

# **Digitarium® Universal Console™ NG User Manual**



**Universal Console NG  
August 3, 2021**

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Bremerton, WA 98337, USA  
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## Introduction

The Digitarium® Universal Console™ is a software interface that allows you to control your Digitarium digital planetarium system through a web browser. Version 1.9 and above are designed to work with systems using Nightshade NG (not Nightshade Legacy) software.

With a cross-platform, web-based application interface, users can control their system from a number of devices over a wired or wireless network. For example, a fixed dome user may want to use a PC type console in a control booth. For a more portable device, users might choose an Apple® iPad®.

**The Universal Console software runs in your web browser, you do not install it on your computer or iPad.**

The Universal Console is designed to give presenters more options for controlling their Digitarium planetarium system. The Universal Console has clear advantages for users who want finer control over their presentations, or who want to hide any trace of their user interface from the audience to maximize the immersive experience.

A drawback with the Universal Console is that you need to look at the interface while using it, whereas you can easily operate the Digitarium remote control by touch alone. Therefore it is entirely possible that you might use both during one presentation, using whichever is easier for a given task.

**You should familiarize yourself with the Digitarium Software User Manual in order to understand and make effective use of all your Digitarium system software features** This manual only explains how to set up and use the Universal Console interface to your system.

If you have just downloaded a new version of this manual, remember that access to new features may require running a free Internet software update to get the latest software versions. We recommend that you always keep your system and user manuals up to date for the latest features and bug fixes.

## Conventions Used

In this manual, when a special term is defined for the first time it will be shown in ***bold italics***.

If text needs to be entered exactly, it will be drawn like this in a box. Note that capitalized phrases in brackets need to be replaced with an appropriate value when entering the text. [EXAMPLE]



*If something behaves differently on a particular platform, that will be called out like this, next to an icon for the browser or device (in this case for the Apple iPad running the built in Safari web browser).*

# Requirements

**Digitarium Control Unit:** A Digitarium control computer running the Digitarium NG software platform is required. If you purchase a license for the Digitarium Universal Console after receiving your system, you will need to perform an Internet software update to install the required software. See the Digitarium Software User Manual for more detail on this process.

- 1. Computing Device:** Any Apple iPad model running a version of the iOS currently supported by Apple, and using the built in Safari web browser, OR a computer running a recent version of the free Firefox® web browser is required. Firefox can be downloaded from <http://www.mozilla.com>. Other browsers or devices may also work, but we do not officially support anything else at this time.



**WARNING:** *Never update your iPadOS (iPad operating system software) without confirming this will not cause problems with the Universal Console application! Check the latest version of this manual at:*

*<https://nightshadesoftware.org/projects/community/knowledgebase/articles/47>*

*Tested iPadOS version is: 14.6 using the built in Safari browser.  
Some features may not work on older or newer iPadOS versions.*



*Recommended and tested Firefox version is 78 or newer.*

**Do not use Firefox on an iPad, use the built in Safari browser.**

- 2. Network hardware:** Some method of networking the Digitarium control unit computer and your computing device(s) is required. All Digitarium control units support a wired Ethernet connection, but this cable can be connected to a wireless router to enable access from an iPad or notebook computer via a WiFi wireless connection. If you are using a desktop computer, a wired network is usually the preferred option. Ideally this network would also have Internet access, so that you can easily perform software updates. Consult your local network administrator for advice and local policies. See Router Configuration Requirements on page 33 for more details.

The Digitarium CU-S, CU-Z, and CU-Y control units support a direct WiFi connection, meaning that no additional networking hardware is required. Similarly, OP5 or newer Digitarium CU-1 control units support a tiny WiFi dongle (available from Digitalis) which can be left in the system while transporting. These options are great for portable users.

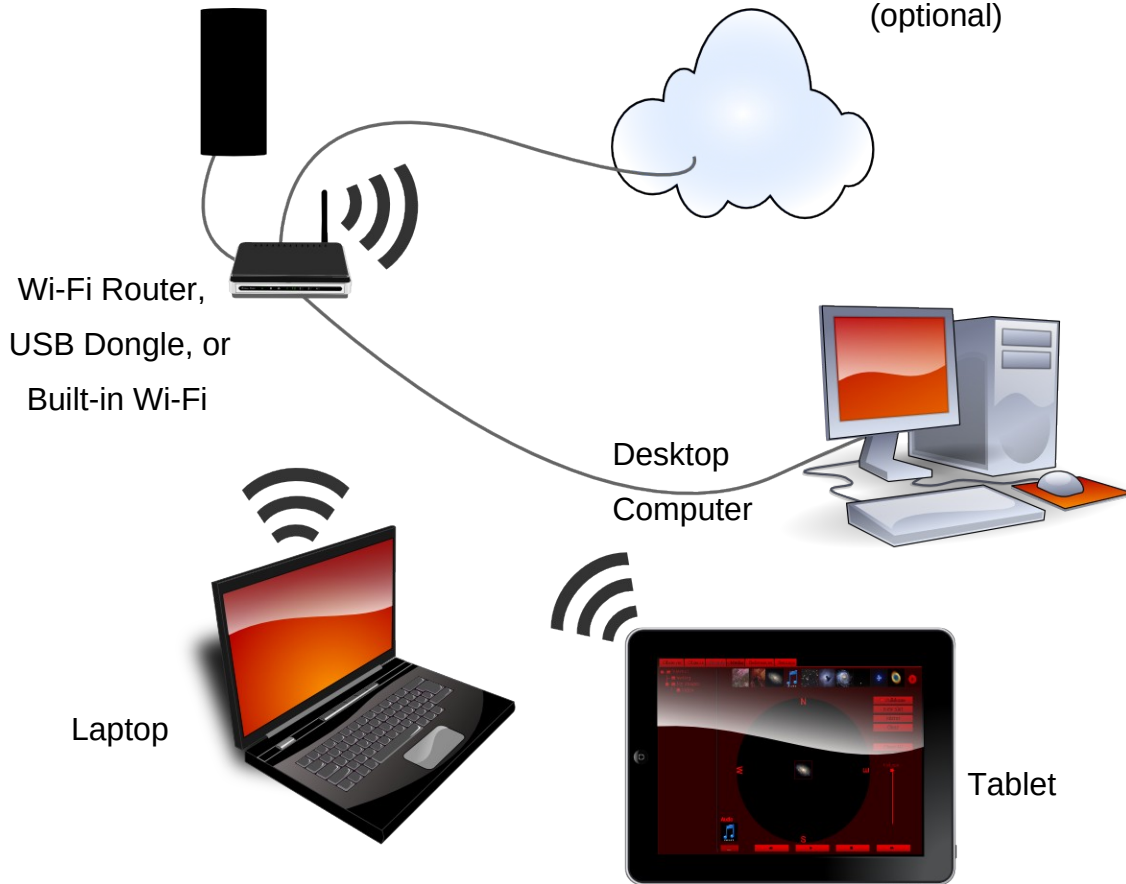
## Typical Network Configuration

Digitarium

Control Unit

Internet

(optional)



## Interaction with Other User Interfaces

Digitarium hand-held remote controls and gamepads can be used at the same time as the Universal Console interface. Multiple Universal Console interfaces can even be used at the same time, limited to the processing power of your system and your network capacity. However, there are a few limitations.

We recommend that you close the Universal Console interface while you are performing a software update.

## First Time Set Up

The first time you set up your system to use a Universal Console interface, you will need to follow the steps below. **It is critical that you not skip any steps** If you experience any problems setting up your system, please consult the Troubleshooting section on page 34.

1. Make sure your computing device meets the requirements outlined in the Requirements section above.



### **Set Landscape Mode**

*While holding the iPad in a landscape (rather than portrait) type orientation, press the home button on the face of the iPad twice in rapid succession. Some icons or controls will show up along the bottom of the screen. Drag your finger on this area to the right so that you scroll to the left until you see a circular arrow icon. If there is not a lock icon in the middle of the circle, click this button to lock the display orientation in landscape mode. Hit the home button once to exit.*

2. If using a wired network or external WiFi router, make sure the control unit Ethernet port is physically connected to your network.
3. Turn on your network router or switch if required and not already running.  
  
If you are setting up a wireless router for the first time, follow the manufacturer's instructions for configuring your router. Typically you need to use a web browser to connect to the router and change settings. Be sure to:
  - 3.1. Change the default password (and write this down so you remember it) so other people can not change your settings.
  - 3.2. Set up a unique network ID (SSID). This must be a unique ID so that you and your wireless device can easily and correctly identify your network.
  - 3.3. Configure a secure network to prevent unauthorized users from connecting to your network We recommend the WPA2-PSK security option for speed and security.
  - 3.4. Review Router Configuration Requirements on page 33 for other settings that may be required.
4. Boot up the Digitalium control unit (**CU**).
5. Connect your computing device to the network the control unit is on. If you are connecting directly via WiFi to a CU with WiFi capability, join the "Digitalium-XXXX" network, where XXXX is a number unique to your system. The shared WPA key is "d" followed by your control unit serial number from your product label.



