GlassLXE

Virtual Surface Software

Quick Start Guide

WheatNetIP LXE Surface Setup GUI 2.1.3 and higher

GlassLXE: 1.16

Wheatstone Corporation

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Glass LXE Virtual Surface Software

Summary

This document is intended to familiarize the user with initial setup and configuration of Wheatstone's Glass LXE Virtual Surface Software. This document is not a complete instruction manual, and may not cover all available features or possibilities to customize the LXE Surface. Instead it is intended to assist first time users with initial setup of Glass LXE virtual Surface. This document also assumes that the LXE Surface Host, has no surface configuration loaded prior to setup and that the virtual surface will be created from scratch.

System Requirements

Glass LXE, the LXE Surface Host, are generally tied together with compatible versions. Generally, when changes to the software are made to one of them, it requires updating of the other. And in some cases, additional updates may be required for the surface host, or other components of your WheatNet-IP systems. Wheatstone technical support can assist you in determining the correct versions of each component for your system.

For the purpose of this Quick Start Guide, we'll be using the following:

LXE Engine Blade: version 3.7 or higher

LXE Surface Host: version 1.52 with OS R7

LXE Surface Setup GUI: 2.1.3 or higher

Remote LXE: 1.16

WheatNet IP Navigator: version 3.7 or higher

PC: Windows7 or Windows10, NIC statically assigned and connected to WheatNet-IP network.

If you are adding the LXE Engine Blade and Surface to an existing WheatNet-IP system, you will need to add the Blade to the system using the front panel controls, to set up a BladeID and IP address and have it joined to the system as a Blade prior to proceeding further with this guide.

If you need assistance with adding a Blade to your system, you can refer to the Blade 3 Manual using this link: https://wheatstone.com/index.php?option=com_docman&view=document&slug=wheatnet-ip-network-technical-manual&layout=default&alias=713-pr-e-read-me-re-technical-manuals-1&category_slug=wheatnet-ip-tech-manuals&Itemid=3863

Or

By contacting Wheatstone Technical Support during normal business hours, 8:30am to 5:30pm Eastern, M-F at 252-638-7000 or by emailing techsupport@wheatstone.com

Obtaining updates: Updates for GlassLXE, LXE Surface Host and Surface Setup GUI, Blades and other items are delivered on a case by case basis. Contact Wheatstone Technical Support to request updates if you have earlier versions.

Installing the Hardware

As stated in the requirements section, your LXE Engine Blade will need to be connected to your WheatNet-IP Ethernet Switch and configured as a Blade on the network. If you are adding this to an existing WheatNet-IP System, ensure your Blade ID and IP address are unique when configuring the Blade. If this is a new system, you will still need to setup the Blade to operate on a network with an ID and IP address. Additional Blades can also be added for Audio I/O for the system, and these should be done before setting up the Glass LXE virtual surface.

For the LXE Engine Blade specifically, you will have 2 Network connections.

Looking at the back of the LXE Engine Blade, at the far right of the unit you will find a 1G ETH RJ-45 connector. This connector is for the Blade Part of the Engine. This is the interface that will be assigned an IP address via the Blade's front panel during initial setup of the Blade. This is the interface that other Blades in the system will use to communicate with this Blade. For the purposes of this document we will refer to it as the Blade NIC or Blade Interface.

To the left, you will see another RJ-45 connector, located near the HDMI connector, and the USB connectors. This is the LXE Surface Host Interface. It will also require a unique static IP address on the same subnet as your Engine blade is assigned. From the factory, it has a default IP assigned of 192.168.87.90. If this address is already in use on your existing system, or you are planning on using a different IP scheme, this address will need to be changed. We will cover later is this document. The process is also covered in the LXE Quick Start Guide.

Once you have the LXE Engine Blade powered on, the Blade Interface connected, and assigned an ID and IP Address, then proceed with the rest of this document.

Note: The LXE Engine Blade, and the Surface Host are two separate devices, that just happen to be located in the same box. The front panel controls of the Engine Blade have no interface to setup or control the Surface Host. The only thing common to each device is the Power Supply inside the Blade. In order to communicate with each other, each of their respective interfaces have to be assigned IP addresses on the same subnet and connected to the same Ethernet switch(es) in order for them to communicate.

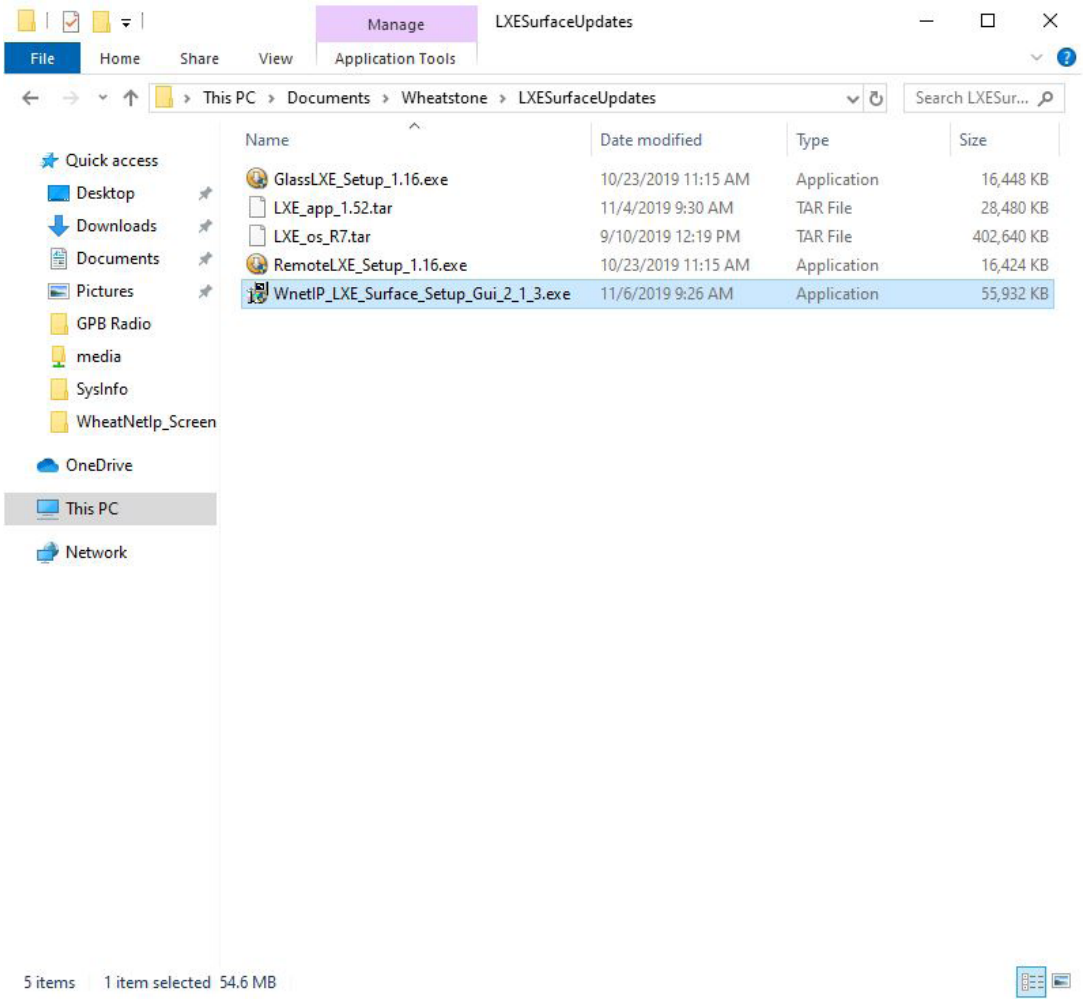
Installing the Software

LXE Surface Setup GUI

With your purchase of the Glass LXE Surface and LXE Engine Blade, you should receive a USB drive with necessary software installers you will need to setup and configure your Glass LXE Surface. If you did not receive the drive or it has been misplaced, contact Wheatstone Technical Support to obtain download links for the necessary software.

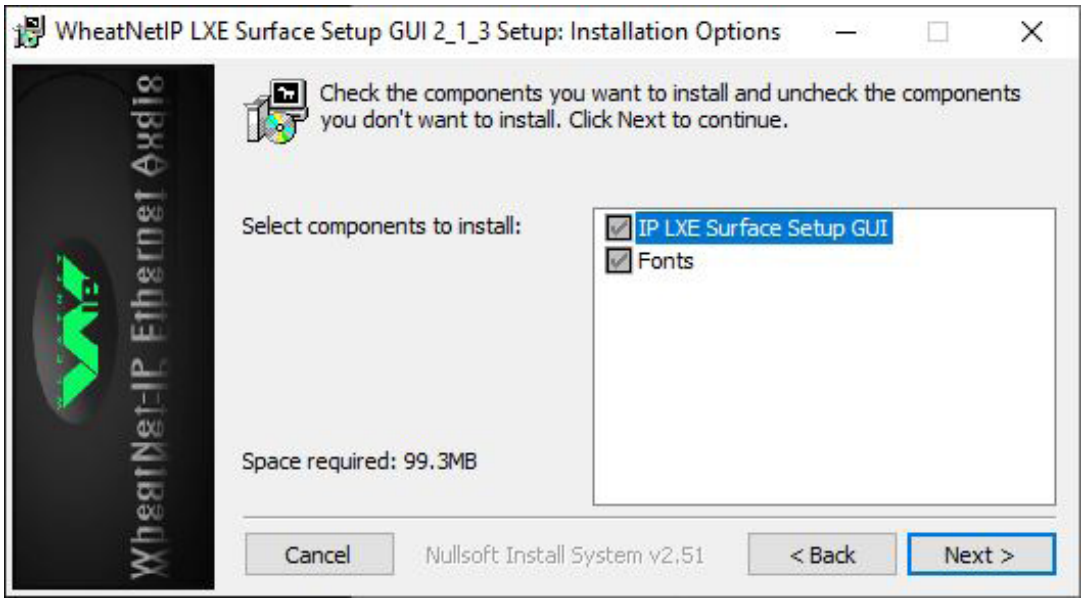
Since we need to possibly change the IP address of the surface host from the factory default, we'll first need to install the LXE Surface Setup GUI.

Find the LXE Surface Setup GUI Installer.

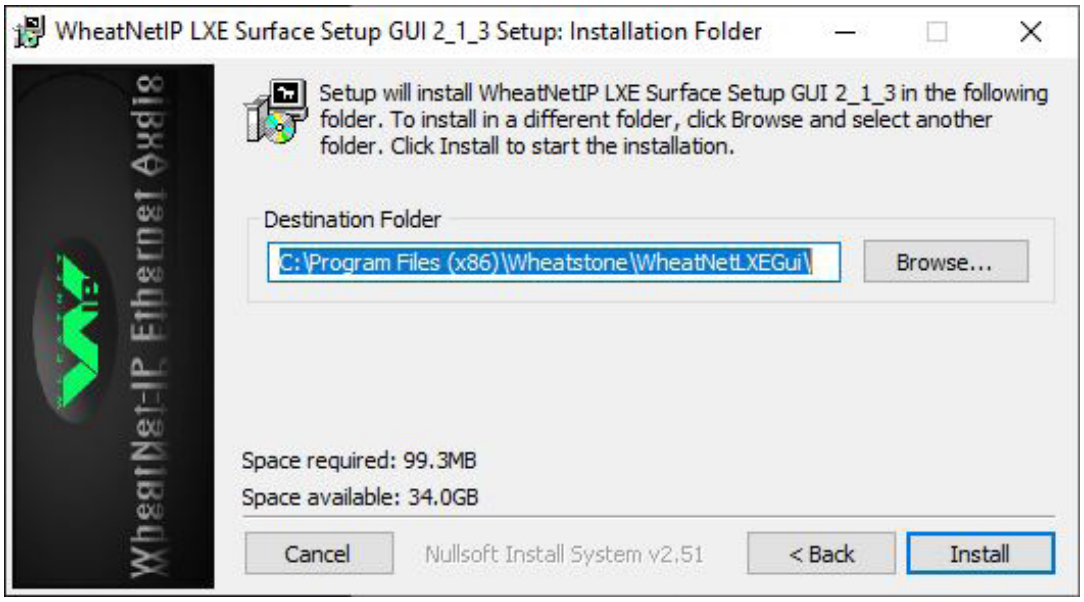


Double click to Start the Installation Wizard.

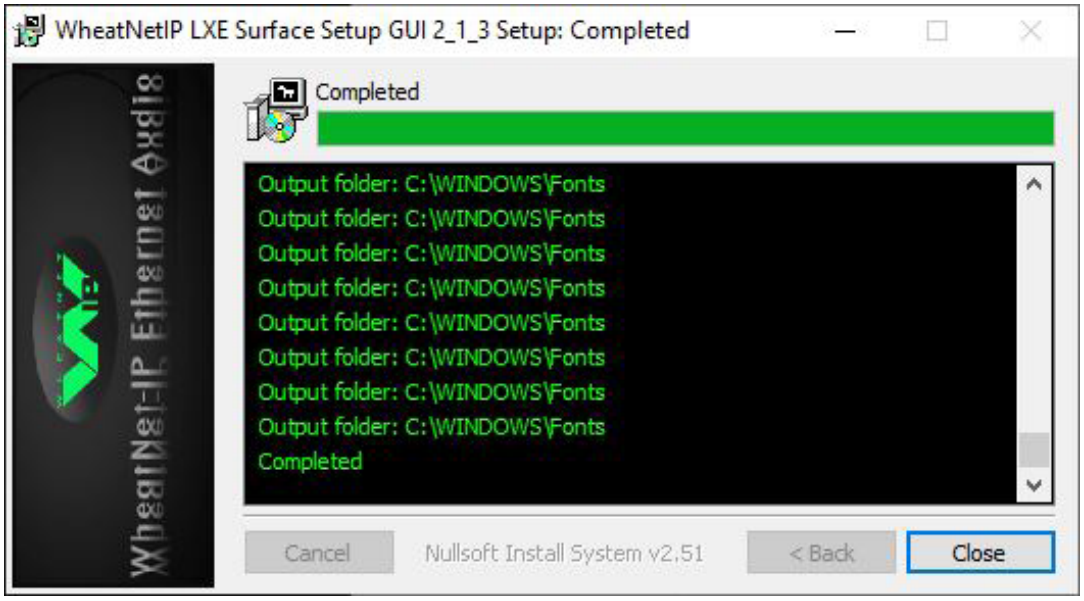
Accept the License Agreement.



