31. Click on the *play button* in the movie window, and your movie is played.

32. The *running indicator* on the bottom scroll bar will move to the right while the movie plays. (If no sound is heard, ensure that your speakers are properly connected and configured on your computer.)

ADDITIONAL DOCUMENTATION AND SUPPORT

The *ObjectDANCER Reference Manual* describes in great detail all mechanisms of Dancer, and should be used as a tool for creating rich and thorough animations, while becoming an expert at using the ObjectDANCER tool.

If you encounter questions beyond the scope of the *ObjectDANCER Reference Manual*, you are encouraged to review the PaceWorks' website (<http://www.paceworks.com>) periodically for late-breaking news regarding ObjectDANCER or other PaceWorks' products. Also, you may review the “ObjectDANCER FAQ (Frequently Asked Questions) Page” to see if the answer has already been provided. If you still do not have an answer to your question(s), send an e-mail to info@paceworks.com.