*Press the home button on the iPad once to exit and then two more times to get to the home screen. Click on the Settings icon. Select the "Wi-Fi" section. Select your wireless network by the unique ID you gave it. Press the home button again to exit.*

6. Using the Digitarium remote control, go to menu item 8.9 and note the IP address of the control unit. However, if connecting directly via WiFi to the control unit, use the address 10.0.0.1 instead.
7. Open the web browser on the device and open the location:

`http://[IP ADDRESS]`

Example:

`http://10.0.0.1`



*Some cable modems/routers provided by Internet Service Providers reserve IP Addresses in the 10.0.0.x range. This can interfere with your ability to access the UC while connected to the router. Check with your ISP about changing this setting.*

8. You will be prompted to set a 6 digit password. If you ever need to reset this password, you can do so from the TUI menu using your Digitarium remote.



*On older iOS versions you might need to disable “Block Pop-ups” and “Request Desktop Site” in the Safari preferences.*

9. Bookmark this page or create a Webapp for future access.



*Click the icon next to the address box that looks like an arrow coming out of a rectangle (see screenshot at right). Select “Add to Home Screen” from the pop-up menu. You will then be prompted to name your application (“Universal Console” is a good option). Starting the application from the home screen allows the Universal Console interface to fit on the iPad screen without being cut off at the bottom.*

10. Close your web browser. Next start up the Universal Console application from your bookmark or application icon you just created to make sure it works properly. You will be prompted to read and accept the license agreement before continuing to the application itself. Third generation iPads may not remember your password when using the pin to homescreen feature. You may be prompted to enter your password with each login even if you choose the remember password option.
11. You may want to turn down the brightness on your screen or use the iPad’s Dark mode, to avoid illuminating your dome with distracting stray light. See page Error: Reference source not found.













## Start Up

Once you have performed the first time setup, you should only need to perform the following steps to start up your Digitarium system and use the Universal Console interface. For any problems see the Troubleshooting section on page 34.

1. Make sure that the control unit can reach your network (Ethernet cable or WiFi dongle plugged in, for example).
2. Turn on any network router or switch if not already running.
3. Boot up the control unit.
4. Connect your computing device to the network the control unit is on.
5. Click on the Home Screen Icon you created in Step 9 above.
6. Enter your user name and password if required and get started.

## Universal Console User Interface

The Universal Console user interface (**UI**) is divided into different sections, called **views**. Each view allows you to control one major aspect of your Digitarium system. Each view is accessed from a row of icons across the bottom of the screen. Clicking on the “Media” (filmstrip) icon will take you to the Media View, for example. Icon key:

-  Navigation
-  Date and Time
-  Objects
-  Constellations
-  Scripting
-  Media
-  References
-  Settings
-  Augmented Lessons
-  Data Console
-  Audio
-  Cove Lights



## Basic UI Actions

The following actions are used throughout the remainder of this manual to describe how to interact with the various UI components. If you are using a mouse or similar type pointing device, refer to the “Mouse” column for action definitions. If you are using an iPad, refer to the “Touchscreen” column.

Action	Mouse	Touchscreen
<b>Click</b>	Press and release your left mouse button with the cursor positioned on the component to click.	Touch one finger to the screen on the component to click, and immediately lift your finger.
<b>Drag</b>	Press your left mouse button with the cursor positioned on the component, move the mouse as desired, and then release the mouse button.	Touch one finger to the screen on the component, move your finger as desired, and then lift your finger.
<b>Flick</b>	Like a drag, but move the mouse quickly and release the mouse button while the cursor is still moving.	Like a drag, but move your finger quickly and lift your finger while it is still moving.

### Night Vision

The Universal Console shows pages in a subdued red color to allow users, and audience members to keep their night vision during planetarium presentations. With Apple’s implementation of Dark Mode in iOS-13 users can keep the subdued light even when bringing up the iPad’s keyboard.

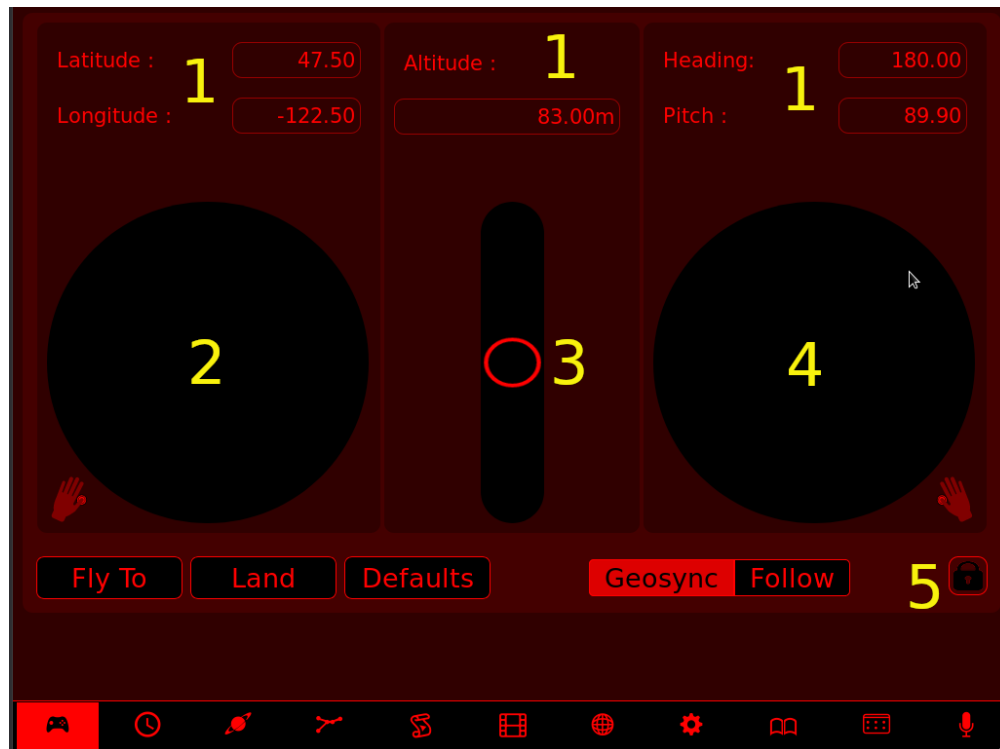


*To enable Dark Mode go to Settings > Display & Brightness. On the right you will see the option of choosing Light or Dark modes. By choosing dark the keyboard that pops up when you select a text box will be in a subdued light, preserving your night vision during your presentation.*



*You can hide the Firefox menu areas and run the UC fullscreen by hitting F11.*

## Navigation View



The touchpad areas can be used like a gamepad controller. You can hold an iPad in both hands and use your thumbs to navigate. You can control pitch, heading, latitude, and longitude as you would with a gamepad controller. Likewise, the altitude control can increase or decrease altitude.

To ease performing other tasks while flying around an object, click the lock button and your controls will stay in position even when you let go. To return to direct control of the touchpads, click the unlock button again. To fly to a selected object, click the “Fly To” button. To Land on a selected object, click the “Land” button. To jump to your default position and home body, click the “Defaults” button.

Labeled areas in screenshot:

1. Click the text boxes to enter specific values.
2. Left touchpad to adjust latitude and longitude (up = move forward, right = move right).
3. Center touchpad to adjust altitude (up = increase altitude).
4. Right touchpad to pan.
5. Lock button.

## Date and Time View



The time control buttons at the bottom of the screen control the rate of time in the simulation, and work the same way as the buttons on the Digitarium remote. The fast forward button accelerates the time rate in a positive (forward) direction, and can be pressed multiple times. The rewind button accelerates the time rate in a negative (backward) direction. The play button moves forward in real time. To return to the current date and time, click the “Now” button.

Click the edit boxes at the top of the screen to change your date or time directly. You can click the “Calendar” or “Sidereal” buttons to move through time in calendar or sidereal days.

## Objects View



The Objects view allows you to:

- Select and track objects in the sky
- Zoom in or out on selected objects
- Fly to other bodies
- Toggle planet labels and orbits
- Turn on time lapse

To select an object just click the labeled button. You can only select one object at a time. To unselect an object click the “Unselect” button. For unlisted objects, use the search box in the upper right of this section, start typing the name, and then hit enter to select once the auto-completed name matches the object you want to select. For example if you start typing “bet” into the search box, the star Betelgeuse will auto-complete.

To zoom in you need to have an object selected. When you are in manual zoom mode (see the Settings view), you can hold down the zoom buttons to zoom in or out as desired.

If you use the Fly To button with nothing selected you will fly to your home object. For example if your default setting has you on the planet Earth looking at the sky, the Fly To button will fly you to orbit. If you have another world selected the Fly To button will fly you directly there.

## Constellations View

The Constellations view allows you to toggle the constellation labels, art and lines.