Leave the components checked and click Next.

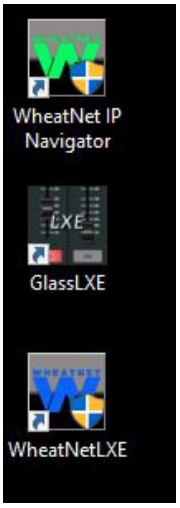


Leave the default path or click browse to select a different directory. When ready click Install.

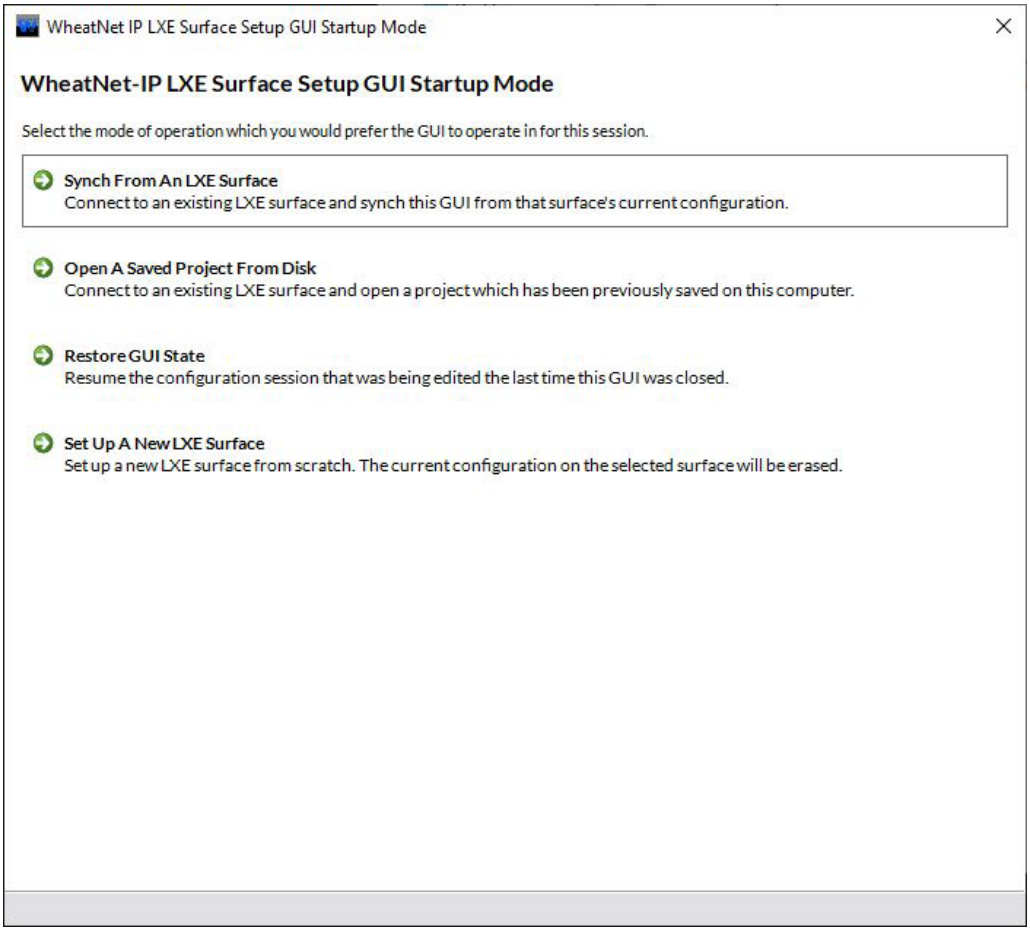


Click Close to Finish the Installation Wizard.

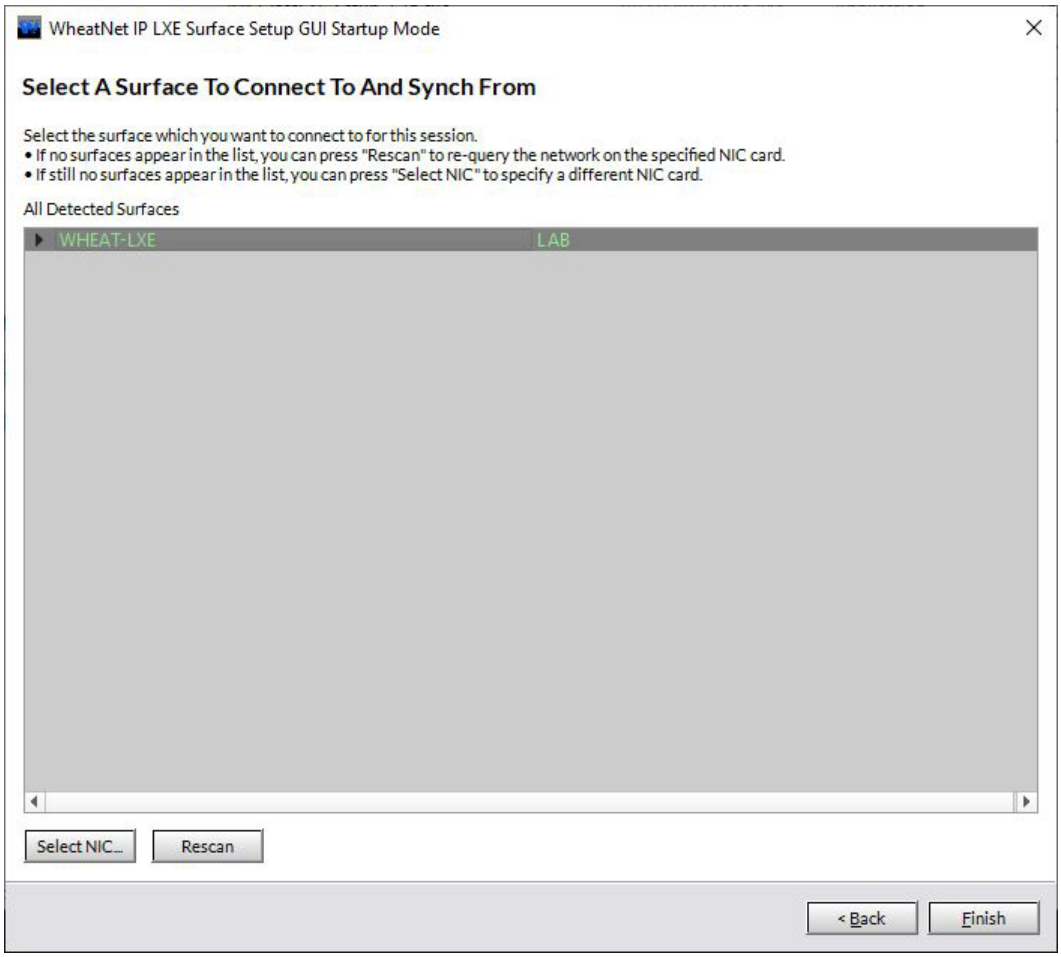
The next step requires you to have the NIC on the PC assigned a static IP address, on the same subnet as the Surface host. As stated, the surface host ships with a default IP address of 192.168.87.90. Connect the Surface Host NIC from the back of the Engine Blade to the Network Switch. Connect the PC NIC to the Network Switch. Once these connections are made, then launch the LXE Surface Setup GUI.



Use the WheatNetLXE shortcut to launch the GUI.

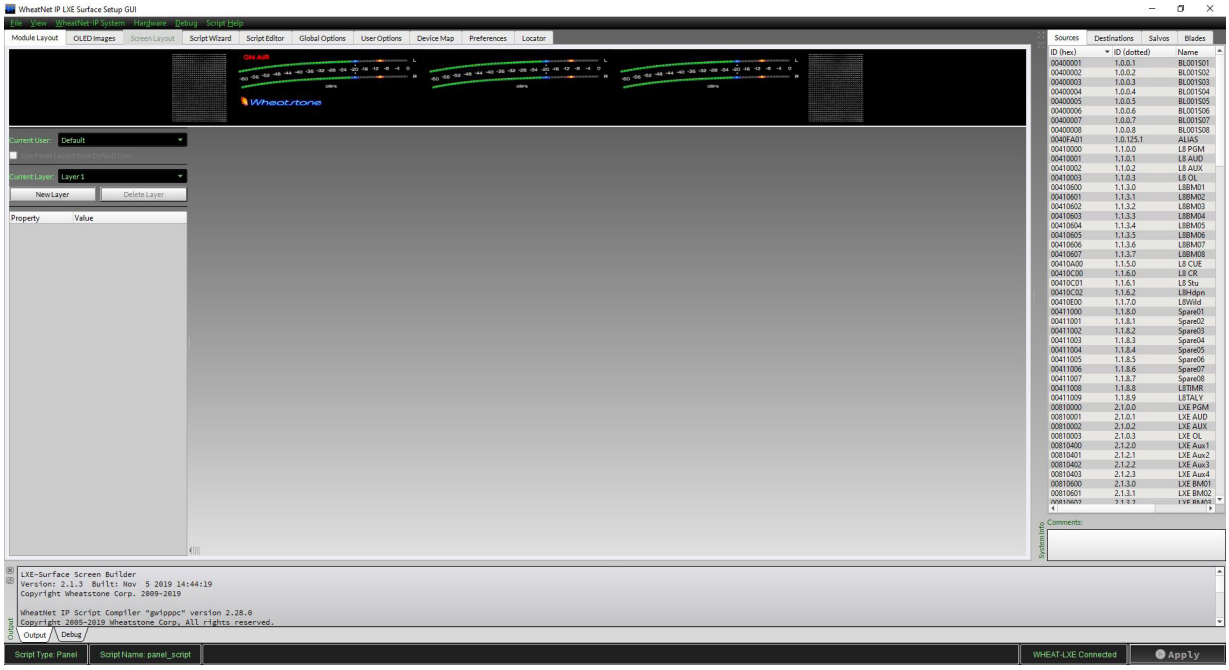


When the GUI opens you are presented with several options. For this purpose, click on Sync from an LXE Surface to connect this instance of the GUI to the Surface Host.



The Setup GUI will scan the network and look for surface Hosts. If this dialog opens up and you do not see any LXE Surface Hosts listed here, click the Select NIC and bind the GUI to your WNIP NIC. Then rescan. Your LXE Surface Host should appear in the list. Additional LXE Surface hosts will appear in the list if they are on the same subnet and you are connected to the main network. Your new LXE Surface Host likely will not have a Name or Location field populated as the example above does. This is normal and you can set those fields later on.

Select the appropriate Surface and click Finish.



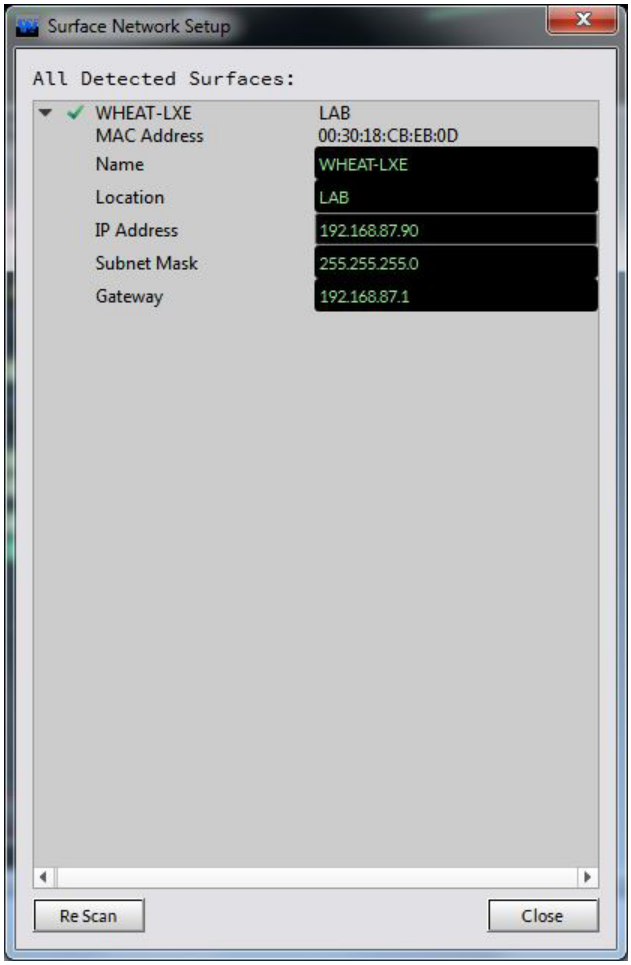
The Surface Setup GUI will then connect to the surface host and request the config information from it. Since we are starting from scratch, this is normal that there are no modules in the layout. We'll come back to this screen later, after installing and running the GlassLXE software for the first time. For now though our goal is to possibly change the assigned IP from the default.

