



STARTER WEB INTERFACE 5.0

Getting Started Documentation

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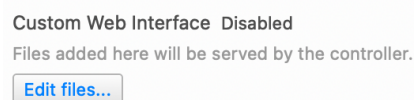
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OVERVIEW

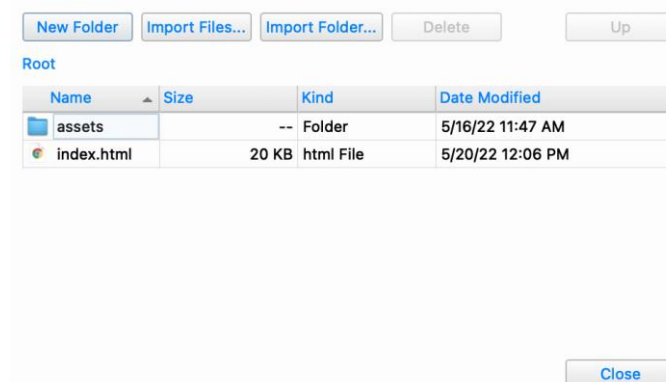
The Pharos Starter Web Interface has been designed to serve as a basic custom web interface for any project to start using immediately or as a template for you to build your own custom project. Control elements are dynamically generated based on information in your Pharos Designer 2 project file without the need to add triggers. This progressive web application or **PWA** is responsive and will automatically adjust to accommodate most desktop and mobile device screen sizes. It has also been optimized for Apple devices using their **Web App** mechanism. This version of the starter interface utilizes API 5.0 and compatible with Designer 2.8 and higher. The API setting can be found on the Project tab in Designer under the project properties tab.

INSTALLATION

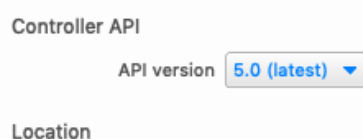
Extract the files from the downloaded .zip archive. From the Project view in Designer 2, select the **Web Interface** horizontal tab. Locate the **Custom Web Interface** section and select the button labelled **Edit Files**. This will open the Custom Web Interface window.



Drag the **assets** folder and **index.html** file from the **web_interface_5.0** folder and drop it in the Custom Web Interface window. An **assets** folder and **index.html** file should appear, as shown below. You can then close this window. Save your project file and upload.



This Interface was created specifically for API version 5.0. Future API version releases may need modification to ensure continued functionality. This setting can be found in the Project view in Designer 2 under the tab **Project Properties**.



USING THE INTERFACE

To access the Web Interface, simply navigate to the Controller's IP address from your web browser on your PC, Mac or mobile device. Your device and the Pharos Controller do need to be connected to the same Ethernet and/or Wi-Fi network.



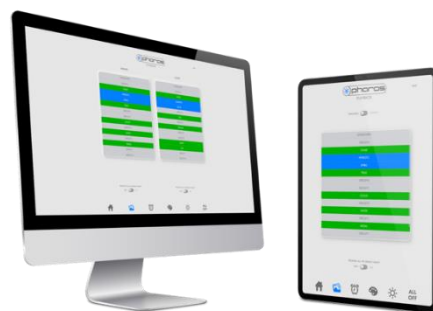
Home

Once loaded, depending on the device with which you're using the interface, you will either see a system dashboard that will have up to 6 navigation tabs or you will see up to 6 icons on your home page. All pages will generate automatically if your project file contains the related elements.

On larger devices, the system dashboard will appear. It provides the user with system status and controller information, as well as an intensity slider for each group in the Designer 2 show file.

Playback

On larger screens, timelines and scenes appear in separate sections. For smaller screens and mobile devices, they are grouped together and accessible via a toggle switch.



To start a timeline or scene, simply select a timeline or scene from the playback page and it will play automatically.

If you have placed your timelines and scenes in groups (A-H) in Designer, they will be sorted as such in collapsible groups. Any timelines or scenes that haven't been grouped will show up in the "Ungrouped" section.