It also allows you to toggle on the star labels and change sky cultures.

To select a constellation just click the labeled button. You can select multiple constellations at a time. To unselect a constellation, click the labeled button again. To unselect all constellations click the unselect button.

If you want to display constellation labels in the native language rather than your sky language, turn off the “Translate” button.

If you would like to change sky cultures, click the name of the current sky culture to bring up the list of other available sky cultures.

## Script View

The Script view allows you to select and play StratoScript™ scripts from your internal hard drive or any connected USB drive. Digitarium Professional edition users can additionally record scripts, edit scripts, create new scripts, and manage files on the internal hard drive (only).

### The File Tree

On the left is a file tree showing the drives connected to your system.

You can drag the right edge of the file tree to adjust the width of the file tree. You can click the large arrow to the right of the file tree to open or close the file tree. The double arrow pointing up to the right of the file tree will collapse all drives and directories.

In the file tree you can expand folders by clicking the arrow icons.

A **trash can icon** to the right of a file/folder name will delete that file (move it to the .recovery folder where it can be restored using the file tree). A **plus sign icon** gives you the option to create either a folder or file (click on the appropriate icon in the dialog window). Please note that all files will automatically have the .sts (StratoScript) extension added. While you can see all files, only .sts files can be opened.

### The Script Editor

On the right side of the view is the script viewer/editor pane. Below this is the script debug log (left) and the Nightshade NG log (right), both of which can provide important information when debugging a script or other system problem.

When a script is selected in the file tree, it will be displayed in the viewer panel on the right. The commands and argument/value pairs are color coded to make writing and editing scripts easier. Once selected, you can play the script with the play button along the top of the viewer pane. The script can be paused or stopped while playing with the relevant buttons. If a script causes a notification or error during playback, that line will be marked with a small 'x' icon to aid debugging. Digitarium Professional users can click on the progress playback bar to seek to a certain point in script playback.



Digitarium Professional users can also hit the round record button to start and stop recording a new script into the currently active folder. Everything that you do will be recorded in the script. To record gamepad motion you can make sure the **Record Manual Movement** toggle is selected in the Settings view → Administration tab. You can also hit the **keyframe** button to record the current position, orientation, and elapsed time. When played back, these key frames will be strung together into a sequence of movements.

The **Close** button clears the script viewer. Professional users can use the **Save As** button to save a script to the internal drive with a different name or location.

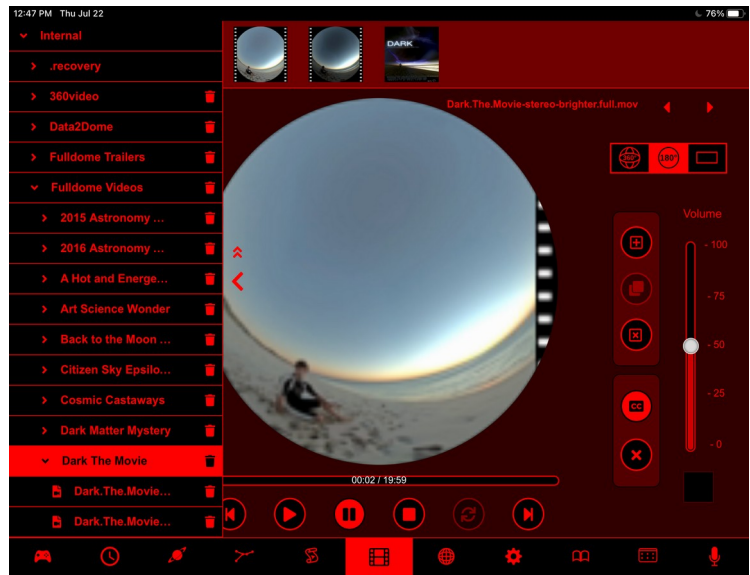
To learn how to get files on or off your internal drive so you can work on them on a desktop computer, please refer to the Bidirectional Drive Synchronization section of the Digitarium NG User Manual.

## Media View

The Media view allows you to easily select images or videos to show on your dome, adjust media placement and projection types, play automated slide shows, and even play audio tracks in the background.

### The File Tree

The File Tree is the same as on the Script view. In the media tab you can only see media files (i.e. .png, .wav, .ogg, .mp4). If you click a file in the file tree it will be shown in the **dome circle** and projected onto the dome.



*The media tab with the File Tree open and a full dome movie selected.*

### Thumbnail List

When you click on a folder in the tree, the folder will be highlighted and the media in that directory will be drawn as thumbnails across the top of the view. For large folders or files there may be a short delay before the thumbnails show up.

Video files are represented by thumbnails with film sprockets at the sides. Audio files are represented by a waveform pattern. If a file format is not supported, it will not show up in the thumbnail list.

If there are more files than fit on the view, you can scroll across the thumbnail view to see more files.

You can click on a file in the thumbnail view to play it. You can also drag a file into position on the dome circle.

### Dome Circle

The large black circle is a simplified view of your dome which allows you to place media directly onto the dome where you want it. Your system focal point is towards the direction of the bottom of your UC screen. If you face your focal point in your dome and place an image at this point, it should be intuitive to move the image up/down and left/right as these directions will be the same between the UI and your view of the dome.

### Media Slots

A **slot** is a place where a media file can be shown. A square with a bright red border is the currently selected slot. A mirrored slot has a dashed rather than solid border. If a slot is not selected it has a dim red border. If a slot contains a media file, a thumbnail is shown in the slot and the media will be visible on the dome. To select a different slot, simply click on another slot in the dome preview.



By default, the Media view starts with an empty slot at your focal azimuth direction. This is the default location if you create a new slot by clicking on the “New Slot” button.

## Adjusting Slots

Simply drag a slot to move it. This can be done whether or not the slot is empty.



*To rotate a slot, touch the slot with two fingers and then touch outside the slot with a third finger. Then rotate your hand to rotate the slot.*

*To scale, place two fingers in the slot and vary the distance between the second and first finger.*



*To rotate a slot hold down the Shift key and use a mouse scroll wheel.*

*To scale a slot use the mouse scroll wheel.*

## Selecting a Thumbnail

If you click on a thumbnail in the thumbnail list, the full filename is displayed just below the row of thumbnails and the file is loaded into the currently selected media slot.

## Slot Controls

To the right of the dome preview is a vertical line of buttons that control the slots. They allow you to add a new slot, mirror an existing slot to the opposite side of the dome (useful in planetariums with concentric seating), clear the existing slot, toggle closed captioning, and clear all slots.

## Playing Media

When playing a movie file a progress bar will appear under the dome preview. You can click on the progress bar to jump to another point in the movie. Above the progress bar will be a counter showing elapsed time/total time for the media. Below the progress bar will be media control buttons allowing you to stop, start, pause, and seek through the movie.

It is now feasible to play more than one perspective video file at a time. To do this create a slot and place a video file in it, then create another slot and put a different video file inside it. When showing multiple movies the progress bar and media controls will correspond to whichever slot is selected.

When playing audio-only files an icon will appear in the **audio slot** located in the bottom right corner of the Media tab. The progress bar, counter, and media controls will appear under the dome preview. An additional media control button allows audiofiles to be looped.

At upper right, below the thumbnail bar are left and right arrow buttons. These let you move easily backwards or forwards to the next media file for simple slideshows.

## Volume Control

An audio volume control slider is positioned on the right side of the media tab, just above the audio slot.

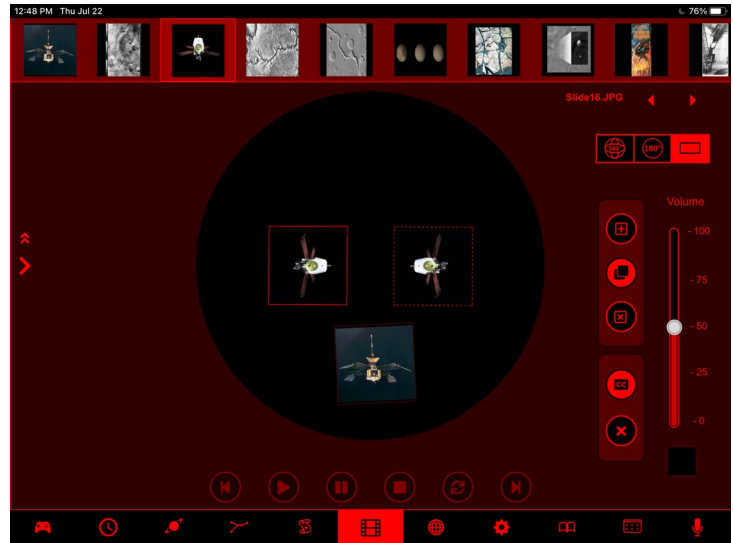
## Projection Mode Controls

Just below the slideshow arrows are a row of buttons that allow you to change the visual media projection mode for the selected slot. There is support for **perspective mode**, **fulldome mode** and **360 mode**.