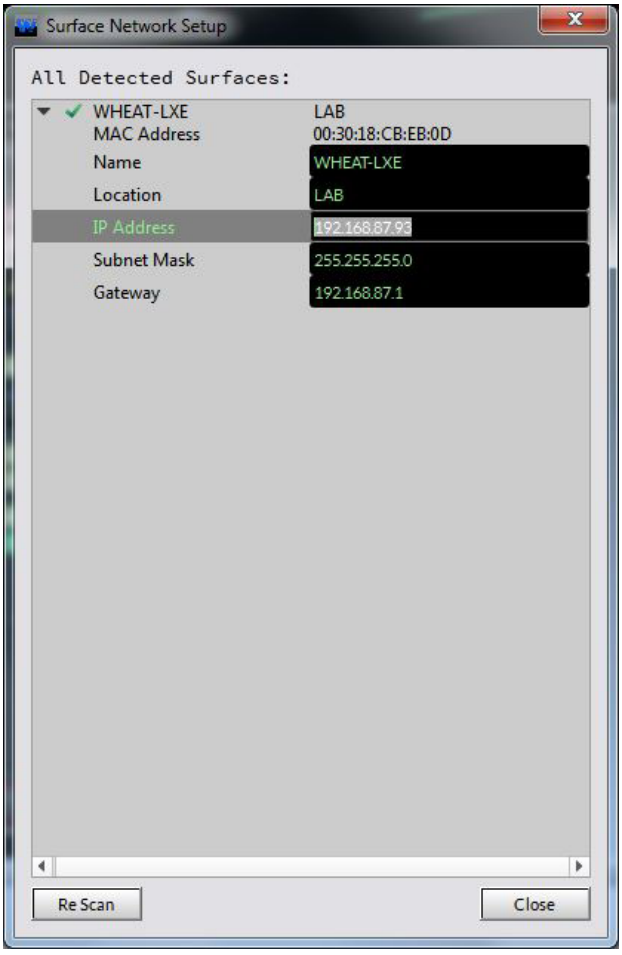
From this screen click the Hardware Menu item.

Then select Surface Network Setup.

Expand the Info for the Surface. Double click into each field and set your Desired Name, Location, IP address, Subnet Mask, and Gateway.

When done in each field, press the Enter Key.

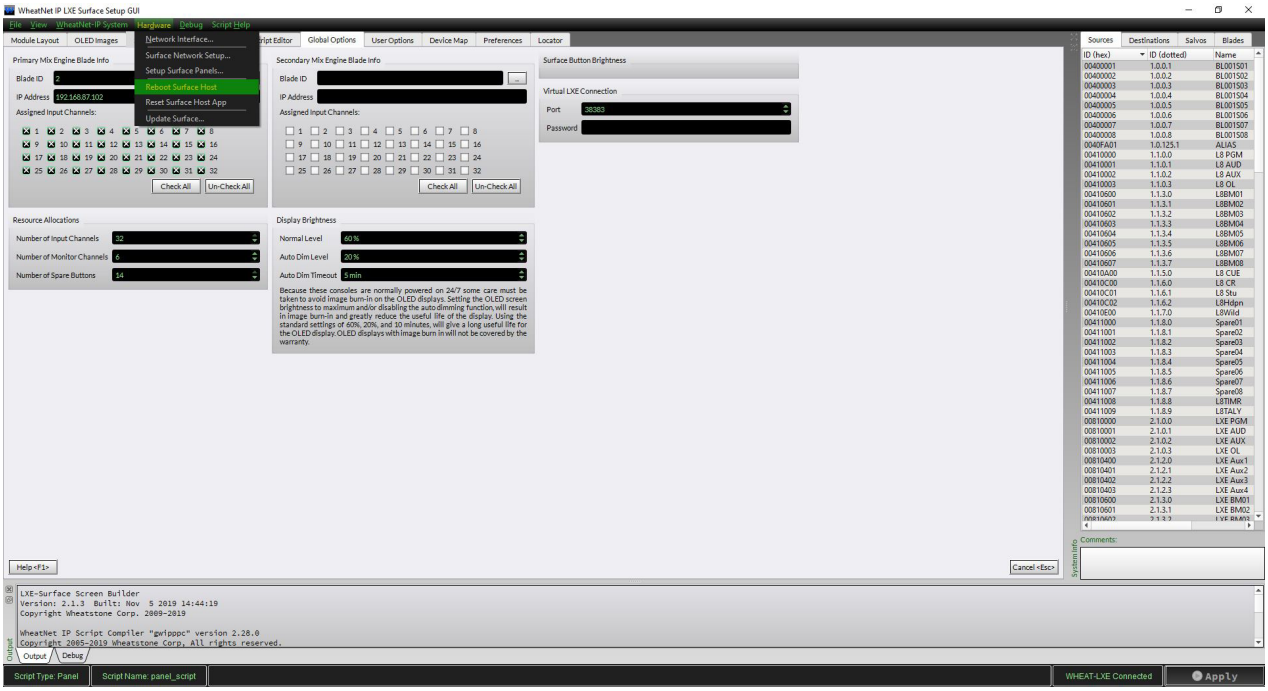




When done, select Close.

In order for these changes to take effect, the Surface Host will need to be restarted.

This is done from the Hardware Menu again. Click Hardware and then click Reboot Surface Host.



While the Surface Host is restarting, if you monitor the lower right hand corner of the Setup GUI, you will see that the surface is disconnected.

If you have changed the Surface IP to a different network than the default 192.168.87.xx network, you need to now change the NIC on the PC, to the new Network subnet. If you stayed in the default subnet, then you don't need to change the NIC on the PC.

Once you have changed the NIC and the surface has restarted you should see the connected status.

Once the Surface status says connected, the surface has finished restarting and now operating on the newly assigned IP address.

Updating the LXE Surface Host

This step, may or may not be needed. As we stated earlier Glass LXE and LXE Surface host versions are tightly related. For our example Glass LXE surface, we are starting with version 1.16. The requirement for this version of Glass LXE is that the LXE Surface Host is running version 1.52, and that LXE Surface Host version requires LXE Surface Operating System R7.

Also note that not every LXE Surface Host Update will require Surface Host Operating System updates.

It's possible that if you have older versions of Glass LXE you will have older versions of LXE Surface Host and LXE Surface Host OS respectively. You may need to update these to use the latest version(s) of Glass LXE. This section will show you the update process.

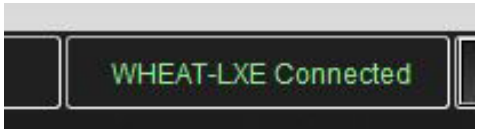
To obtain your currently installed version of LXE Surface Host software version, from the Surface Setup GUI, connected to the surface host, use the Locator tab. Click the Refresh button to have locator scan the system. You can filter by LXE Surface to reduce the results.

Find your surface Host in the list and note the version.

To obtain appropriate updates for your LXE Surface Host, LXE Surface Host OS, and Glass LXE please contact Wheatstone Technical Support.

Our example will show the process to update the Surface Host to the proper version to use with GlassLXE 1.16. In this example, both the Surface Host and the Surface Host OS need to be updated.

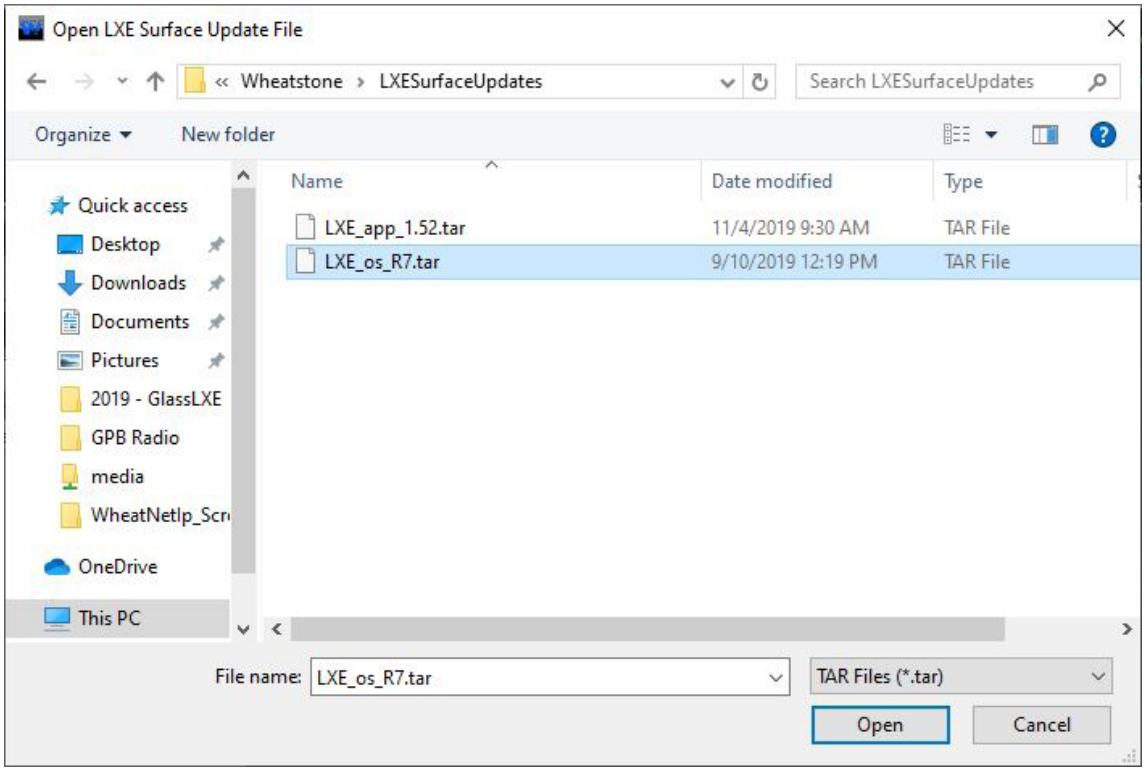
Open the Surface Setup GUI and connect to your Surface Host.



Ensure the GUI is connected to the surface in the lower right status bar.

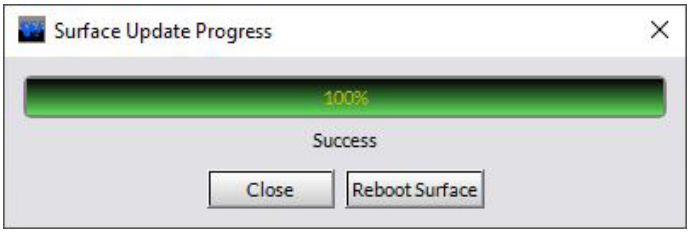
Select the Hardware Menu, then select Update Surface.

Browse to the update files obtained from Wheatstone Technical Support.



If, we have to update both the Surface Host app version and OS version, there will be two files to choose from. For this example we need to update both the OS and the app. First select the OS Version. In this case, LXE_os_R7.tar and select Open. This will push the OS Update to the surface host.

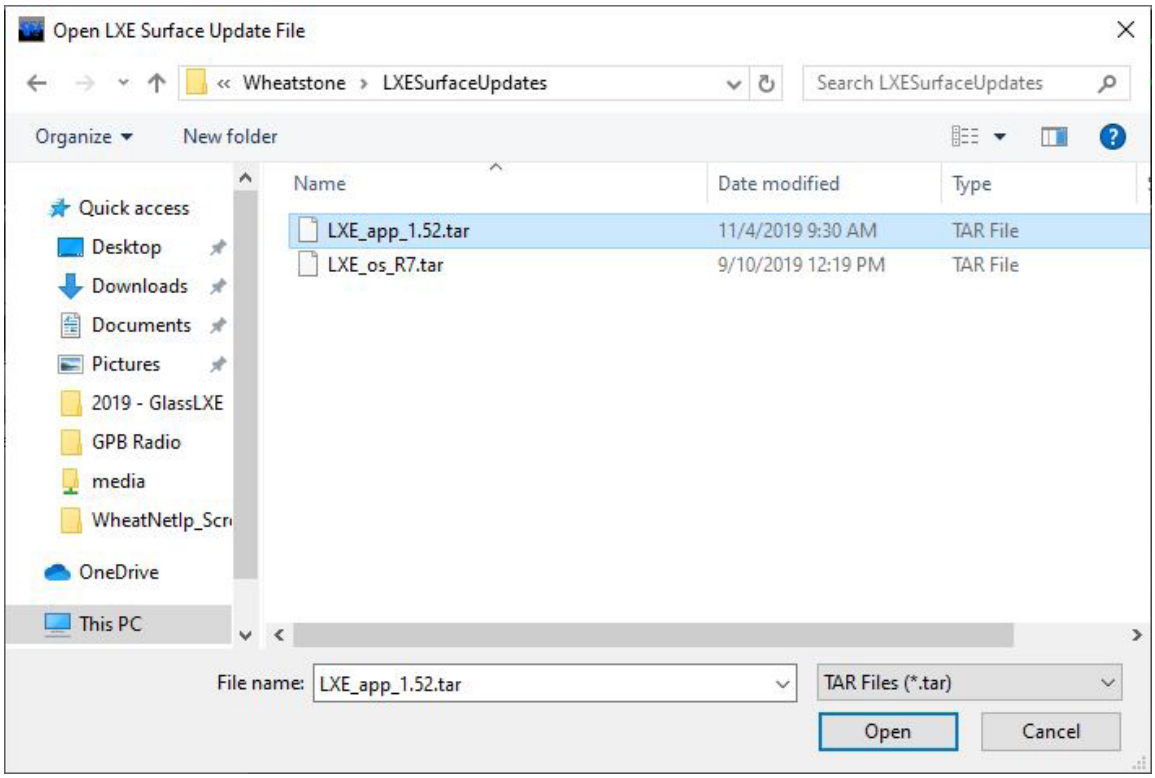
When completed you will get success message:



DO NOT CLICK Reboot Surface!

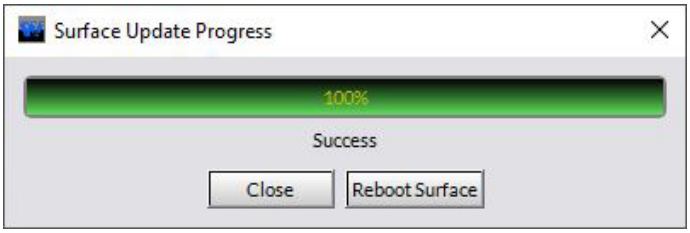
Since there may be compatibility issues with Surface Host app versions and OS versions, when the OS update has finished transferring click Close as we do not want the Surface Host to restart at this point.

Next we'll repeat the process to upload the app file. Click Hardware, Update Surface again.

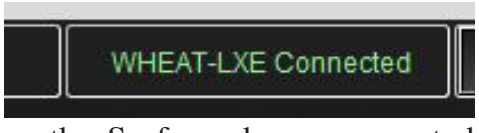


Browse to your update files and select the LXE_app_1.52.tar file. Select Open.

When completed you will get this message again.



Now it is safe to click Reboot Surface. The app update and the OS update will occur during the restart.