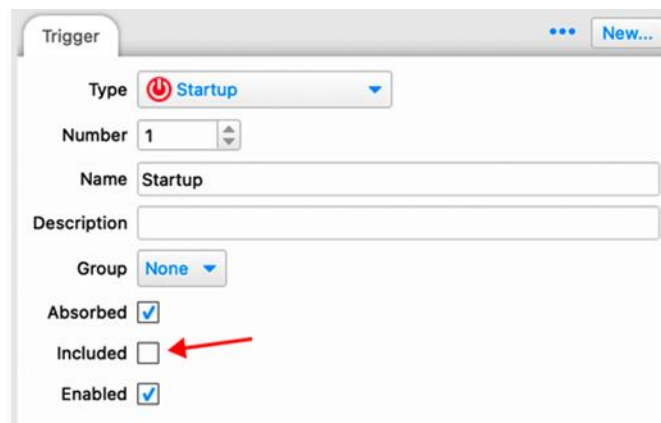
For timelines and scenes that are grouped, you can utilize the **Release All In Group First** toggle switch and when a new timeline or scene is selected, the other timelines and scenes in the same group will be released before the new timeline or scene is played. Note that if you have **Release All In Group First** selected, and you play a timeline or scene from the "Ungrouped" section, then all of the timelines and scenes in every group will release prior to starting your selection.



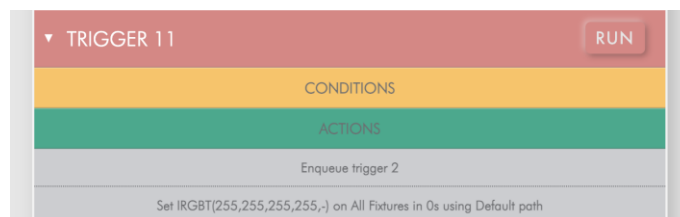
This Interface operates with **last action takes precedence** rules. This means each timeline or scene choice takes over from any previously that are onstage. Master Intensity levels will persist and are updated in real time.

Triggers

This Interface provides a triggers page which allows you to run any of the triggers you have created in your show file. You can control which triggers show up on your triggers page by navigating to the Triggers tab in Designer 2, selecting the trigger(s) you wish to exclude from the interface, and unchecking the **Included** box. This will remove the selected triggers from the triggers page. The name given to the trigger in Designer 2 will be the name of the trigger in the interface. If you have no triggers in Designer 2, this page will not appear.

Triggers can be expanded to reveal both conditions and actions.



The trigger list can be filtered by groups, which can be chosen in the Triggers tab of Designer 2. There are 7 groups in total including triggers that are ungrouped. To run a trigger, simply select the **RUN** button associated with each trigger. An alert will confirm that the trigger has run. Finally, you can choose to test any conditions associated with your triggers by selecting the **Test Conditions** toggle switch.



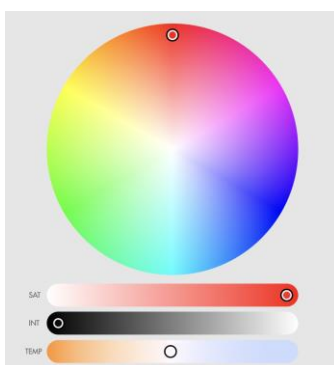
Overrides

The overrides page allows you to set custom looks for both colour fixture groups as well as tuneable white light fixture groups. Any group that you create in the Layout tab of Designer 2 will appear in the **Groups** section of this page, along with a group for **All**. On larger screens the colour picker will appear with 3 sliders. Saturation, intensity, and colour temperature. On smaller screens, the saturation slider is hidden.



The colour temperature slider will affect colour fixtures just as the colour picker and saturation slider will affect white light fixtures. Therefore, it is strongly recommended that you group your tuneable white light fixtures together and name them accordingly.

It is important to note that the intensity slider for the colour picker defaults to 0. This means that any changes you make won't affect your fixtures until you raise the intensity slider above 0. This was done to keep end users from accidentally making unwanted changes to fixtures.



These custom looks are considered overrides by your controller. Note that these looks are for manual control and are not stored on the controller. They are set to "normal" priority and are subject to the **last takes precedence** rule. You can change the priority of your overrides in the Project tab of Designer 2 in the Project Properties section. Any priority that is higher than normal will override the **last takes precedence** rule, providing your timelines and scenes are set to **Normal** priority.

Override priority **High**

Master Intensities

The Intensities page provides the user with a master intensity slider for every group created in Designer 2. On larger screens each group has a slider and a toggle switch that are visible directly on the page. On smaller screens a button with a toggle switch is provided for each group. Selecting the button will take you to an additional page that has a dial for intensity as well as a back button.



The toggle switches for the intensity sliders and the intensity buttons operate as on/off only. If you toggle on, the intensity is set to 100%. If you toggle it off, intensity is set to 0%. Any previously set levels will need to be readjusted manually.

