### Using the Digitarium® Remote Control to do a Basic Night Sky Show

The Digitarium<sup>®</sup> remote control is backlit. To backlight the remote for a few seconds, push the button at lower left. You must release the button before you push another button.

For best reception, point the remote at the zenith while pressing buttons.

In a typical night sky show, audiences learn about a few constellations as well as what other objects (planets, the moon, deep space objects, etc.) will be visible that evening. This document will show you which Digitarium<sup>®</sup> remote control buttons to press in order to present a basic night sky show.

Below is an image of the Digitarium<sup>®</sup> remote control:



# The Sky Tonight Outline

#### I. Introduction

Start your lesson with the Digitarium<sup>®</sup> system set for the current time with atmospheric effects and landscape on. If the lesson is starting after sunset, set the sky time for some time before sunset that day.

You may need to adjust your latitude, longitude, and time zone; see the "Menu Mode" section of the Digitarium<sup>®</sup> software manual to learn how to adjust these settings.

### II. Tonight's sky

You will need to speed up time to get to the night sky. Press to fast forward time. Note that pressing this button multiple times will make time pass faster and faster. If you have sped up time too much, press to slow it down one step. Can also be pressed multiple times.

Let the sun set, then slow time down to real time by pressing  $\checkmark$ . Turn off the atmospheric effects and landscape  $\odot$ .

To help yourself navigate through the night sky, you may wish to label bright stars ind/or display the compass points in .

#### **III.** Constellations

Show your first constellation. To show just one constellation at a time (recommended), you will first need to select a star in the line drawing for that constellation. You will select a star by positioning the cursor directly over the star, then pressing the enter button.

To move the cursor around the sky, use the arrow buttons:

 $\frac{1}{2}$ : Move the cursor toward the zenith (the high point of the sky).

: Move the cursor counterclockwise around the zenith.

: Move the cursor toward the horizon (where the sky meets the earth). Note: When you first start up your Digitarium<sup>®</sup> system, the cursor will be positioned at the zenith. Use this button first to move the cursor away from the zenith before trying to move it to the desired star.

 $\sqrt{2}$ : Move the cursor clockwise around the zenith.

The cursor will move slowly when an arrow button is first pressed and will speed up if the button is held down.

Note that the cursor cannot cross the zenith. For example, if you wish to move the cursor from the

northern horizon to the southern horizon, you will need to use either  $\Box$  o

When your cursor is over the star you wish to select, press igoplus . To unselect an object, press igodot .

After you have selected the desired star, press 🚧 to turn on the line drawing for the constellation,

To add another constellation to your sky while still showing the original, simply select a star in another constellation's line drawing. If you want to remove the original constellation before showing the next constellation, first turn off the constellation label  $\searrow$ , line drawing  $\bowtie$ , and/or artwork  $\bowtie$ , then press O. This will clear out the earlier constellation.

If you wish to show all the constellations at once, simply select a star that is not in a constellation line drawing or another object, such as a planet or the moon.

## IV. Visible planets/moons/deep space objects

After you have shown as many constellations as you wish, point out some other interesting objects the audience can look for in tonight's sky. If desired, turn off constellation line drawings 2, labels 2, and/or artwork 2.

To label planets and moons, press . To give the audience a closer look at a planet or moon, first select the planet or moon using the cursor (as explained above), then press to zoom in. If you have selected a planet with moons, you can fast forward time to show the moons orbiting the planet. If you are set for auto zoom (the default setting), you can press a second time to see more surface details of the planet. When you are ready, press to zoom out (you may need to press this twice to get back to full sky view).

If you are using manual zoom , you can zoom in or out in smaller steps than with auto zoom. You can change from auto to manual zoom using the text menu. See the Digitarium<sup>®</sup> software manual for instructions on how to navigate the text menu.

To show moon phases, select and zoom in on the moon, then jump forward in time day by day using

the  $\boxed{2}$   $\boxed{1}$   $\boxed{1}$  button (the +1 button in that row enables you to jump one day forward at a time). You can also just fast forward time  $\boxed{1}$  to show the progression of the phases.

To label deep space objects in the sky, press the button. Each yellow dot marks an image which you can select with the cursor and zoom in on.

#### **V. Conclusion**

4

We recommend finishing your lesson with a sunrise. Make sure that your sky time is set for night time and that you are showing the full sky (i.e., not zoomed in on anything). Turn on the atmospheric effects and landscape  $\bigcirc$ , and turn off any planet labels  $\bigcirc$ , deep space object labels  $\bigcirc$ , etc. Fast forward time  $\bigcirc$  until sunrise, slowing time down to real time  $\bigcirc$  before you ask your audience to stand up and exit the dome.