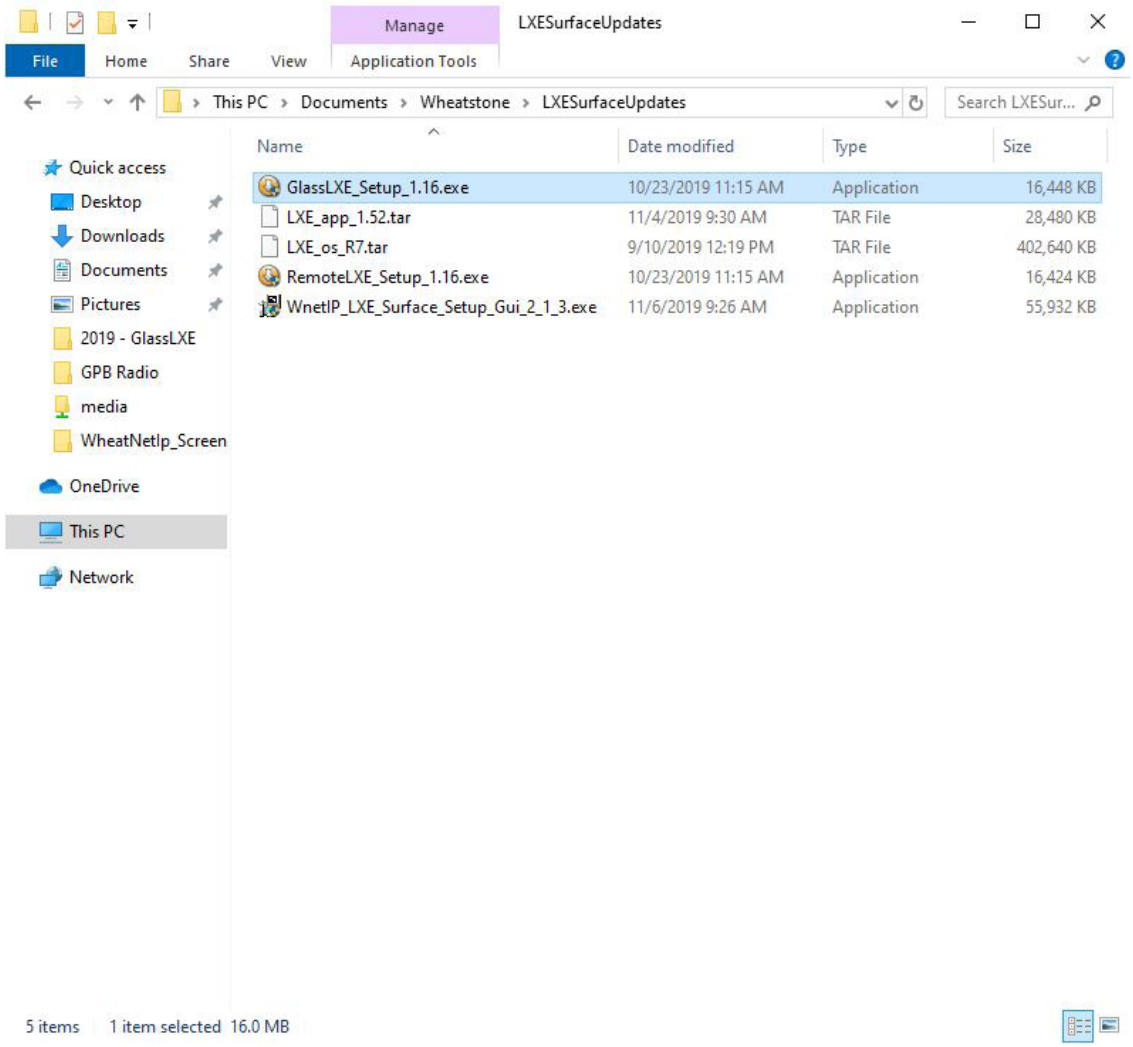


Once the Surface shows connected in the status bar, you can use the Locator tab again, and click Refresh and note the Software update was successful.

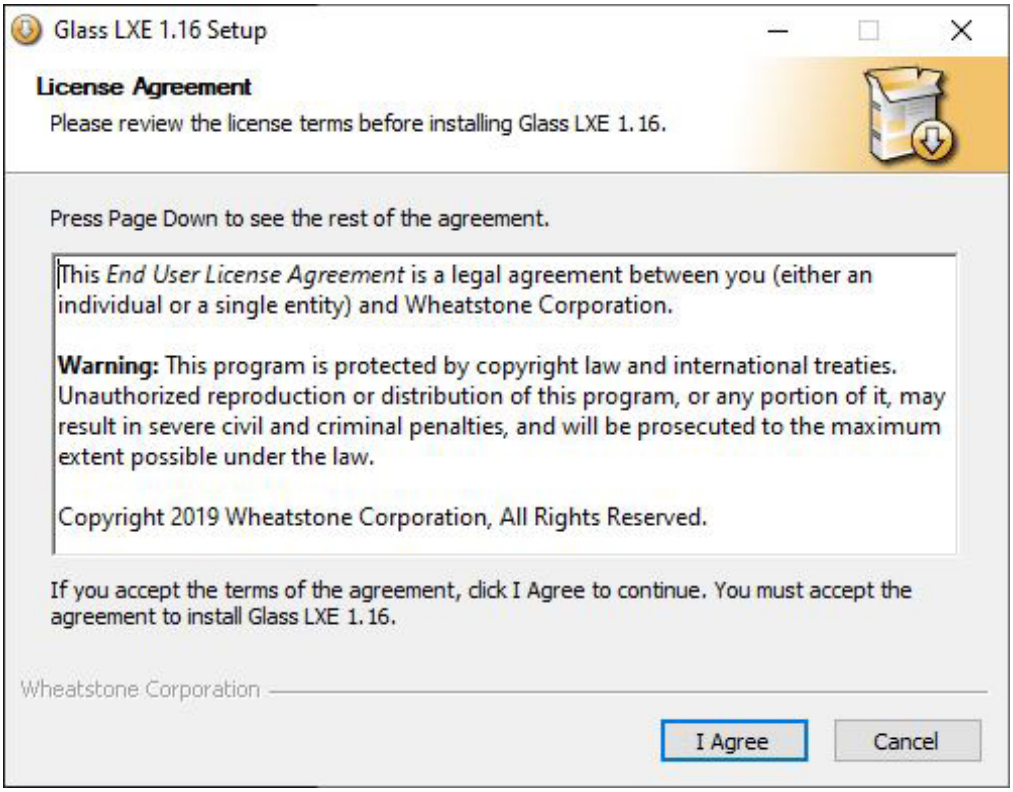
Glass LXE Software

As you noted when you connected to the LXE Surface Host with the Surface Setup GUI, there was no module layout. This is normal for Virtual Surfaces at first run, because there are no physical fader or output modules and panels available for it to use. We need to tell the surface host to use Virtual Panels and populate those virtual panels with input faders, output modules and other items. For this we will use the Glass LXE Software to define how the Surface should be layout should look.

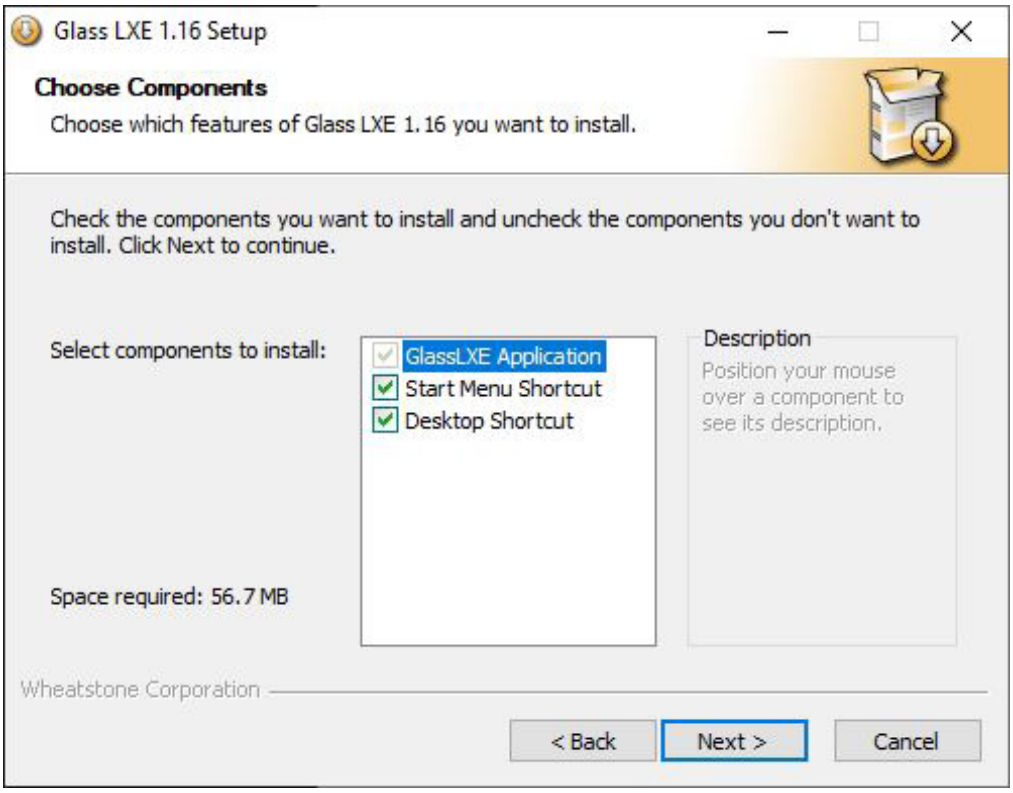
Find the Glass LXE Installation file.



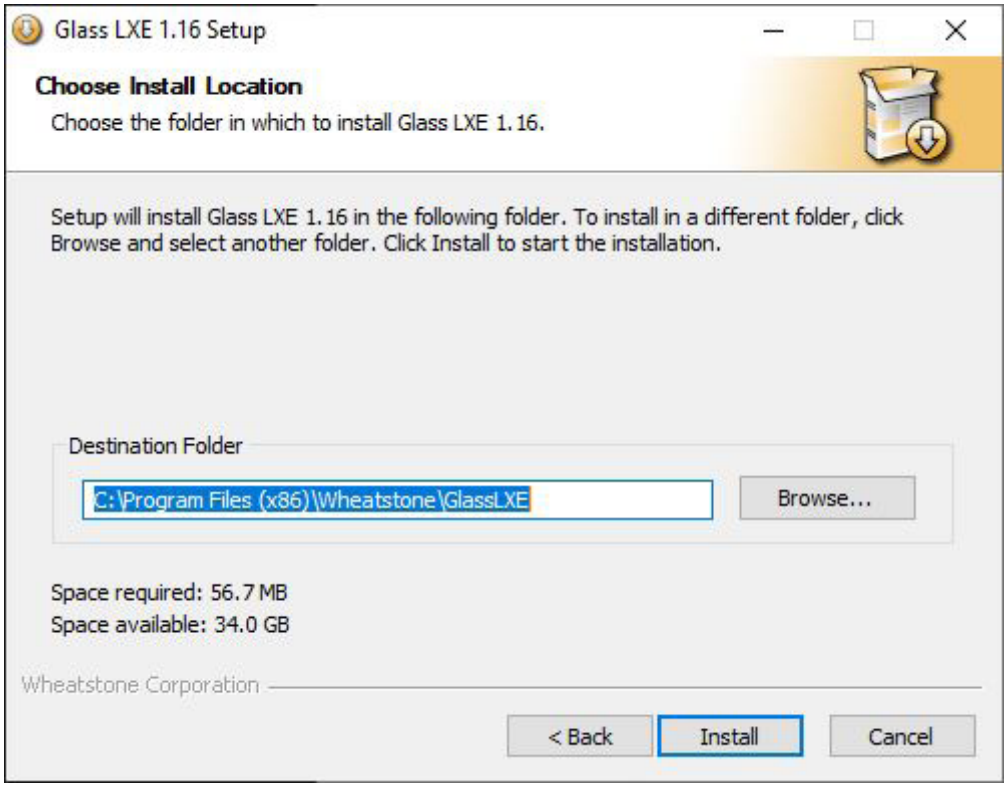
Select the GlassLXE_Setup_1.16.exe file and double click it to start the installation wizard.



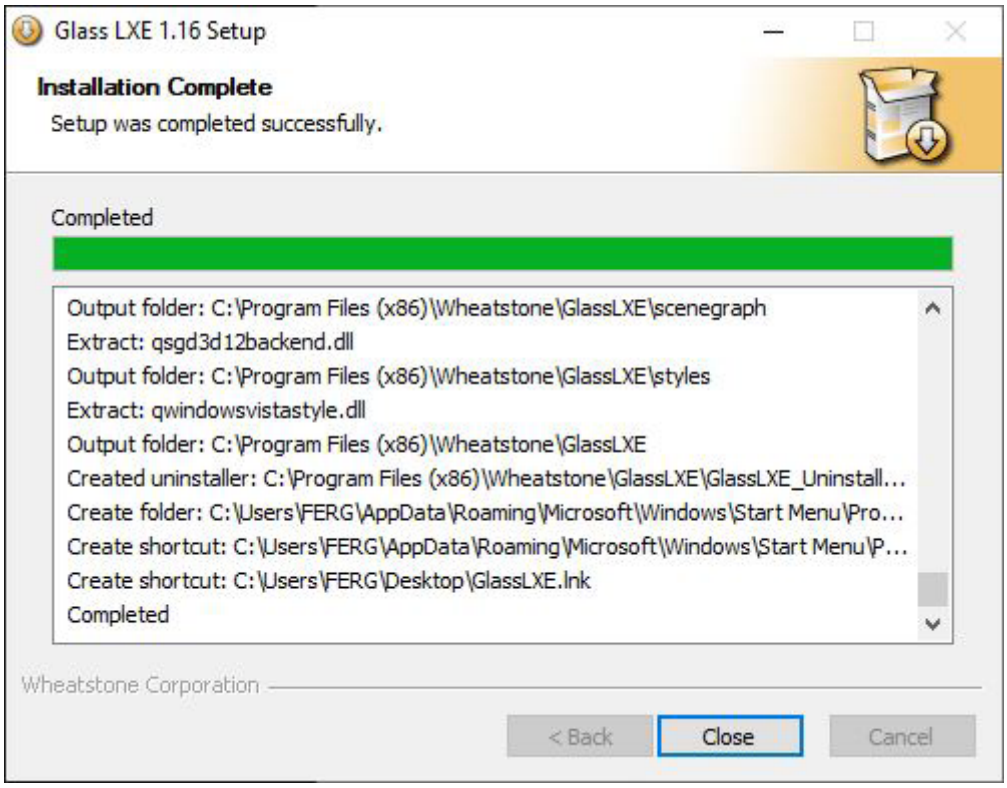
Accept the License Agreement by clicking I Agree.



