

Instructions for animation programs

Note the buttons in these instructions are not active. You will need to run the programs.

Throughout this book there are diagrams with a caption followed by the word ‘program’. An example is shown below.

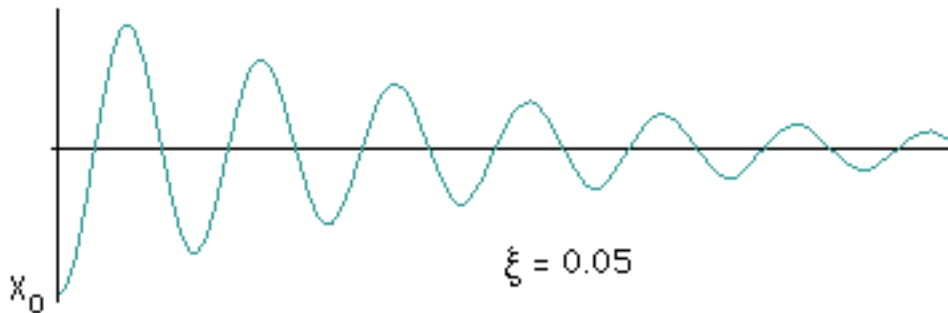
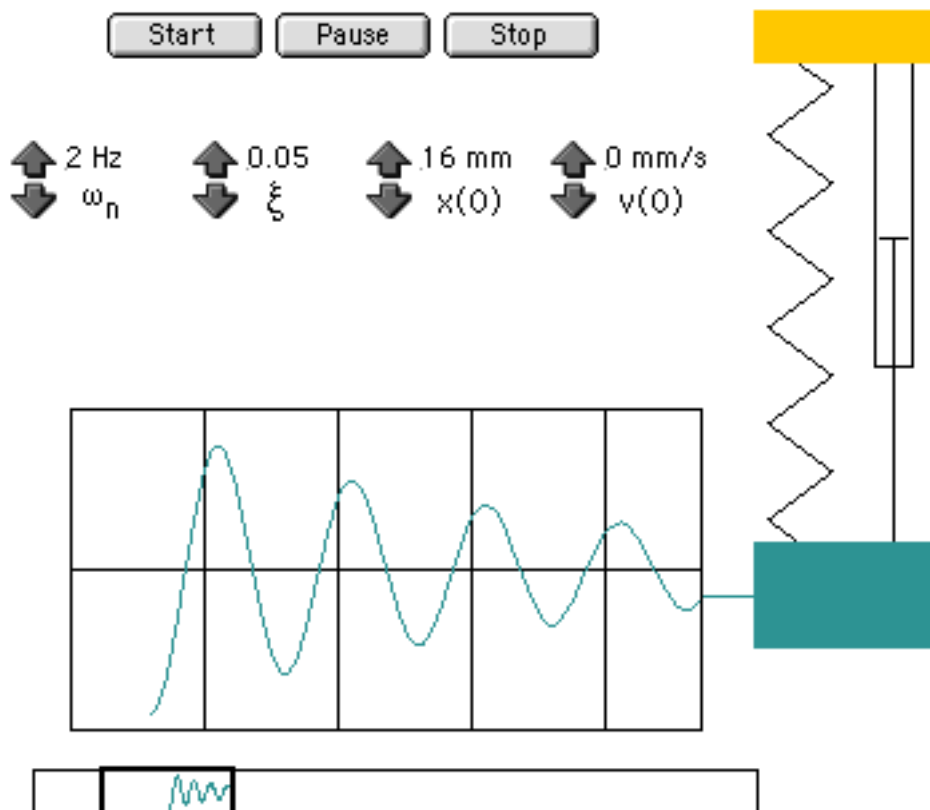


Figure A.4 Transient vibration with $x < 1$. (Program A.2)

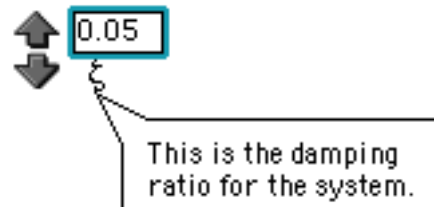
If the disc supplied with the book is loaded into your computer and the file ‘Programs.html’ selected your WWW browser should load a page that has links to all the programs. If the link to Figure A.4 is selected the program will be run. A compressed picture is shown below of what will typically be seen on screen when this program is run.



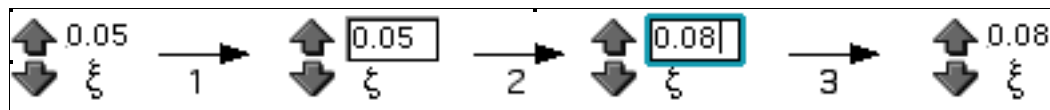
The 'Start', 'Pause' and 'Stop' buttons are self-explanatory. When the 'Start' button is selected the spring mass system vibrates and its motion is recorded on the trace that scrolls across the screen.

At the same time, a thumbnail sketch of the trace is drawn and the cursor shows that part of the trace that is displayed on the scrolling trace. If the 'Pause' button is selected, the animation is stopped and it is possible to drag the cursor back to examine an earlier part of the trace. It is also possible to click on the scrolling trace and drag it. If the 'Start' button is selected the animation continues from the point where it was paused. The 'Stop' button finishes the animation and if the 'Start' button is then selected the motion begins from the start.

It is possible to change the values of the main parameters governing the animation. If the cursor is placed over one of these parameters an information box may open to show what that parameter is. The up-and-down arrows allow the numerical value to be changed.



It is also possible to type in a required numerical value. If the mouse is clicked on the numerical value then a box appears around it. The numerical value may then be edited but note that the return key must be used to enter the new value. The sequence of actions is shown in the next diagram.



The program may now be run again to observe the effect of changing the parameter. For programs that do not have start and stop buttons the effect of changing a parameter is almost instantaneous.