In addition, these levels are master intensities. Starting new timelines or scenes will not affect the master intensity values like they do for overrides. If you set the level to 50% and want the level back at 100%, you will need to set the level back to 100%.

All Off

The All Off page provides the user with a method to release timelines, scenes, or to clear any manual overrides individually, or any combination of the three at once. These are global releases of timelines and scenes, and a complete release of all overrides. If you need to release specific timelines or scenes, then you can do so from the Playback page by simply toggling the active buttons.




AUTHENTICATION

You can set a password for your custom web interface in the Project section of Designer 2 in the Web Interface tab. First, you need to make sure that you have set **Preferred guest access level** to **No access**. This will prevent access to anyone that doesn't have a username and password.

Setting Web Interface Password

Web Interface Access

The guest access level is the level that can be accessed in the default web pages before logging in. It is limited by the lowest access level given to a user, and may be different on a controller that has a local password set.

Preferred guest access level **No access** 

Current guest access level No access

Users are defined here and given a password and an access level. There are three user levels (Status, Control and Admin) which are used to control access to the default web pages and web API.

Add... **Edit...** **Remove**

Username	Access level

Second, click the **Add...** button and enter your desired username and password. Set the Access level to **Admin** and then select the **Add** button.

Add... **Edit...** **Remove**

Username **Access level**

Username **your_username**

Password **your_password**

Access level **Admin**

Add

Once you've added your username and password you should see the following indicating that you have done it correctly:

Web Interface Access

The guest access level is the level that can be accessed in the default web pages before logging in. It is limited by the lowest access level given to a user, and may be different on a controller that has an local password set.

Preferred guest access level No access ▾

Current guest access level No access

Users are defined here and given a password and an access level. There are three user levels (Status, Control and Admin) which are used to control access to the default web pages and web API.

Add... Edit... Remove

Username	Access level
pharos	Admin

It is important to note that while selecting different access levels for each user will provide for tiered level access of the standard web interface, it will not provide tiered level access to your custom web interface.

Setting Controller Password

Alternatively, you could add a controller password by selecting "Configure" from the Network tab of Designer 2. This will automatically set the username to **admin**. Check the box labelled **Enable security** and enter your desired password. Note that controller passwords require login prior to upload or download of show files.

Admin Password

☒ Enable security


New password

Confirm password

Logging In with Web Interface Password

If you have set a web interface password and want to login with those credentials you must uncheck the box labelled **Use Local Account** and enter your username and password.

Please log in

☐ Use local account 

User

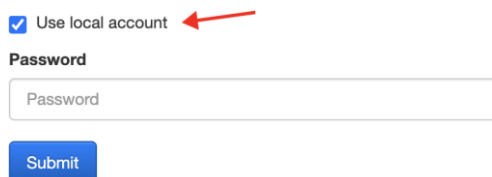
Password

Submit

Logging In with Controller Password

If you have set a controller password and want to login with those credentials you must check the box labelled **Use Local Account** and enter your controller password.

Please log in




The screenshot shows a login form titled "Please log in". It contains a checkbox labeled "Use local account" which is checked, with a red arrow pointing to it. Below the checkbox is a label "Password" and a text input field containing the word "Password". At the bottom of the form is a blue "Submit" button.

Once logged in, you should be redirected to your custom web interface. If for some reason you are redirected to the standard web interface, while on the standard web interface login page, you simply need to clear all site data and 3rd party cookies from your browser and then login again.

APPLE DEVICE (IOS) SETUP

Using this interface on Apple mobile devices such as iPhone and iPad have an extra setup step that will make the user experience feel like they are using a native Apple Store App. Apple devices can display this interface in a mode where the Safari web browser controls, URL bar and other menu items are hidden. In this mode, your lighting system interface works and feels like a touch screen

Step by Step:

1. Open the Safari browser and navigate to your controller's IP address. There is no need to login quite yet.
2. Tap this icon to  bring up the sharing menu.
3. Scroll down to the selection called "Add to Home Screen" and following the prompt to name the bookmark it will be placing on your home screen.
4. Once this is done, go back to Safari can close the tab or quit.
5. Navigate back to you home screen, find and launch the bookmark icon that has been newly added to you home screen.

NOTE 1. For best results using a device as a semi-permanent control station, you may want to disable certain iOS features like screen timeout, automatic device lock, Bluetooth, and Live Text. You can also read up on using the iPad in Supervised Mode by installing the Apple Configurator App. In this mode your interface can be the only App that the device will present to a user.