Leave the check marks for the Selected Components. Then click Next.

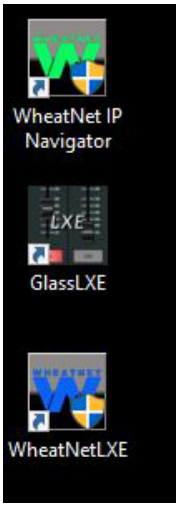


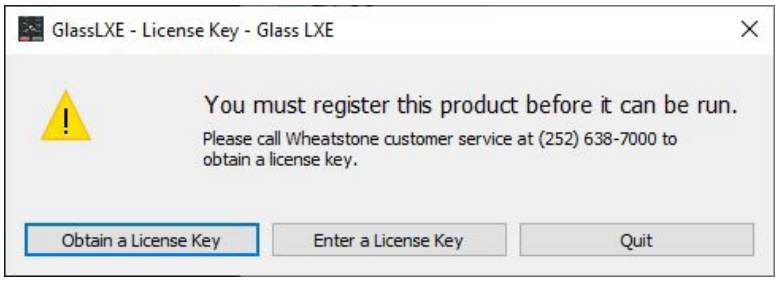
To change the default installation path, click browse and select a path, or leave the default and the click Install.



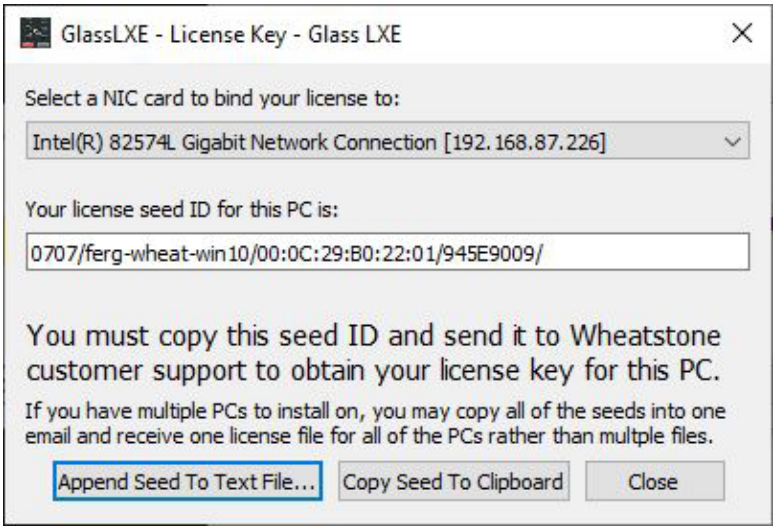
When completed click Close to finish the installation wizard.

Find the shortcut to Glass LXE on the desktop and launch the application. On first run, you will be prompted for a License key.





Click Obtain License Key.



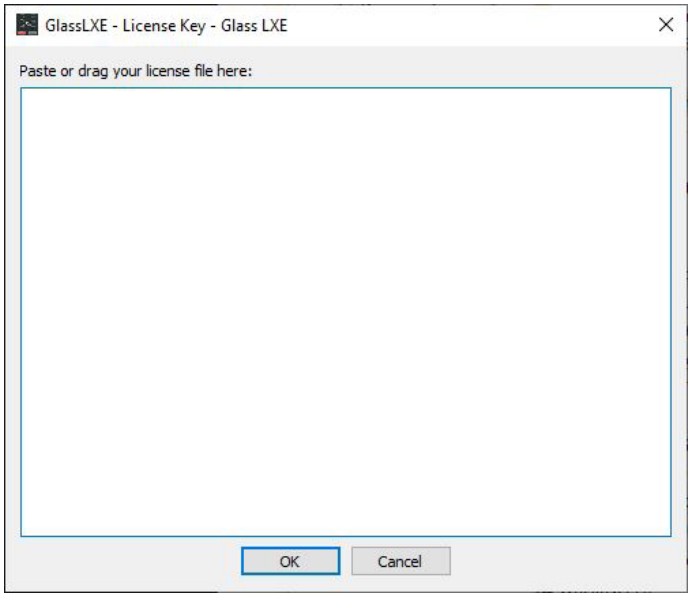
Copy the resulting seed code, and paste it into the body of an email or txt file and send to techsupport@wheatstone.com requesting a license key for GlassLXE. Tech support may ask for purchase details to be verified before issuing a license key.

The seed code provides us with the Host Name, the HDD S/N, and the Mac Address of the PC. These items will be used to bind the License file to this PC. If any of these items change, the license key will become invalid.

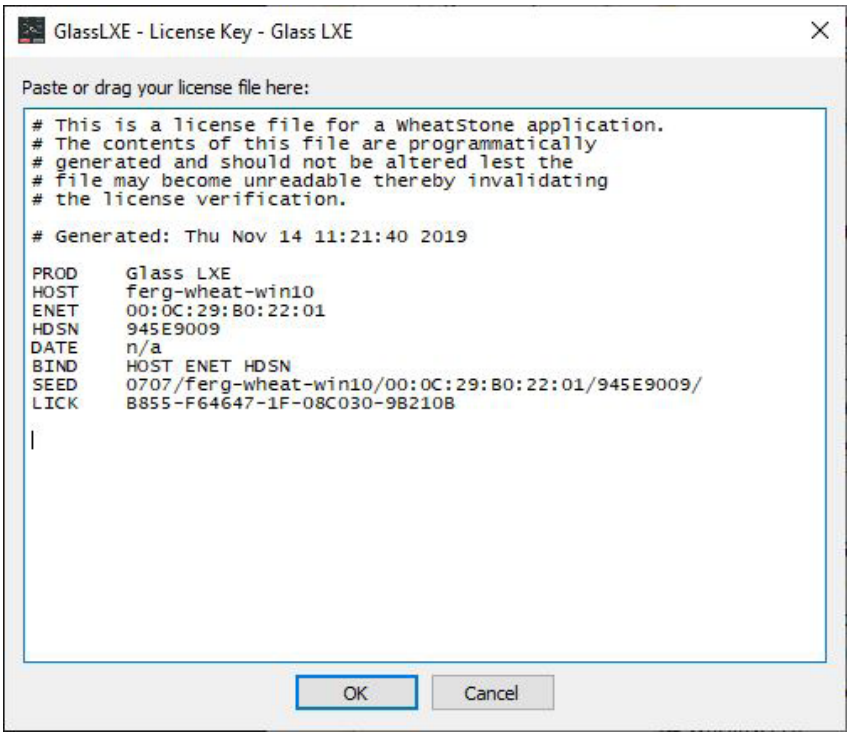
Click Close once you have copied the seed code.

When you receive the key from Tech Support, click Enter License Key.

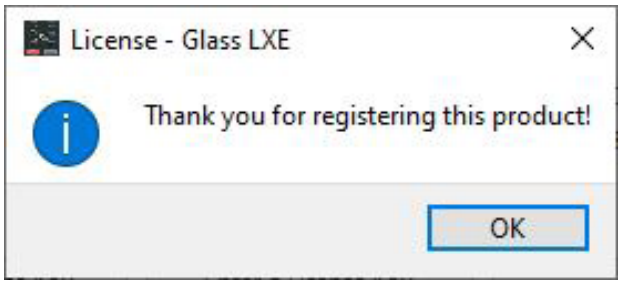
Drag the file, or copy the txt from the file and paste into this window.



The result of the drag file or copy/paste should look like this. If you copy/paste, the entire contents of the file needs to be copied and pasted including the item preceded with the # symbol.



Click OK to apply this license key.

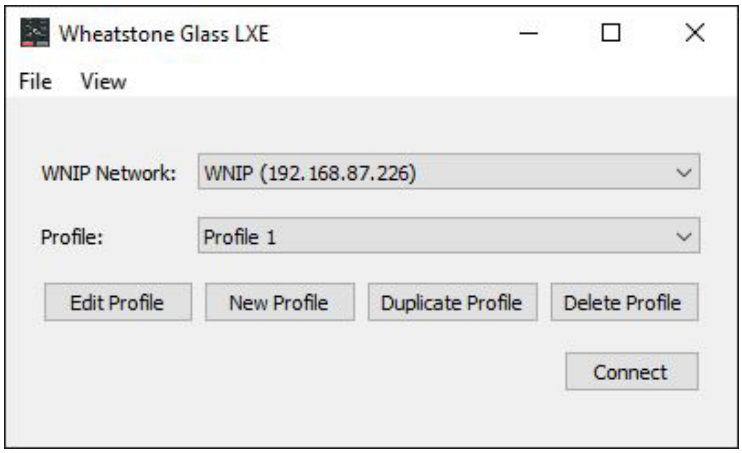


Click OK to dismiss the confirmation screen.

If you get an error message instead of the Thank you message, it's likely due to an incomplete data pasted into the Enter License key screen, or the bindings in the Key do not match the PC.

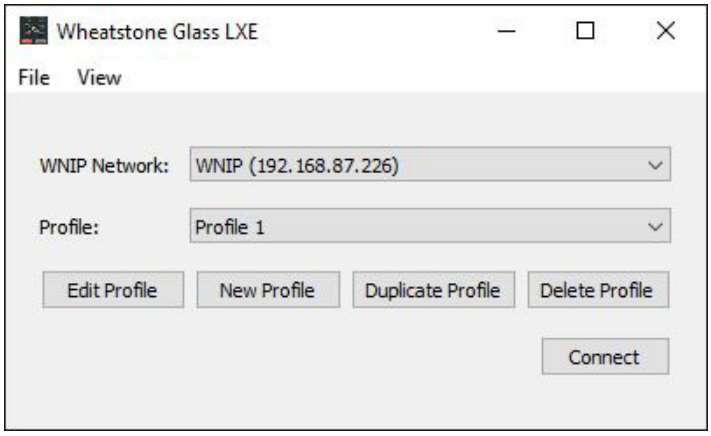
Ensure you have the correct file and entire contents pasted to the Enter License Key window.

Once registered the app will open to its default options.



Configuring the GlassLXE Surface

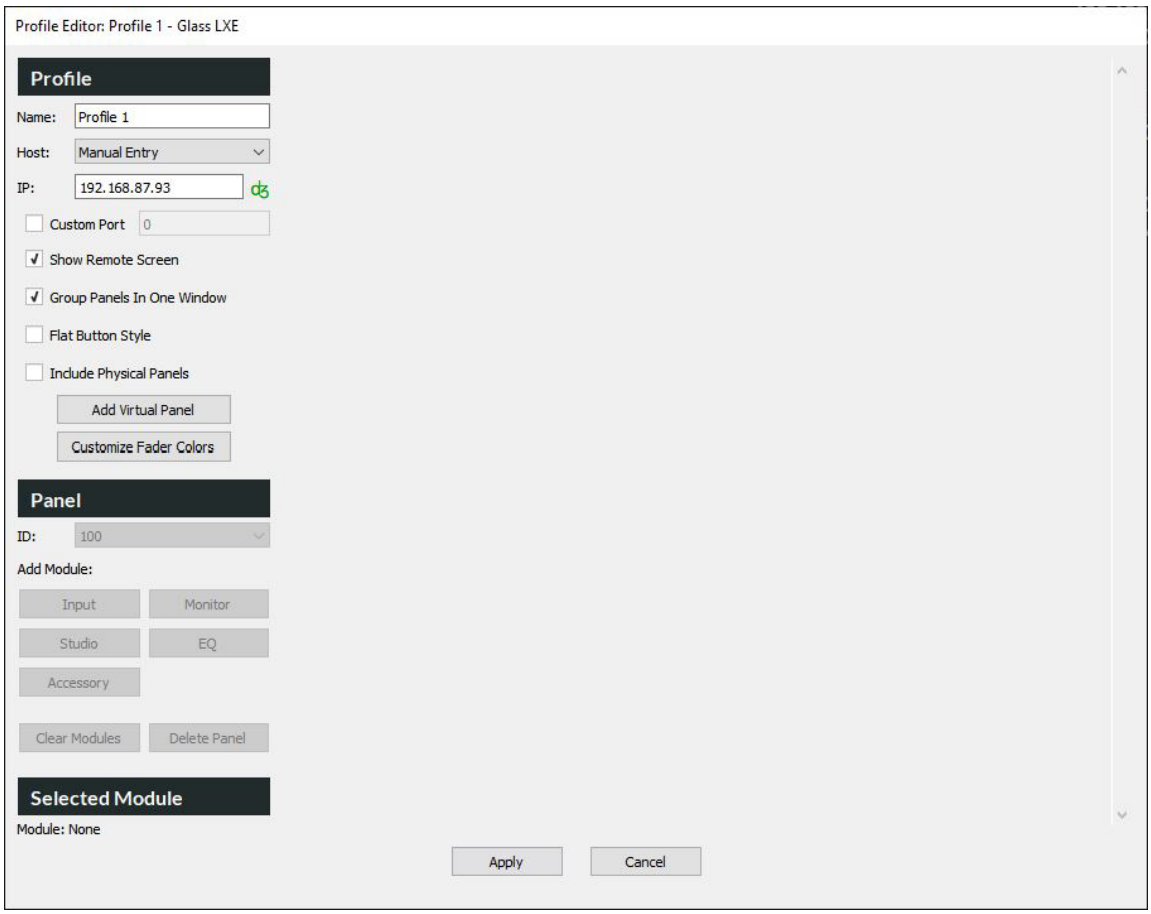
Now that we've done the Installation it's time to configure the Glass LXE Surface.