In perspective mode, media files are distortion corrected to look correct on a small portion of the dome. In perspective mode, slots can be moved, scaled, rotated, and mirrored. When a perspective mode slot is moved, the bottom stays parallel to the horizon as much as possible.

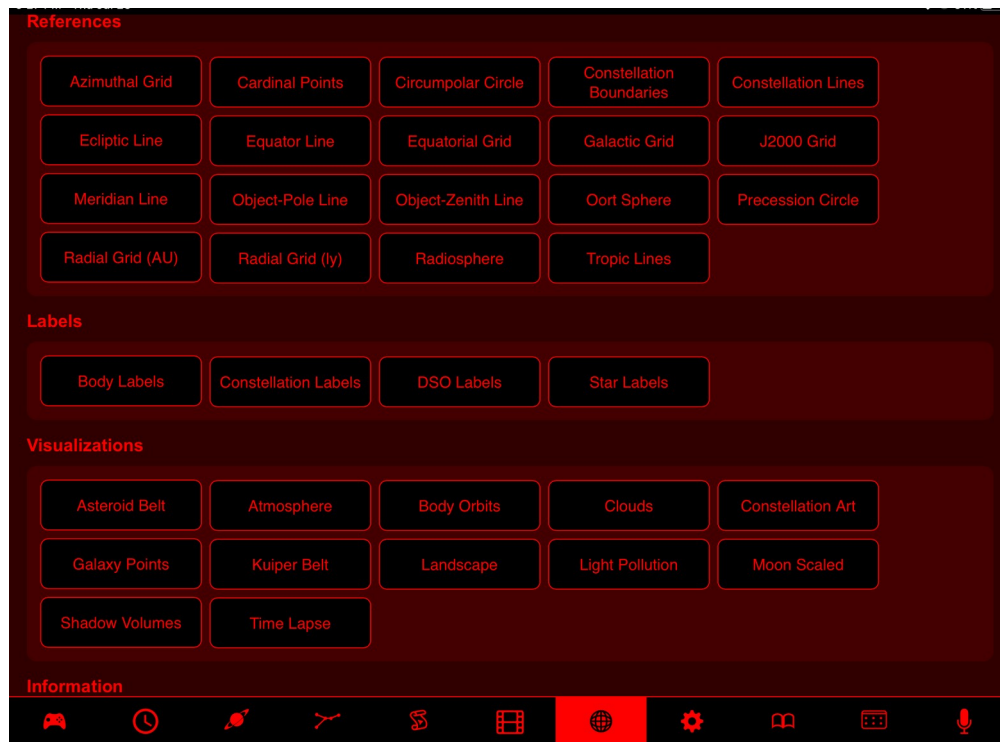
In fulldome mode, a media file will be scaled to fit your dome, and the slot can only be rotated. This is most useful for fulldome videos or fisheye images.

In 360 mode you can pan around using a gamepad or the Navigation view to explore the entire 360 degree image.



*The media tab showing the File Tree closed and two perspective media slots. Note that one of the slots is mirrored.*

## References View



The References view allows you to quickly toggle reference lines and other visual settings, including setting the current landscape. You can scroll up and down to see all of the References.

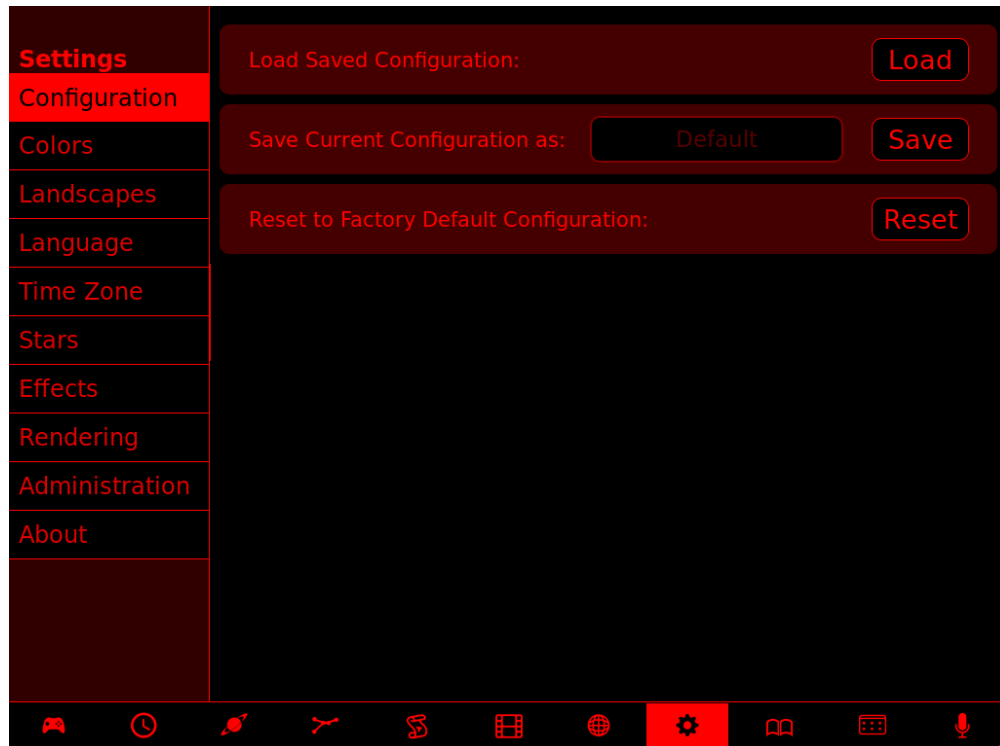
For background on each feature, see the Digitarium Software User Manual.

## Settings View

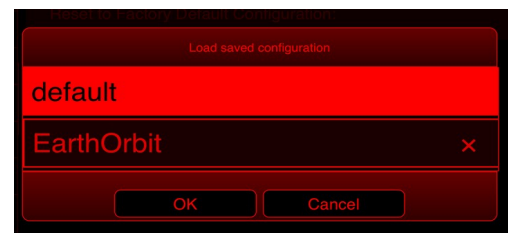
The Settings view allows you to change settings that are otherwise accessed through the text menu using the Digitalium remote control.

### Configuration Tab

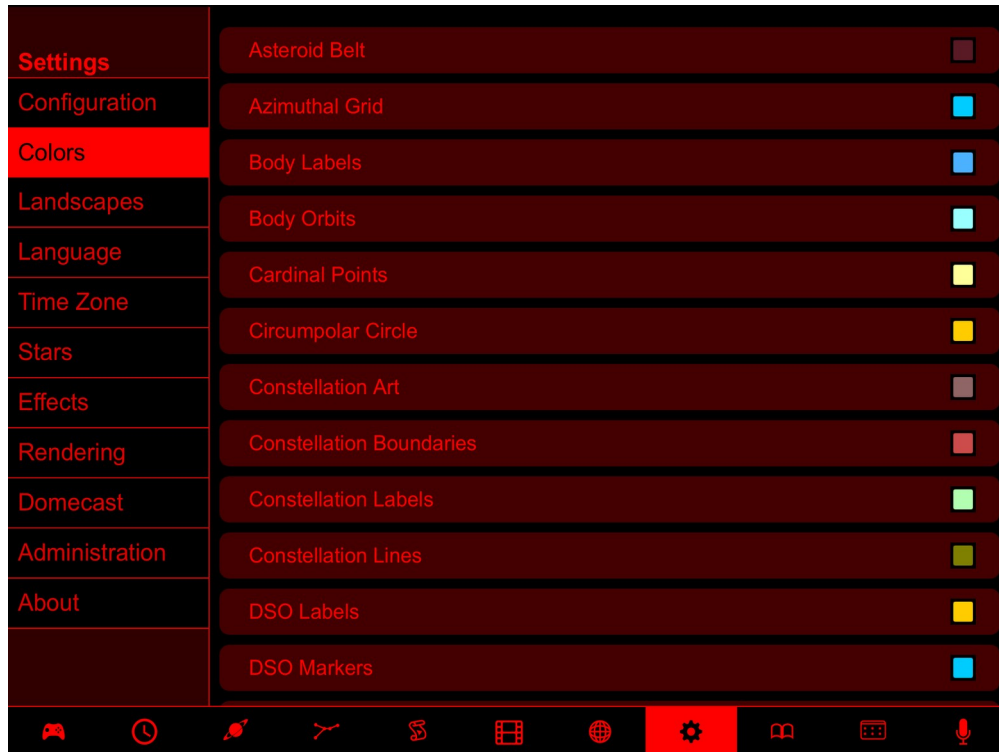
On this tab you can change and save your default configurations. You can load your default configuration settings, change your default configuration settings, save named configuration settings, and reload the factory defaults.



To save a new configuration file, click on the word “Default” and a cursor will appear in the text box. Name your new configuration (note only Arabic numerals and Roman letters are allowed). When you next click the load button a pop-up window will appear allowing you to chose any of the saved configurations.