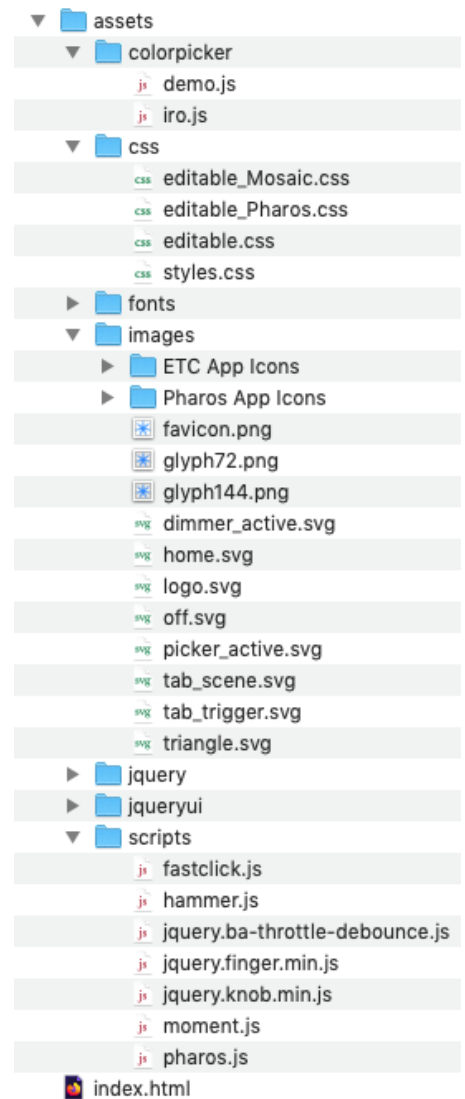
CUSTOMIZATION

This starter custom web interface has also been created to act as an example system to allow others to use it as a jump off point to build their own interfaces or to customize this one. While all of the HTML, CSS and JavaScript code can be customized we provide a variety of out of the box easy thing you can customize.

Some of these customizations are achieved by working in the Designer 2 software, while others require edits to the web interface files that you unzipped and added to Designer during the installation step earlier in this document.

When we indicate what file needs to be edited, in the list of customizations below, we will do so by indicating the folder path where the file can be found. The current file structure looks like this on the right. Most of the files you will be working with will be:

- index.html
- assets/images/logo.svg
- assets/images/favicon.png
- assets/scripts/pharos.js
- assets/colorpicker/demo.js
- assets/css/styles.css
- assets/css/editable.js



Changing the Pharos Logo

To change the Pharos logo shown at the top of the interface when larger screen sizes are used, you simply need to create your own logo in .SVG format and replace the [assets/images/logo.svg](#) file with your identically named file. Logos similar to the aspect ratio of the Pharos Logo will work best but the interface will constrain the height and width to be sure it fits best.

Change the Browser Favicon

To change the favicon that is shown within a web browser's bookmark and tab system you simply need to create your own favicon file and replace the [assets/images/favicon.png](#) file with your identically named file. Favicons require a specific resolution and size for them to be acceptable to your web browser.

File name:	favicon.png
Document type:	PNG image
File size:	3 KB (3,418 bytes)
Creation date:	Jul 7, 2022 at 9:26 PM
Modification date:	Jul 7, 2022 at 9:26 PM
Image size:	128 × 128 pixels
Image DPI:	83 pixels/inch
Color model:	RGB

Change the Icon Used for the iOS Homepage Bookmark (Apple-Touch-Icon)

Two files are used to provide the icon that iOS will save to your home screen (See Apple Device Setup Above). One is for non-retina displays and the other a higher resolution for Retina screens. Those file files are [assets/images/glyph722.png](#) and [assets/images/glyph1442.png](#)

File name: glyph72.png	File name: glyph144.png
Document type: PNG image	Document type: PNG image
File size: 4 KB (4,127 bytes)	File size: 7 KB (6,978 bytes)
Creation date: Jul 11, 2022 at 9:11 PM	Creation date: Jul 11, 2022 at 9:11 PM
Modification date: Jul 11, 2022 at 9:11 PM	Modification date: Jul 11, 2022 at 9:11 PM
Image size: 72 × 72 pixels	Image size: 144 × 144 pixels
Image DPI: 72 pixels/inch	Image DPI: 72 pixels/inch
Color model: RGB	Color model: RGB