Select the WNIP Network NIC, to bind the application to the WheatNet-IP Network interface on the PC.

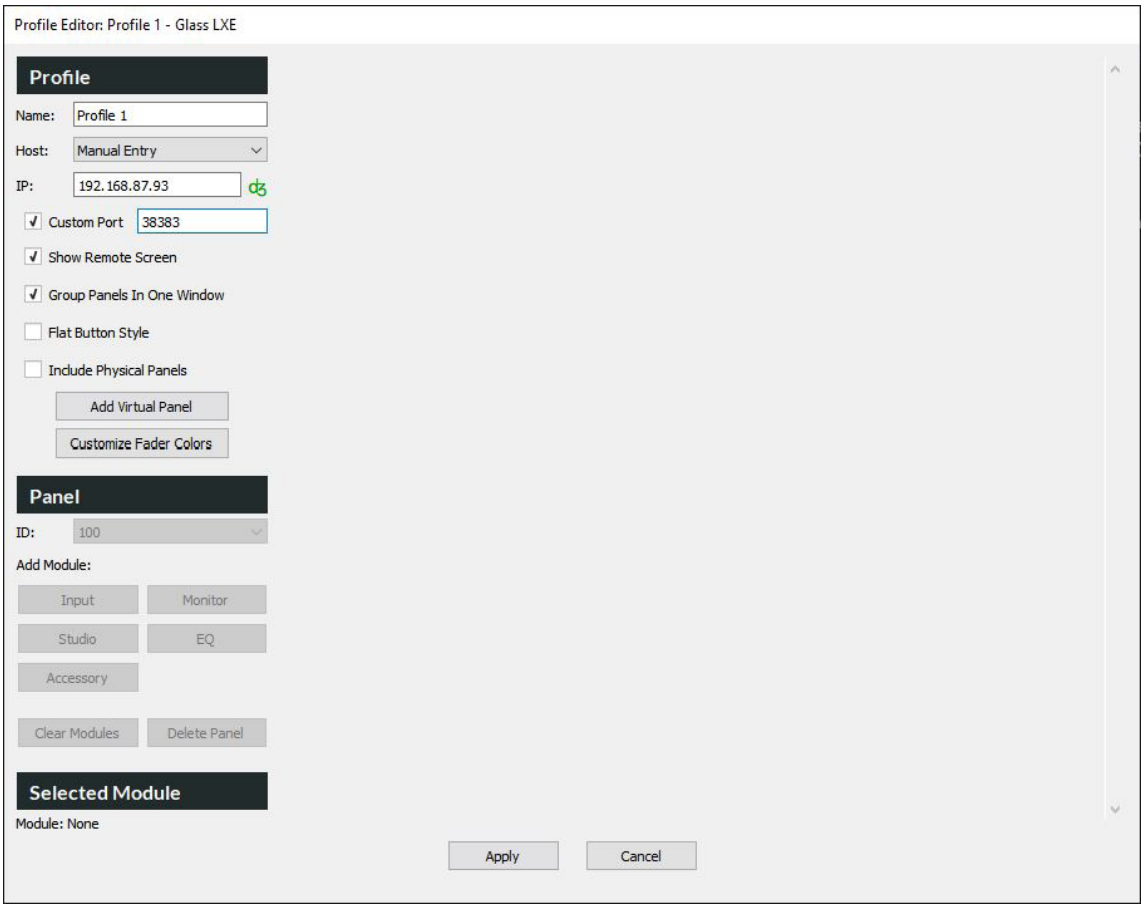
Leave Profile 1 in the Profile field.

Select Edit Profile to bring up the Profile Builder.



Here you can rename the profile from Profile 1.

Additionally, you can select Manual Entry and manually enter the Surface Host IP, or you can change the Host dropdown, and select from Surface Hosts that might be available on the network. For this guide, we'll leave it Manual Entry and type in our Surface Host's IP.

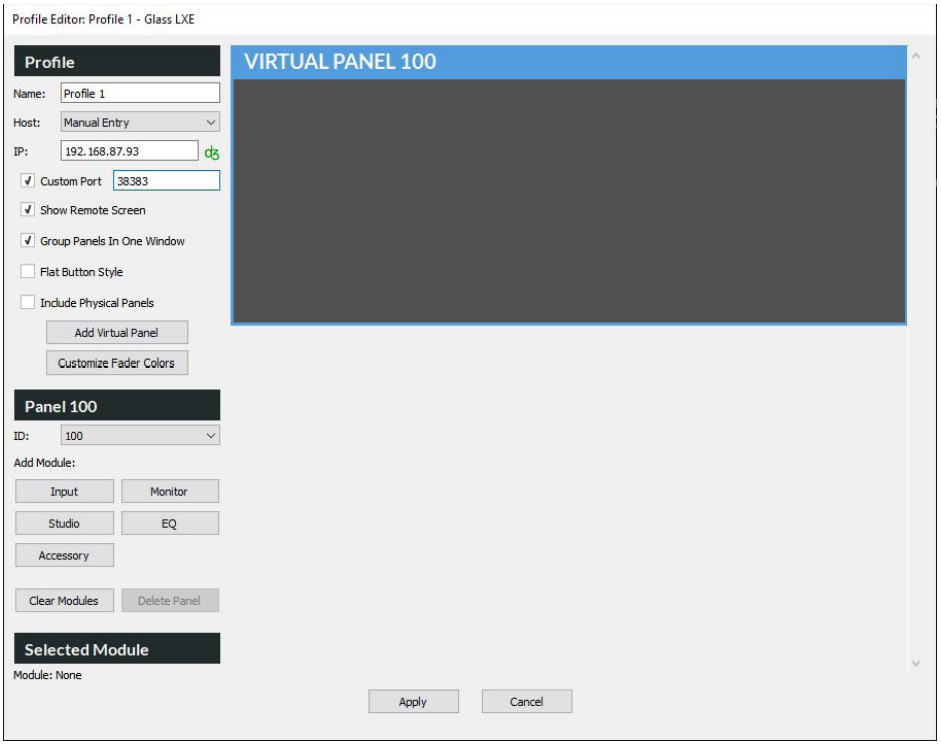


The next option is the Custom Port option. This is the Port for Glass LXE to connect to the surface with. Check Use Custom Port, and enter 38383. This port is designated as the default connection port for Glass LXE connections. This can be changed to suit your network if needed.

The Surface Setup GUI, can be used to set a custom port other than 38383, but that would have to be changed and saved to the surface first, then changed to match here. For now, we'll go with the default.

And optionally for this Profile, we'll leave the Show Remote Screen, and Group Panels In One Window options checked.

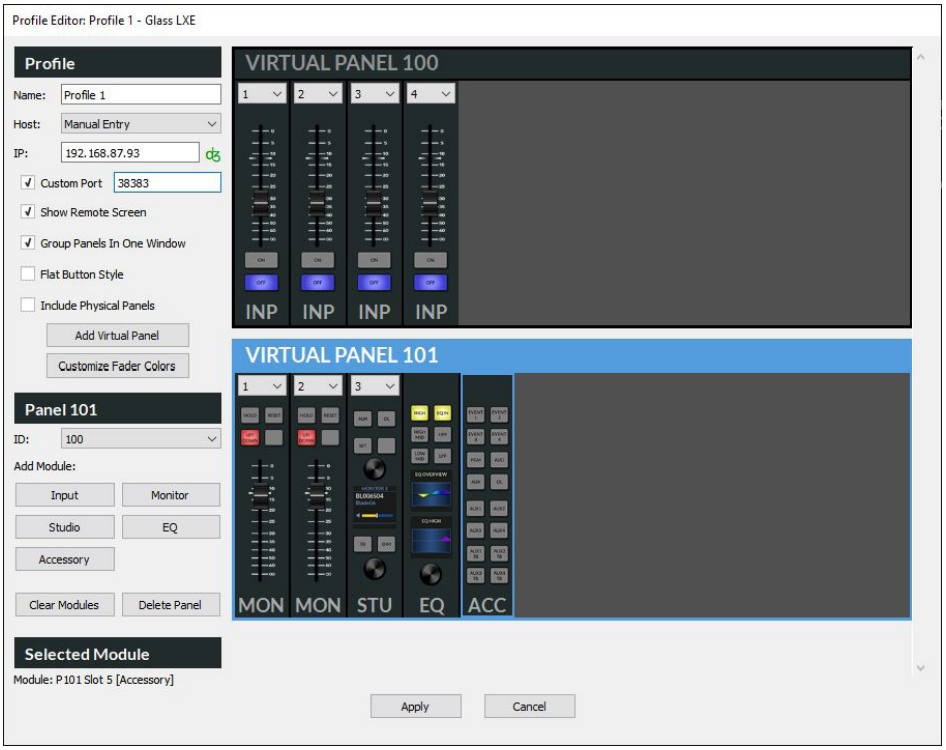
The include physical panels option would allow displaying any physical panels that might be connected to this surface host. Since this Surface will not have physical panels the option will remain unchecked.



Now it's time to define some Virtual Panels. Virtual Panels host modules. So before we can add any input or output modules we need a panel to host them. Virtual Panel ID's start 100 by default. This is fine, and should be left at default numbering. The Next Panel will have id of 101.

Each Virtual Panel can host up to 12 modules of any given type.

For our example purposes here, we've added 2 Virtual panels. I will use Panel 100 for Inputs and Panel 101 for the Output and Accessory Modules.



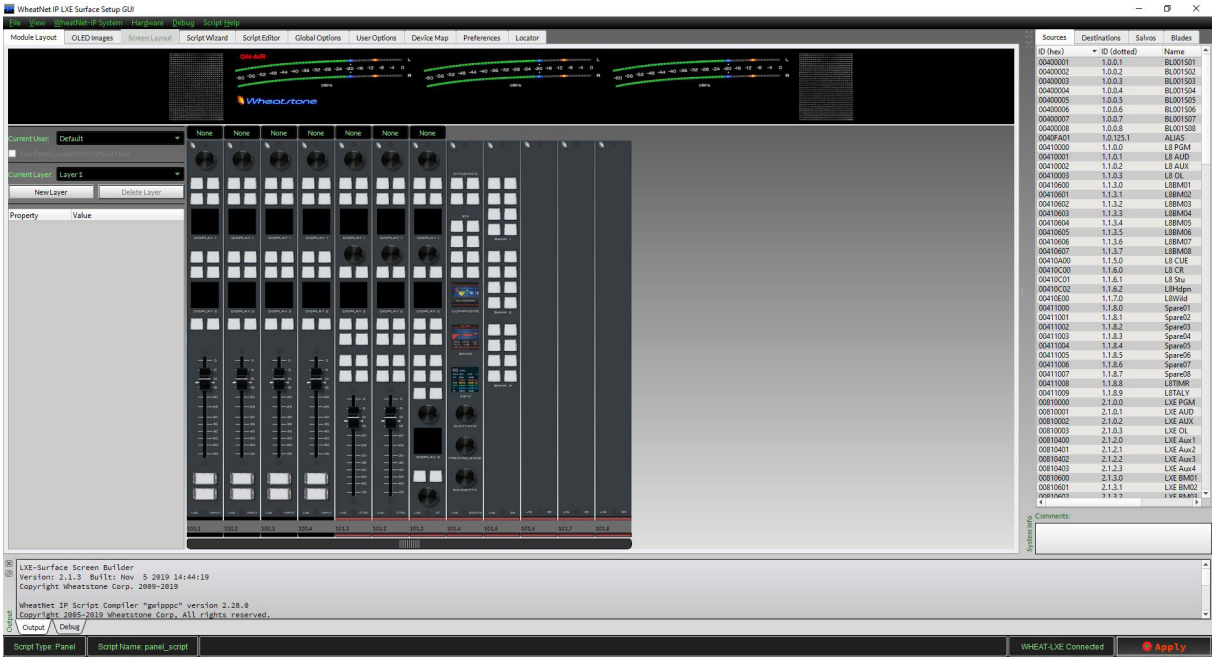
To add modules to a panel, select the Target Panel on the right, then select the type of Module you want to add to each panel. Remember that in our options above, we've selected to group panels into one window. Later when we run this profile, these panels will show up in a single window. If we un-checked that option, when we run the profile, each panel would have it's own window. This is handy in multiple monitor/screen setups if using them.

Once you are happy with your layout, click Apply.

This sends the layout of your Glass LXE Surface to the Surface Host. If you try to run the profile now, when the screen loads, your modules will show up as unconfigured, which is correct, they have not been configured by the Surface Setup GUI.

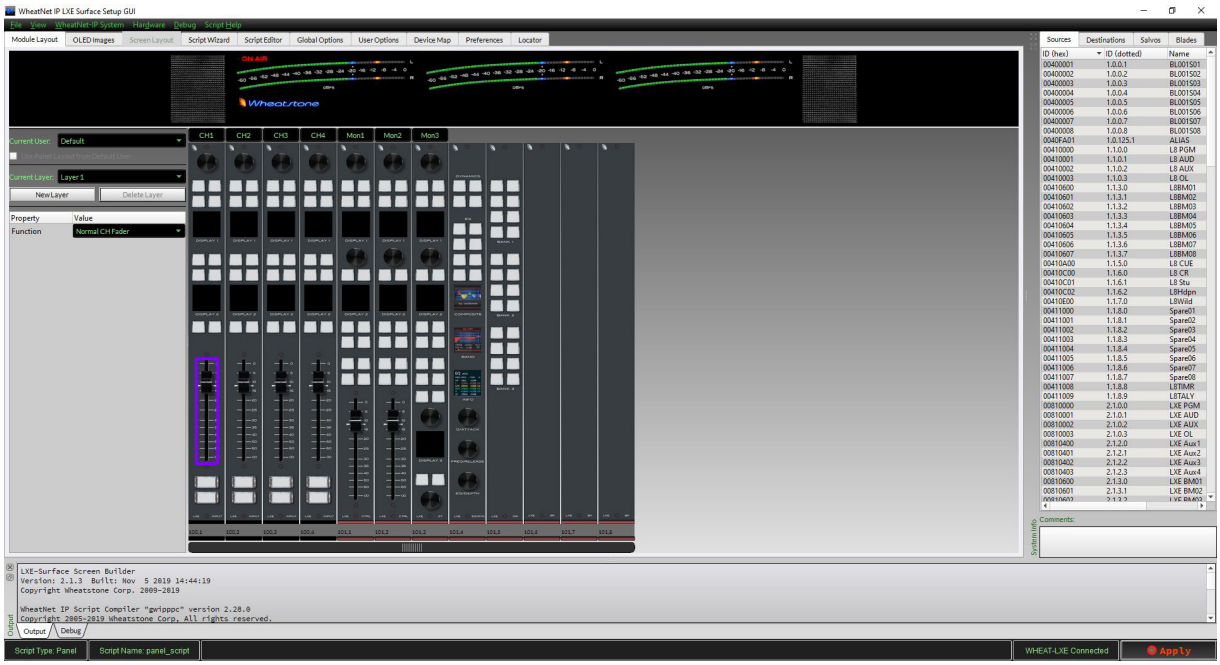
Running Profile 1, notice the modules grouped into 1 window. The surface Screen has it's own window behind the modules displayed. The Triangle with ! means that the Modules are not configured yet.