## Color Tab



To change colors of drawn lines or labels, navigate to the Colors item, then select the item you want to change the color of from the list. The current color will be shown in the small square next to the item's name in the list. The color selector control consists of a **color saturation square**, a horizontal **hue selector** (looks like a rainbow), and a horizontal **opacity selector**.

You can click within the color saturation square to adjust the saturation of the current hue. A small circle shows the current saturation selection and the color preview gives you a larger sample of the current color. To change the hue, click on the desired hue in the hue selector.



## Landscape Tab



Landscape tab allows you to select what landscape displays when you are landed on a body. It is now possible to load any landscape onto any body. For example can load the moon landscape while on Earth.

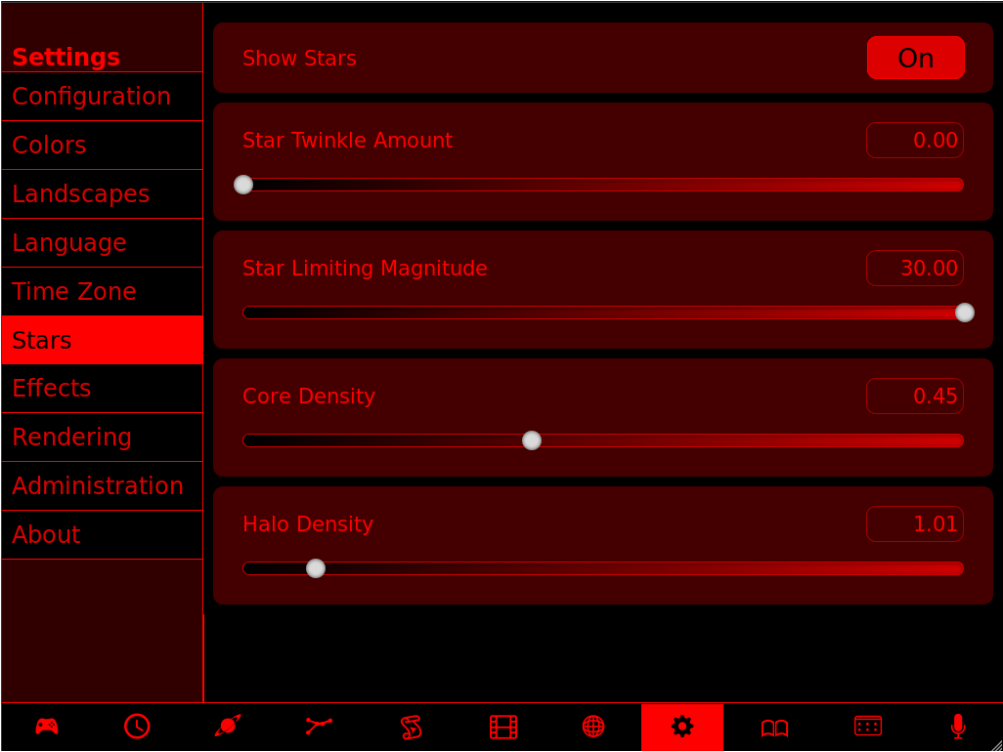
## Language Tab

The sky language is used for labeling objects in the sky. The UI language affects only your Universal Console interface.

## Time Zone Tab

You can pick your time zone from the drop down menu.

# Stars Tab



The “Stars” tab presents sliders and text boxes to adjust the appearance of stars.

# Effects Tab



Setting effects are discussed in the “Menu Mode” section of the Digitarium Software User Manual.

## Rendering Tab

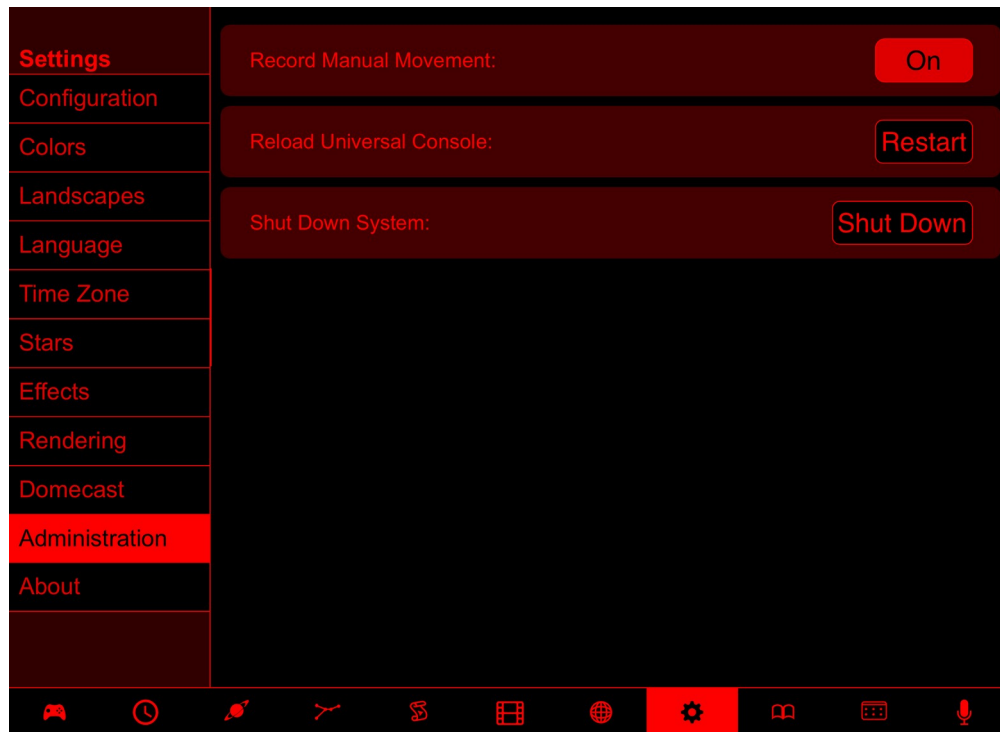
The Rendering item allows you to select **light exposure**, **Gamma**, or **Saturation**, and adjust these settings with the slider bar below. You can find more information about these Rendering settings in the “Menu Mode” section of the Digitalium Software User Manual.

## Domecast Tab

Gives you the ability to either host or subscribe to a Domecast over the Internet. To learn more about domecasting see the How To Domecast document at:

<https://www.nightshadesoftware.org/projects/community/knowledgebase/articles/275>

## Administration Tab



Gives you the ability to toggle the recording of gamepad movements in the Script Editor, Restart the Universal Console, or Shut Down your Digitalium computer.

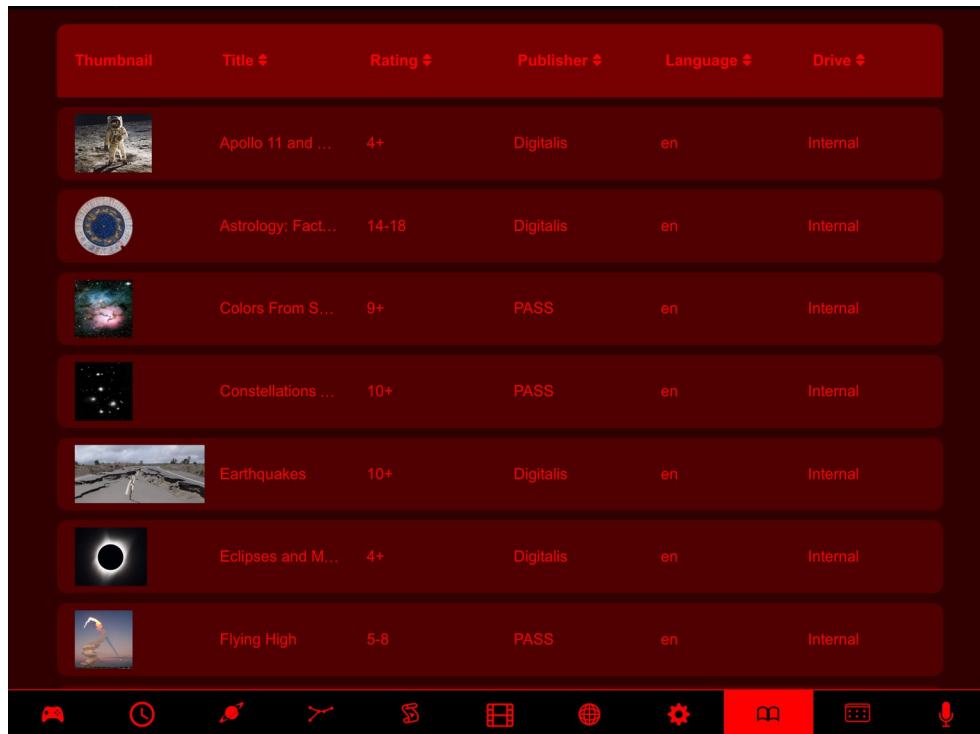
## About Tab








Click the “About” button for Universal Console version information.