Changing the Colour Scheme

This interface has been provided with a quick and easy way to customize the colour scheme to re-theme the look of the interface. The use of CSS variables allows for the editing of a simple text file to change the colours of the interface. Open and review the file [assets/css/editable.css](#)

```
@charset "UTF-8";
/* CSS Document */
:root {
  /* Primary Color - Page Background */
  --pri: #ffffff;
  /* Secondary Color - Primary Text, Footer Icons, Off Container Background: ; */
  --sec: #6d6e71;
  /* Accent Color - Secondary Text, Table Value Text */
  --acc: #ffffff;
  /* Tertiary Color - Intensity Toggle Switch Active Color */
  --ter: linear-gradient(#00843D, #00ca5d);
  /* Intensity Toggle Switch Off Background */
  --off: linear-gradient(#36455b, #283446);
```

In the example above you can edit the colour and gradient colours for each of the variables and they will affect the commented areas of the interface. After editing, don't forget to put your new file with an identical name into the Designer Custom Web Interface files area. Review **Installation** above to be reminded where to remove and add files for this interface.

Limiting Displayed Triggers

As with the standard web interface that runs on all controllers, a trigger can be omitted from the list presented to the web interface user by un-checking the "Include box while in the Designer software. This does not disable the trigger, just prevents it from showing on any/all web interfaces.

Type
Astronomical
Number
1
Name
Trigger 1
Description
Group
Absorbed
Included
Enabled
Event
Sunset
Offset
-60 mins

Limiting the Number of Groups, Timelines and Scenes that are Displayed

There are times in your programming that certain timelines, groups and scenes do not want to be operated by a user from the web interface. This interface allows you to set a limit to which of these elements will be presented for operation via this customer web interface. This is done by setting a numerical limit to the objects. Any timeline, scene or groups that is more that the limit set will not show up in the interface. For Example: If you had a series of timelines being used for complex timers, you may not want those to appear on the interface. If we set those timelines to above the number 500 and put a limit on timelines at 500, they would not appear in the customer web interface.

To make these settings, three variables in the JavaScript code have been created:

- tLimit - timeline limit
- sLimit - scene limit
- gLimit - group limit

Changing these variables requires you to edit the [assets/scripts/pharos.js](#) and add your newly editing file to the web interface file area in the Designer software. This variable can be found around line 34 as show here.

```
11 var y = 0;
12 var collapsed = true;
13 var iGroup = 0;
14 var uGroup = 0;
15 var accOpen = 0;
16 var sccOpen = 0;
17 var lastHash = 0;
18 var selectedGroup = "";
19 var controllerType = "";
20 var myGroups = ["Ungrouped", "Group A", "Group B", "Group C", "Group D", "Group E", "Gro
21 var testConditions = false;
22 var intGroup = "";
23 var myFilter = [0, 0, 0, 0, 0, 0, 0, 0];
24 var tLimit = 5000;
25 var sLimit = 5000;
26 var gLimit = 340;
```

Changing the Starting Intensity of Group Overrides

By default, when you open the **Overrides** page, the Intensity Slider is at 0% to start with. This must be adjusted above 0% before a chosen group will change colour to your selection.

This default setting can be changed so that changing the colour will immediately move to the new colour selection at a custom default intensity.

To make these settings, two variables in the JavaScript code have been created for you to edit.

- myInt - the starting intensity value (0-255)
- slidrInt - the default position of the intensity slider (string of "#000000" to "#FFFFFF")



Changing these variables requires you to edit [assets/colorpicker/demo.js](#) and add your newly editing file to the web interface file area in the Designer software. These variables can be found around line 23 as show here.

```
23 // Set Default group intensity of first press and intial slider position
24 var myInt = 128;
25 // Above enter 0 for 0%, 128 for 50% and 255 for 100% to set starting intensity
26 var slidrInt = "#808080";
27 // Above enter "#000000" for 0%, "#808080" for 50% and "#ffffff" for 100% slider position
```

Note: Variable **slidrInt** that governs the slider's position uses a RGB colour value to define its background colour and position. Using RGB **black** at RGB (000,000,000) and RGB **white** at RGB (255,255,255) will yield the black to white track colour that is desirable as well as the proper position of the handle. In this file colour values are written as hexadecimal.

Add a Custom Zone Name to Timeline and Scenes for the Dashboard

Designer 2 allows you to create custom properties for Fixtures, Layouts, Scenes and Timelines. By adding a customer property name **Zone** for Timelines or Scenes, the interface will display that name in the lower left-hand corner of the Status Object when viewing the Dashboard page of the web interface. In the example below Timeline 1 was given a **Zone** name of **Exterior** and this is now presented on the dashboard page.