Now we need to launch the Surface Setup GUI and connect to this surface host to configure the modules.



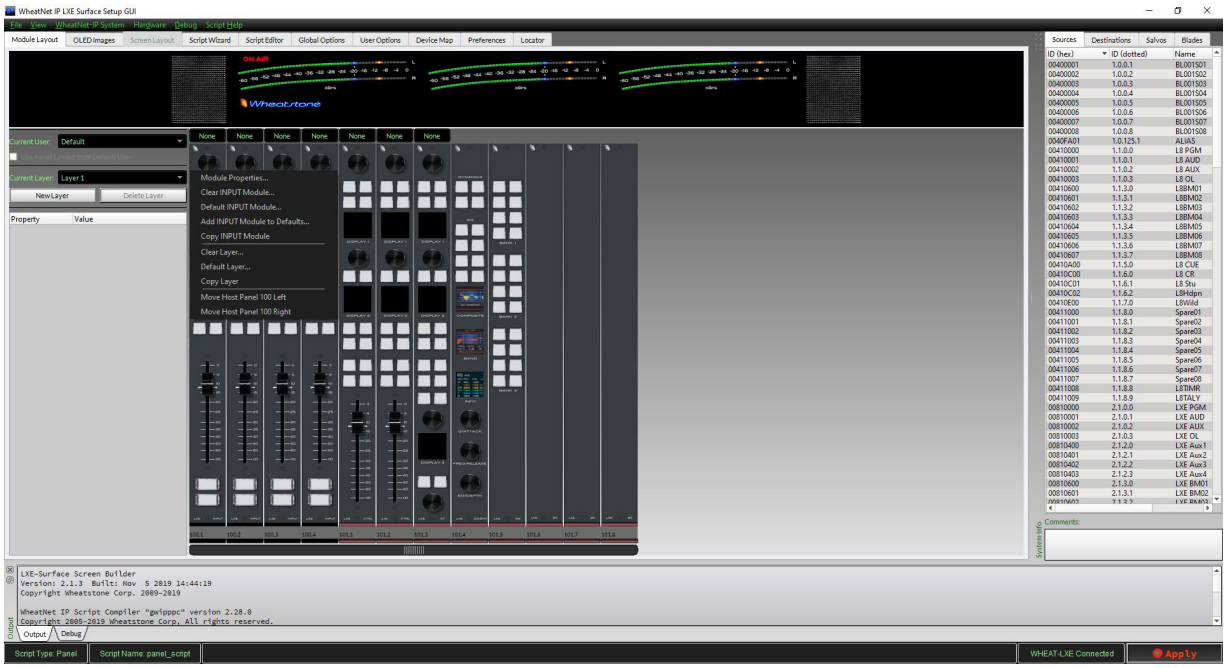
Notice now the Module Layout is populated and matches what we built in Profile 1, of the Glass LXE software.

To configure each Module, we first need to assign Input and Monitor numbers to each module. At the top of each module displayed, click into the field where None is displayed. Select the Input # that will be assigned to input faders. In our example we'll use 1-4 and we'll also assign Monitor outputs for the Monitor Modules. In this case, we'll use Mon1 to Mon3.

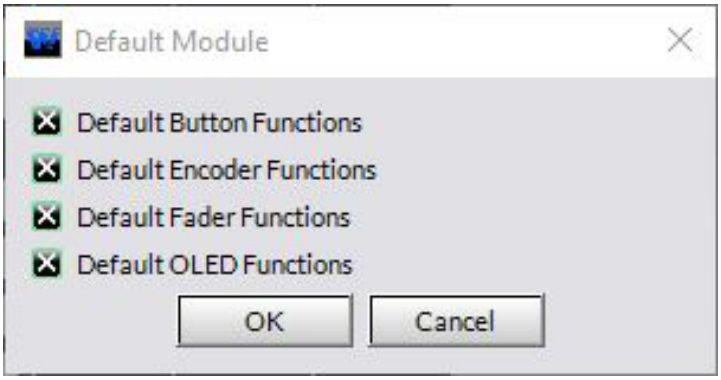


Inputs Modules, 1 - 4, and Output Modules, Mon1, Mon2, and Mon3.

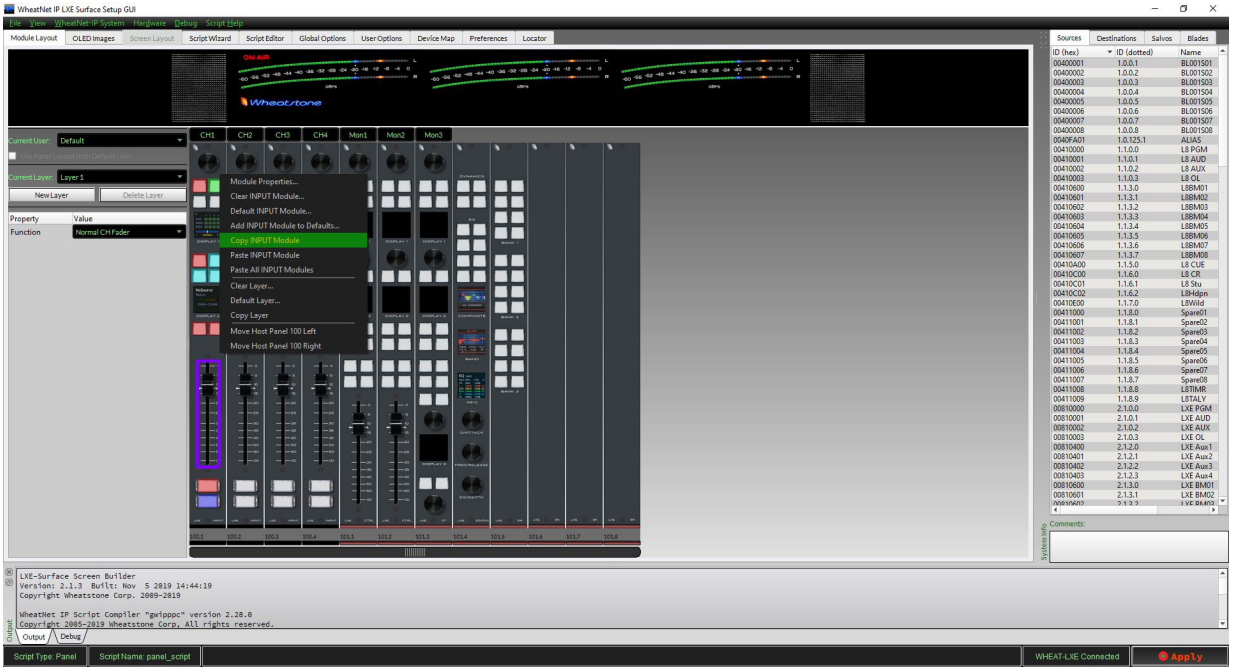
Now it's time to configure the buttons, screens and encoders on the modules. You can do this a number of ways, by clicking each item individually or for expedience you can use our default values for each module type.



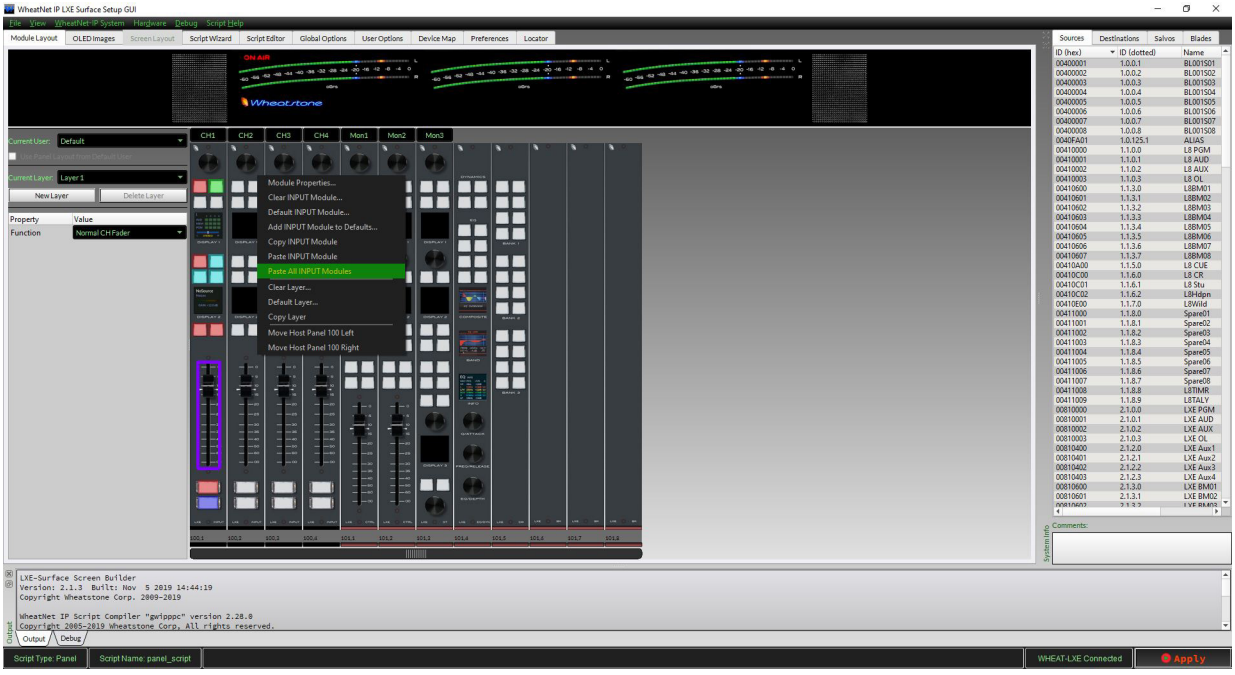
Right click on an Input Module and select Default INPUT Module. This will assign Default Functions to the Controls on the Input Module.



When prompted, check all of the boxes to set all controls to default.

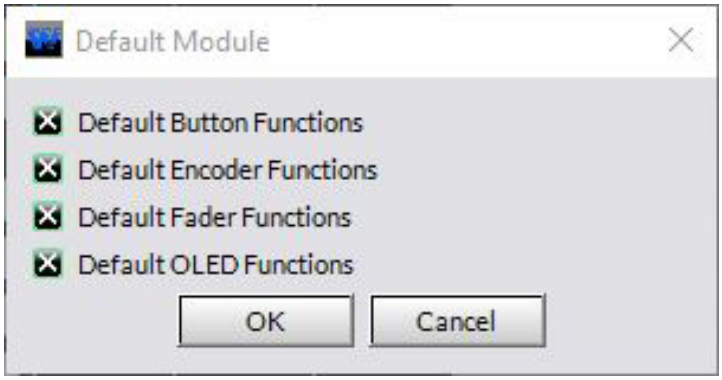


Once the first module has default values, you can right click and copy this module using the Copy function, then right click on the next Fader and select Paste INPUT Module, or do the rest of the input modules with Paste All INPUT Modules.

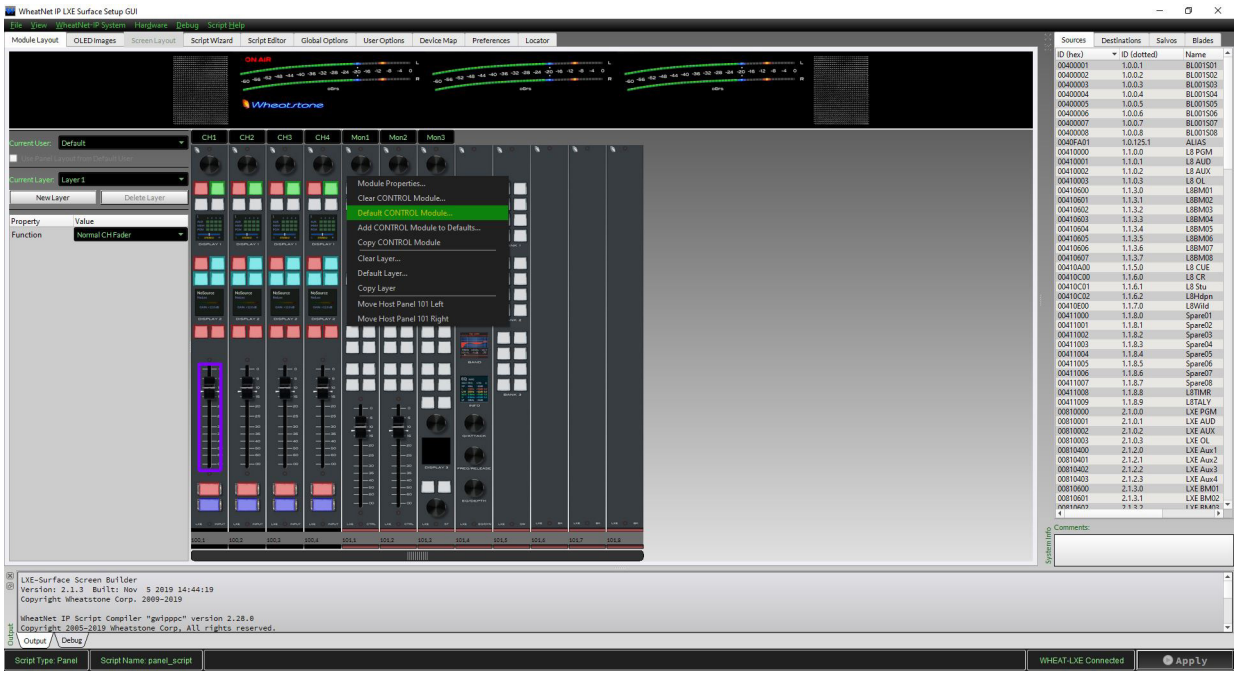


This will put the same config on all of the input modules.