# Lessons View

The Lessons view allows you to access Augmented Lessons that are specifically developed for use with the Universal Console. Lessons typically include everything a presenter should need to give a full presentation, including narration text, images, videos, and scripted actions.



Thumbnail	Title	Rating	Publisher	Language	Drive
	Apollo 11 and ...	4+	Digitalis	en	Internal
	Astrology: Fact...	14-18	Digitalis	en	Internal
	Colors From S...	9+	PASS	en	Internal
	Constellations ...	10+	PASS	en	Internal
	Earthquakes	10+	Digitalis	en	Internal
	Eclipses and M...	4+	Digitalis	en	Internal
	Flying High	5-8	PASS	en	Internal

## Lesson Index

When the Lessons view is first selected you will see an index of all available augmented lessons on your system. Lessons can be located on any drive connected to your system, as long as they are inside a /lessons/[PUBLISHER]/[LESSON NAME] folder tree on the drive.

Click on the table headings to sort by that column. Simply click on a lesson to load the lesson.

If you do not have any Augmented Lessons or want more, please go to the Digitalis Community Site. Lessons can be customized to your needs or created from scratch by someone with basic experience writing HTML and StratoScript scripts.

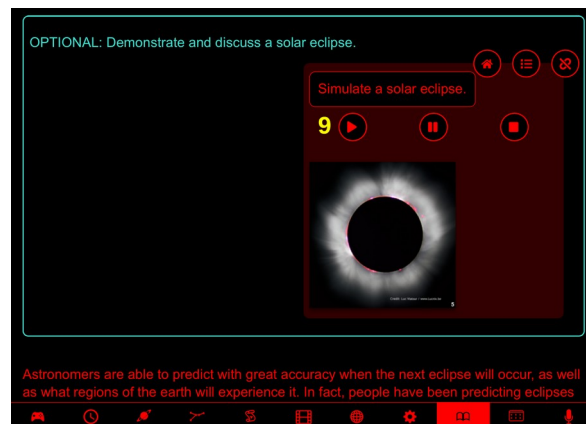
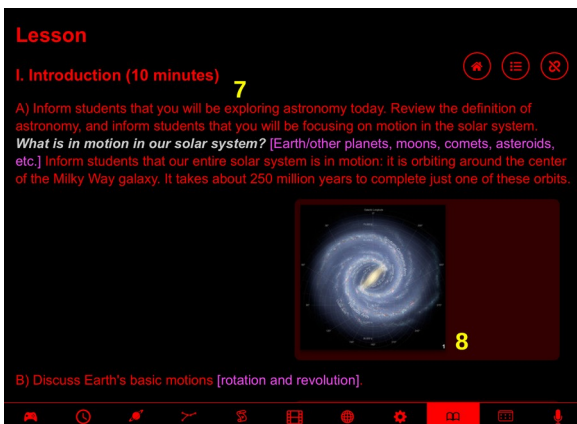
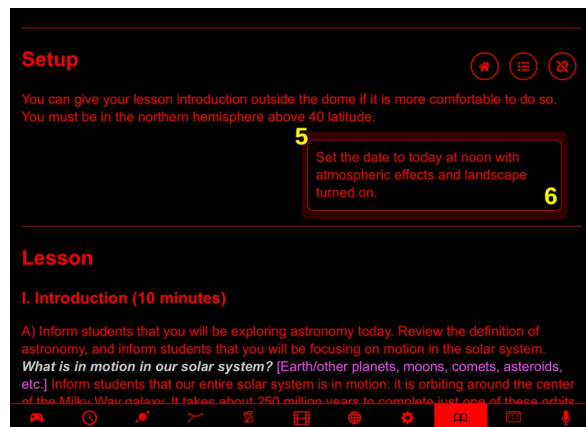
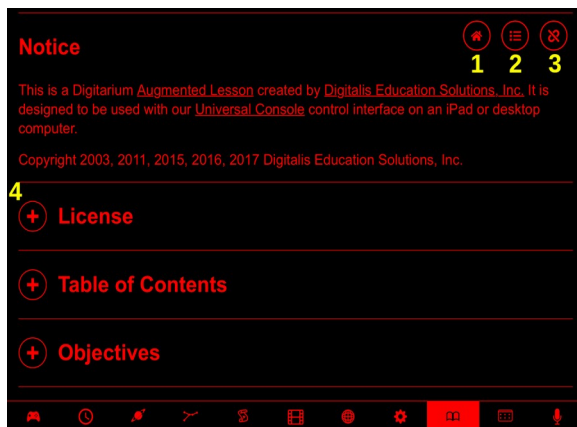
## Navigating Lessons

Once you are viewing an individual lesson you can leave the lesson to go to other tabs as needed, and then hit the Lessons tab to return where you left off. Just scroll down to see more of the lesson.

## Feature Identifier

The images below identify key features of an Augmented Lesson:

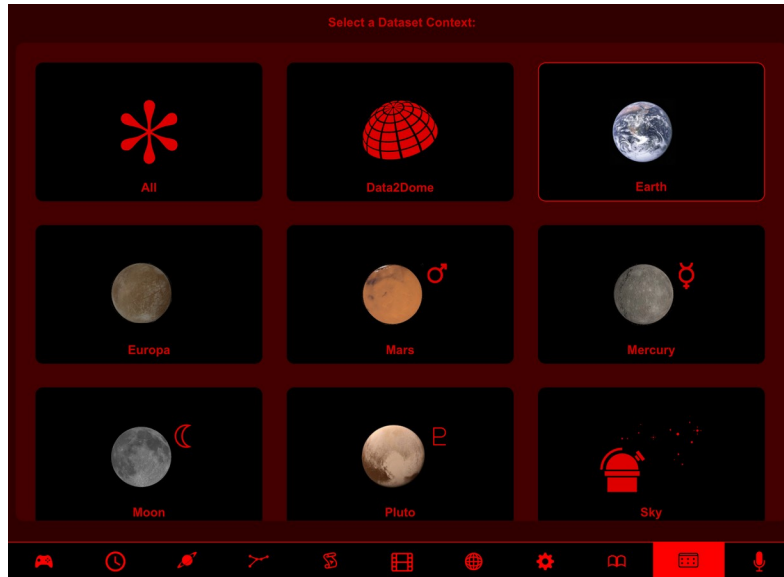
1. The home button takes you back to the **lesson index**.
2. Jump to the lesson's **Table of Contents**.
3. **Drop all media** (images/videos/audio) which were loaded from the current lesson.
4. Click the plus sign to **expand collapsed sections**, and click the minus sign to collapse them when desired.
5. **'Action'** boxes have dark red backgrounds and appear on the right side of the screen. These contain things you can do as the presenter. Actions include playing media, system commands, and descriptions of physical activities.
6. **'Effects'** are red outlined buttons. Clicking such a button will result in the effect taking place on your Digitalium system (via script commands).
7. **'Narration'** text is left justified and offers suggested narrative and guidance for the lesson.
8. **Image/video/audio thumbnails** located inside action boxes are clicked to load the image or play the audio or video on your Digitalium system.
9. **Play, pause, and stop buttons** allow you to control audio, videos, and some complex script effects



# Data Console View

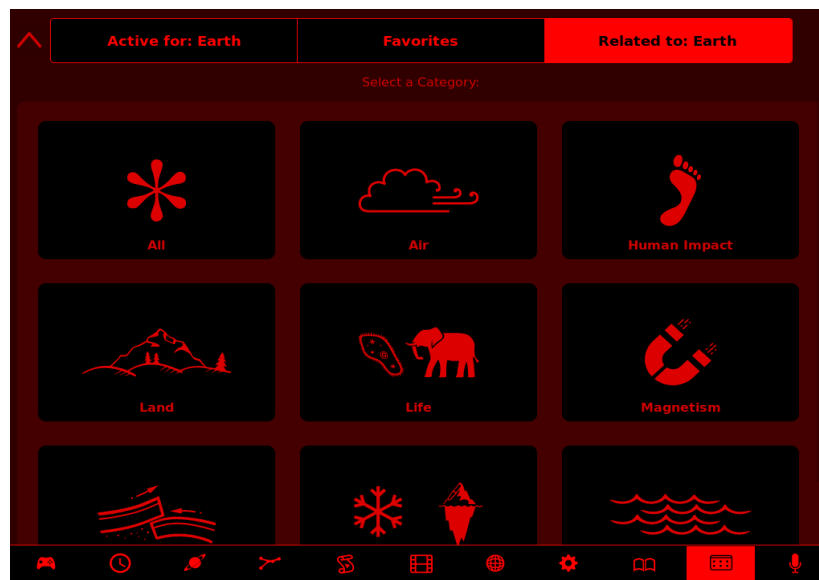
The Data Console allows Nightshade NG Professional users to display different datasets over select planetary bodies and across the sky. Example layers are Seasonal Ice images for Earth, infrared views of the sky, or magnetic maps of Mars.

## Dataset Context



This view allows you to choose data related to specific areas you would like to work with.

## Dataset Category



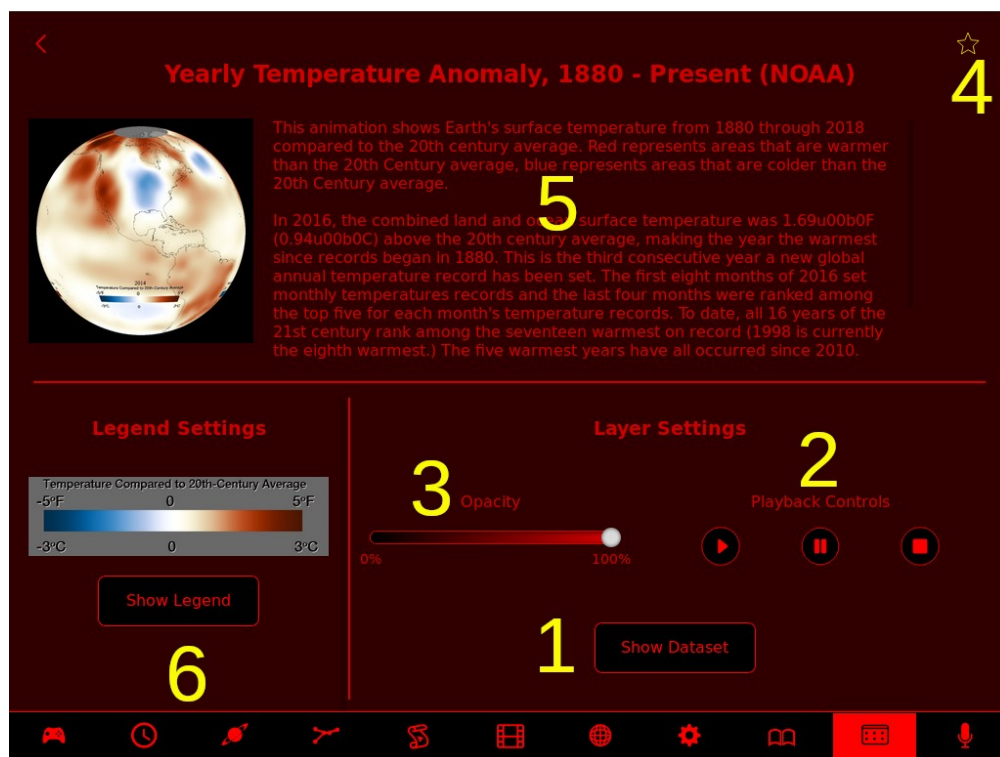
Inside each dataset context view you can choose between the datasets already active for that context, a collection of favorite datasets you have saved for that context, and all of the datasets that are related to that context. Categories make finding datasets easier.

## Data Browser



Selecting a category will bring up a list of all the datasets associated with that category.

## Dataset Detail

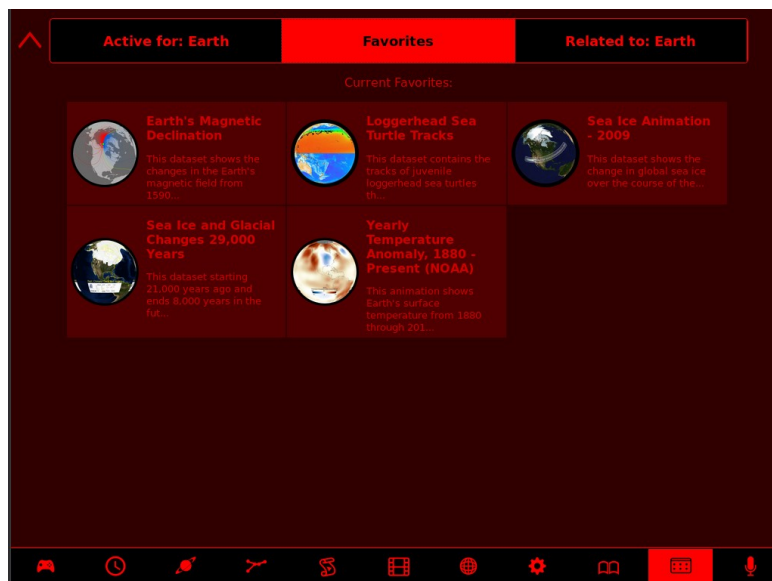


The detail window gives you control over the dataset.

1. The Show Dataset button toggles the dataset on and off.
2. For video layers, playback controls allow you to play, pause, and stop the video.
3. Adjust the opacity of the dataset.
4. Toggle the layer into your favorites list. Note that your favorites are saved/loaded when you save/load your configuration settings.
5. A written description of the dataset and its source.
6. The ability to toggle display of any legends on and off.

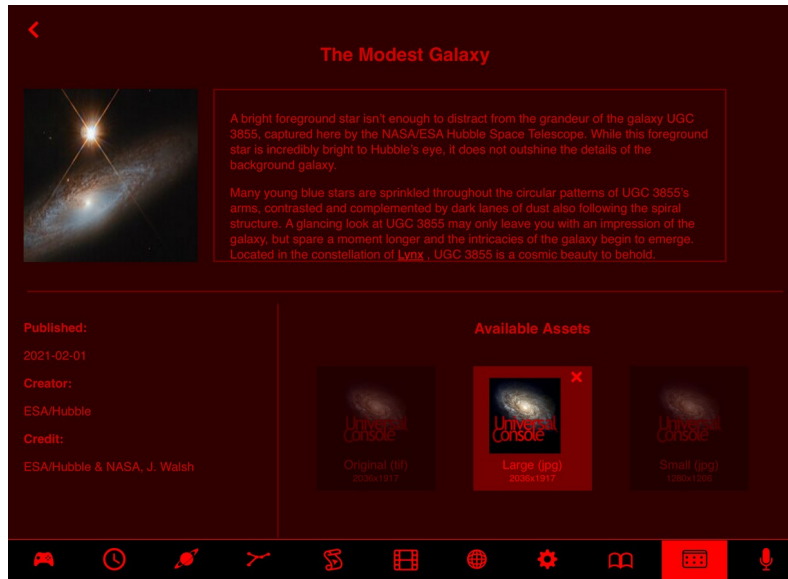
Some datasets, such as those in the Weather category, are updated on Digitalis servers hourly. To see the latest datasets make sure you have run an Internet update. Refer to the Software Manual for details on how to update your system. Data2Dome feeds are downloaded when you first visit each feed so long as you have an Internet connection.

## Favorites



On the Favorites tab you can see all of the datasets you have indicated as a favorite.

## Data2Dome



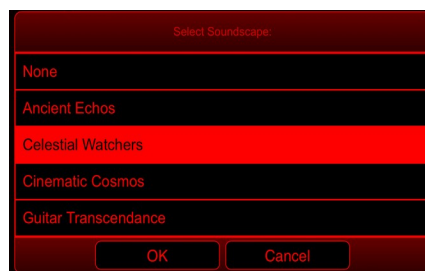
Datasets in the Data2Dome context allows you to download data from select Internet resources directly to your Internal Media Drive, provided your system is connected to the Internet. When you first click an image icon the image will be downloaded to the “Data2Dome” directory on your Internal Media Drive. Clicking the image a second time will display the image. A third click will hide the image. Once an Image is downloaded you can also access it by going to the Media Tab.

## Audio View

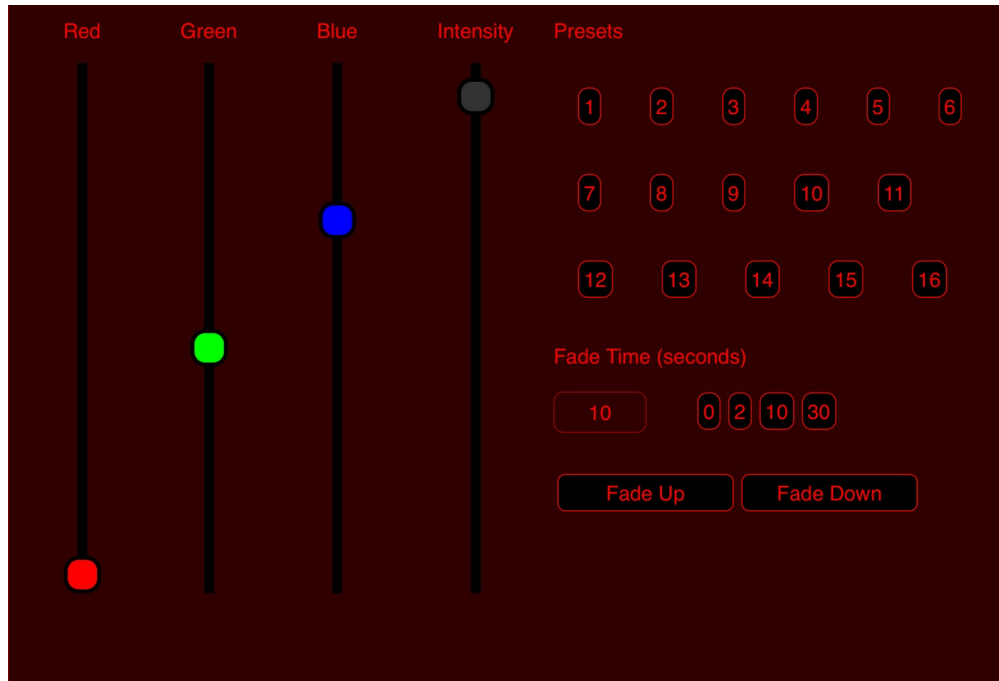
For Nightshade NG Professional users the Audio tab allows control of sound volumes and adaptive soundscapes. Soundscapes provide another level of immersion for your audiences, and the music adapts based on what you are doing. For example, orbiting the Earth will sound different than being landed on the Earth.



1. Media Volume Control. This is the volume control also controllable on the Media tab.
2. Soundscape Volume. Controls the volume of the current soundscape.
3. Soundscape play and pause controls.
4. Description and composition information for the chosen soundscape theme.
5. Talk button. Reduces soundscape volume by 50% to make it easier to talk.
6. Soundscape theme selector.



## Cove Lights View



Digitalis has collaborated with Bowen Technovation so that you can control one of their excellent AstroFX Aurora LED RGB or RGBW cove lighting systems from your Digitalium system. If your network is configured properly (see Router Configuration Requirements on page 33) you will see the Lights tab show up when starting up a Universal Console session.

The Intensity slider allows you to adjust the brightness of the cove without changing your color setting. The Red, Green, Blue, and White (if applicable) sliders can be dragged to adjust the final combined color of the cove lights. Note that slider changes take effect over a fade time, which is set on the middle right of this screen. You can either enter the number of seconds manually, or click the shortcut buttons to the right of the text box instead.

The Fade Up and Fade Down buttons set the cove intensity full on or full off, respectively, using the current fade duration setting.

The 16 preset buttons activate preset 'scenes' that you can set up using your Aurora control console.



# Router Configuration Requirements

Note: Always consult your local network administrator or IT department when setting up routers or changing networks so that they can assist you and comply with local policies and security considerations.

## Basic Configuration

If using a wired network to the control unit, your router needs to support DHCP in order for the Digitalium control unit to obtain an IP address and communicate on the network.

You do not need to use a wireless router if you do not plan on using a wireless device like an iPad. In this situation you could use a wired router, or just use your existing network, depending on your local network policies.

Ideally your network has Internet access so that you can easily perform software updates, but this is not required for the Universal Console interface to function.

We recommend configuring your router's DHCP settings to always assign the same IP address to your control unit so that you can easily connect each time you start up a Universal Console session. Adjusting this setting will be easiest if the control unit is running and connected to the router so that you can identify it (IP assignment is done by MAC address, a unique identifier that exists in every network interface).

## Basic Wireless Settings

We recommend setting up your Wi-Fi network as a secure network dedicated to your Digitalium in order to prevent unauthorized access and reduce latency from other traffic. A suggested security option is WPA2-PSK for speed and security.

Do not use control unit provided WiFi while simultaneously connecting to a wired network with an IP range of 10.0.0.x. If you can not change the wired network, get another router and put it in between the control unit and the 10.0.0.x network.




## Bowen Technovation Integration

For your Digitalium to control a Bowen AstroFX Aurora cove lighting system, you must set up your router to use the 192.168.2.x network and the control unit must have a wired ethernet connection. When both the Digitalium control unit and Bowen control server are booted up attached to the router, the Digitalium will have a 192.168.2.x IP address and be able to communicate to the Bowen system (which is always IP 192.168.2.245).

If you have a Bowen AstroFX Commander system, which can control your Digitalium system, you need to configure your router's DHCP settings to assign an IP address of 192.168.2.100 to the Digitalium control unit (based on its MAC address). This will be easiest if the control unit is running and connected to the router already. After a reboot with the Commander computer and control unit connected to the router, you will be able to control the Digitalium from the Commander console.

## Troubleshooting

Symptom	Possible Solution
No IP address shown on Digitarium control unit.	<ol style="list-style-type: none"> <li>1. Did you have the wired network connected before booting the control unit? If not, reboot.</li> <li>2. Is your network set up to use DHCP for IP assignment? If not, you can use a low cost router and place this between the control unit and your normal network. Assign a static IP to the router following the manufacturer's instructions and your local network administrator's policies.</li> </ol>
Can not connect to IP address of Digitarium.	<ol style="list-style-type: none"> <li>1. Is your computing device connected to the network? <div data-bbox="488 701 612 798" data-label="Image"> </div> <p><i>Click the button on the lower right side (or upper left side depending on your iPad's current orientation) of the device once to blank the screen and a second time to wake it back up. Slide the on-screen slider to unlock the device. This should restart the Wi-Fi connection without having to exit the Universal Console interface.</i></p> </li> <li>2. Are you on the correct network? <div data-bbox="488 1003 612 1100" data-label="Image"> </div> <p><i>The network could be switched without your knowledge if you have "Ask to join other networks" set to "ON" in the Wi-Fi settings Turn this off to avoid this problem.</i></p> </li> <li>3. Is the control unit still connected to the network? Look at menu item 8.9 using the remote control and verify that an IP address is listed and that this is the one you are connecting to (unless you are connecting directly via WiFi to a Digitarium control unit that supports this). If your IP address changes from time to time, you can assign the control unit a static IP address in your router so that it will not change. See the router manufacturer's instructions and/or your local network administrator.</li> <li>4. Your wired router can not be set to IP 10.0.0.1 as this will conflict with using the built in WiFi if your CU supports this.</li> </ol>

Symptom	Possible Solution
Universal Console suddenly stops controlling Digitarium.	<ol style="list-style-type: none"> <li>1. The iPad 1 (at least with iPadOS 4) had a power saving feature which disconnected WiFi after 30 minutes, and there was no option to turn off this feature. One option is to upgrade to iPadOS 5 or see the workaround (1) immediately above.</li> <li>2. See test (2) immediately above.</li> <li>3. Try restarting your Universal Console session.</li> <li>4. If this happens frequently, make sure your computing device operating system is up to date and try using a more reliable wireless router if you are using Wi-Fi (check for Wi-Fi interference as well).</li> </ol>
No sound when playing a video or audio file.	<ol style="list-style-type: none"> <li>1. Are you sure the video has an audio track?</li> <li>2. Do you have speakers plugged in, powered, turned on, and turned up loud enough to hear?</li> <li>3. Turn up the audio volume.</li> </ol>
Can not remember password.	Use the Digitarium remote control to go to menu item 8.12 and reset your password.
Bottom of interface cut off or missing	<p>Is your browser resolution at least 1024x768? Try enlarging your browser window.</p> <div>  <p><i>Did you start the Universal Console application by clicking on the icon on your home screen that you created in the First Time Set Up on page 6? This is not optional.</i></p> </div>
User interface is intermittently unresponsive using Firefox	Try upgrading Firefox.
Unable to leave the Universal Console on the iPad	<div>  <p><i>If the round button on the face of the iPad will not close the Universal Console, hold down that button and the power button on the edge of the iPad together for a few seconds until the iPad turns off. Then restart the iPad.</i></p> </div>
General strange behavior or Augmented Lessons not working fully.	<div>  <p><i>Did you possibly upgrade your iPadOS version without checking if this version works with the Universal Console or are you running an older unsupported iPadOS version? See the warning on page 4.</i></p> </div>

Symptom	Possible Solution
Thumbnails show up as question mark icons.	Thumbnails are created when you insert a new drive, so it takes a bit of time to see new thumbnails. Or you may have used up all the space on your internal drive and there was no room left to store thumbnails. Try removing some files from your master external drive and synchronizing your files again.

## How to Get Help

If you are experiencing problems with your Digitalium system, please:

1. Reread the manuals, especially the trouble shooting sections, to make sure you haven't missed a possible solution.
2. Contact your local distributor, if any:
3. Or create a support ticket (in English) with Digitalis Technical Support by going to the Support section of the Digitalium Community site at: <http://Digitalium.com/community/>
4. Did you know Digitalis offers a Priority support package that includes 24/7 telephone support? If you would like details and pricing please contact your Digitalis sales representative or email [sales@DigitalisEducation.com](mailto:sales@DigitalisEducation.com).

## Software Updates

Free software updates are announced through the Digitalis community site at:

<http://Digitalium.com/community>

Please register for an account if you have not already done so to get email announcements and share with other Digitalium users.

To perform a software update, refer to your Digitalium Software User Manual.

### Software Licenses

The Digitalium system is driven by software, both proprietary and open source.

Proprietary Digitalis software is covered under our standard End User License Agreement You will need to review and accept this license when you log in to your Universal Console for the first time and possibly again after updating your system.

Open source software licenses are listed at: <http://digitaliseducation.com/licenses.html>