For output modules the steps are slightly different.

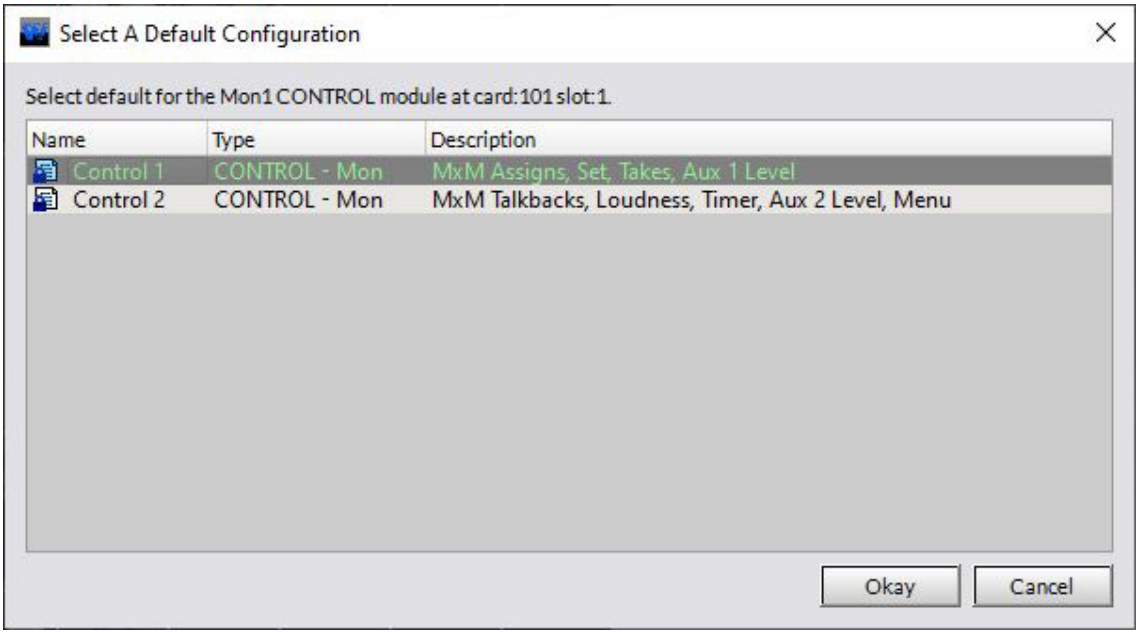


Select all and click OK.



When you select Default Output Module, you will get an extra options window for the type of output module you are configuring, i.e., a CR, or HP Monitor, or a Studio Monitor.

Our first Output Module, is typically the CR module.

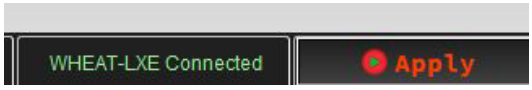


Here we'll select Control 1.

For the Headphone Module, we'll want to select Control 2.

Repeat for the Studio Module.

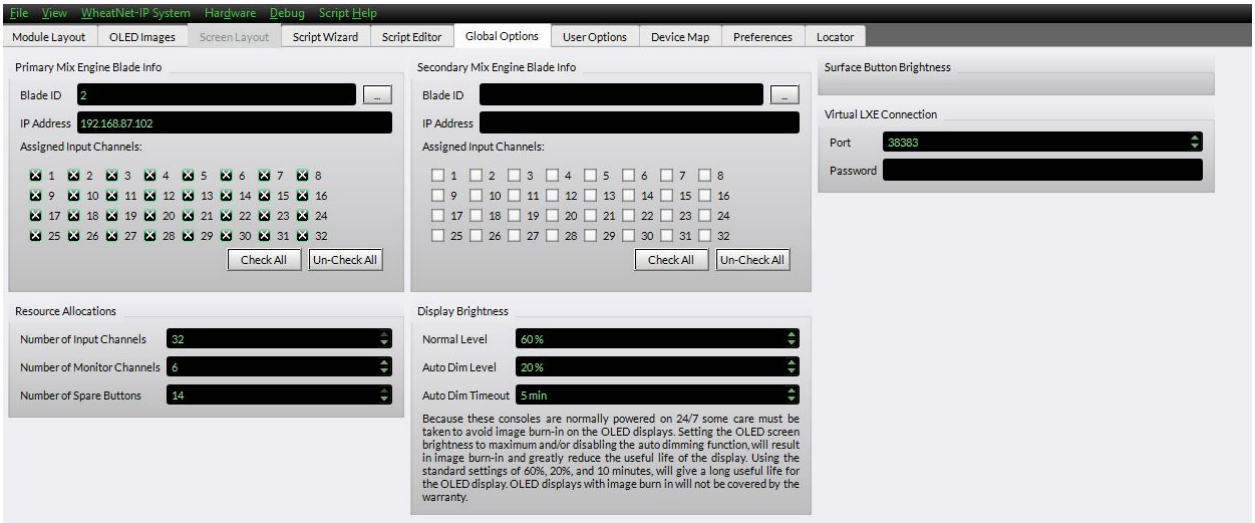
When you are finished, click Apply.



This sends the changes to the Surface Host.

While we are in the Surface Setup GUI, we need to setup a few more things.

First click the Global Options tab.



In the Global Options Screen, we need to tell the LXE Surface Host, which Blade on the Network is it's Mix Engine. If you have not already done so, click Wheatnet_IP_System and select Scan. Enter a Valid Blade IP address as the Starting point for the Scanner. When the System Scan Finishes, click Use this Scan information. When prompted Save the scan file in the default directory offered.

Then in the Global Options, under Primary Mix Engine, click the picker button to the right of the ID Field. Select the LXE Engine Blade for this Surface Host. Then click the Apply button at the bottom of the GUI.

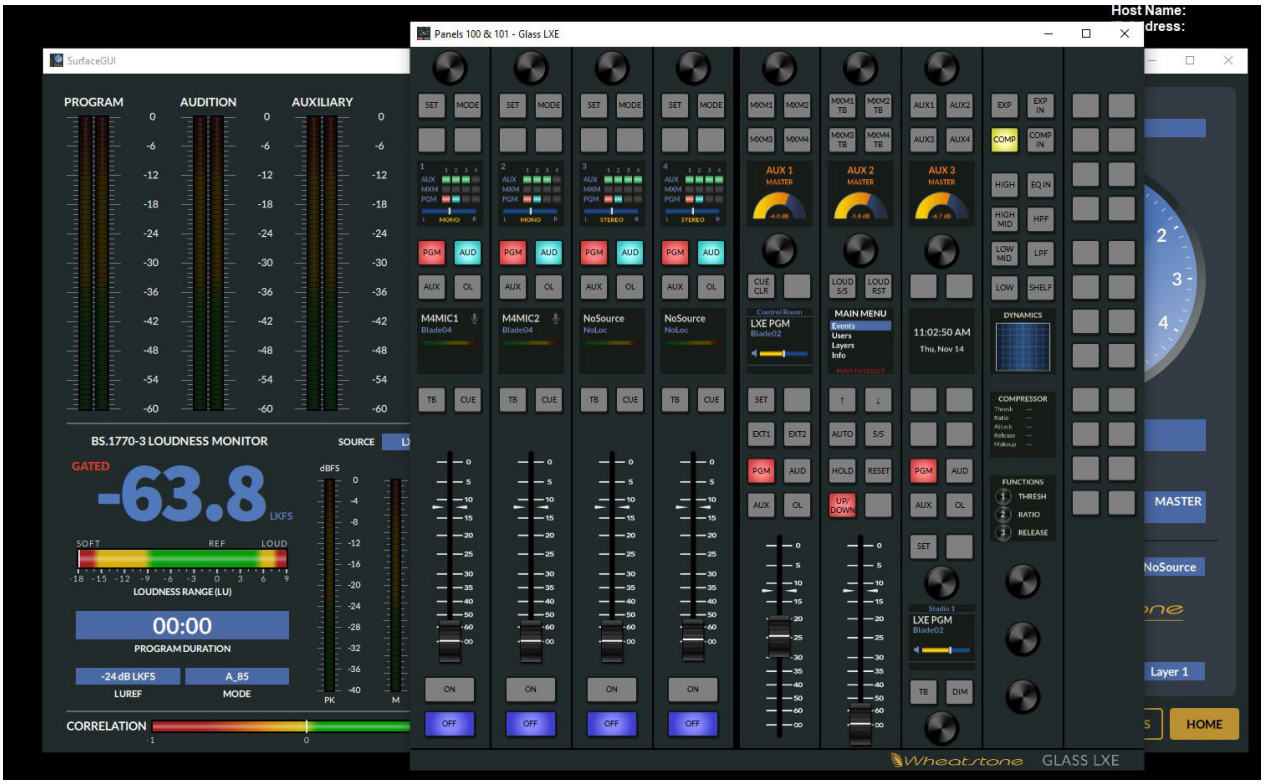
Changes in this screen require a restart of the Surface Host. Use the Hardware menu, and select Reboot Surface option to restart the surface.

Note you can make additional changes here. The LXE Mix Engine supports 32 inputs, and up to 16 Monitors or Outputs and 14 unique spare buttons. You can increase or decrease these based on your facility and needs. You can refer to the LXE Surface Manual for more details.

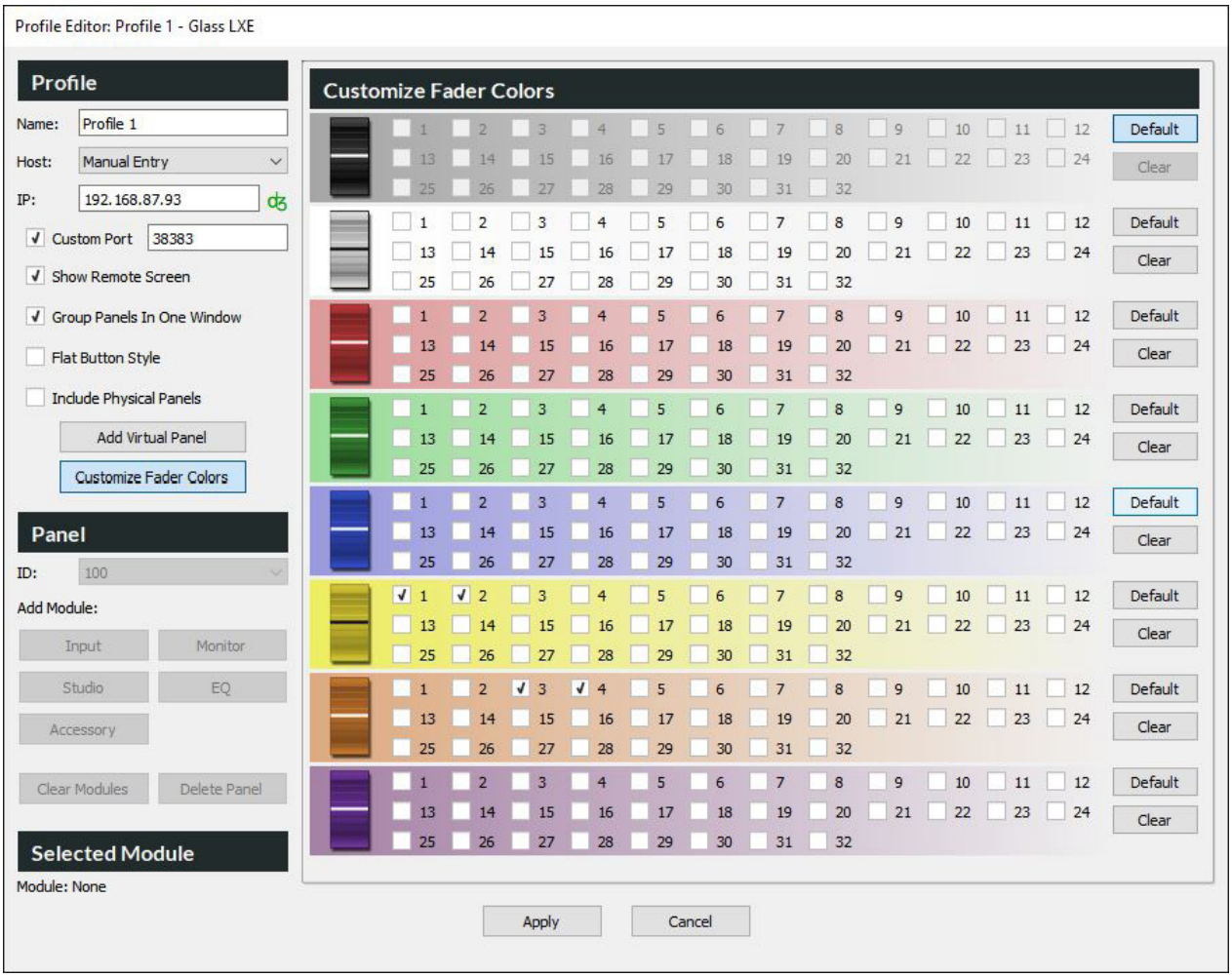
One additional item to cover for this manual, is the Virtual LXE connection section. Here you can assign a port other than 38383 and a password to be required to connect (the password feature is not currently support in the LXE Surface or Glass LXE application and will be in future versions).

For getting started the default is fine to use, however if you do change it, remember to update the Glass LXE Profile for this surface to the new number and password information.

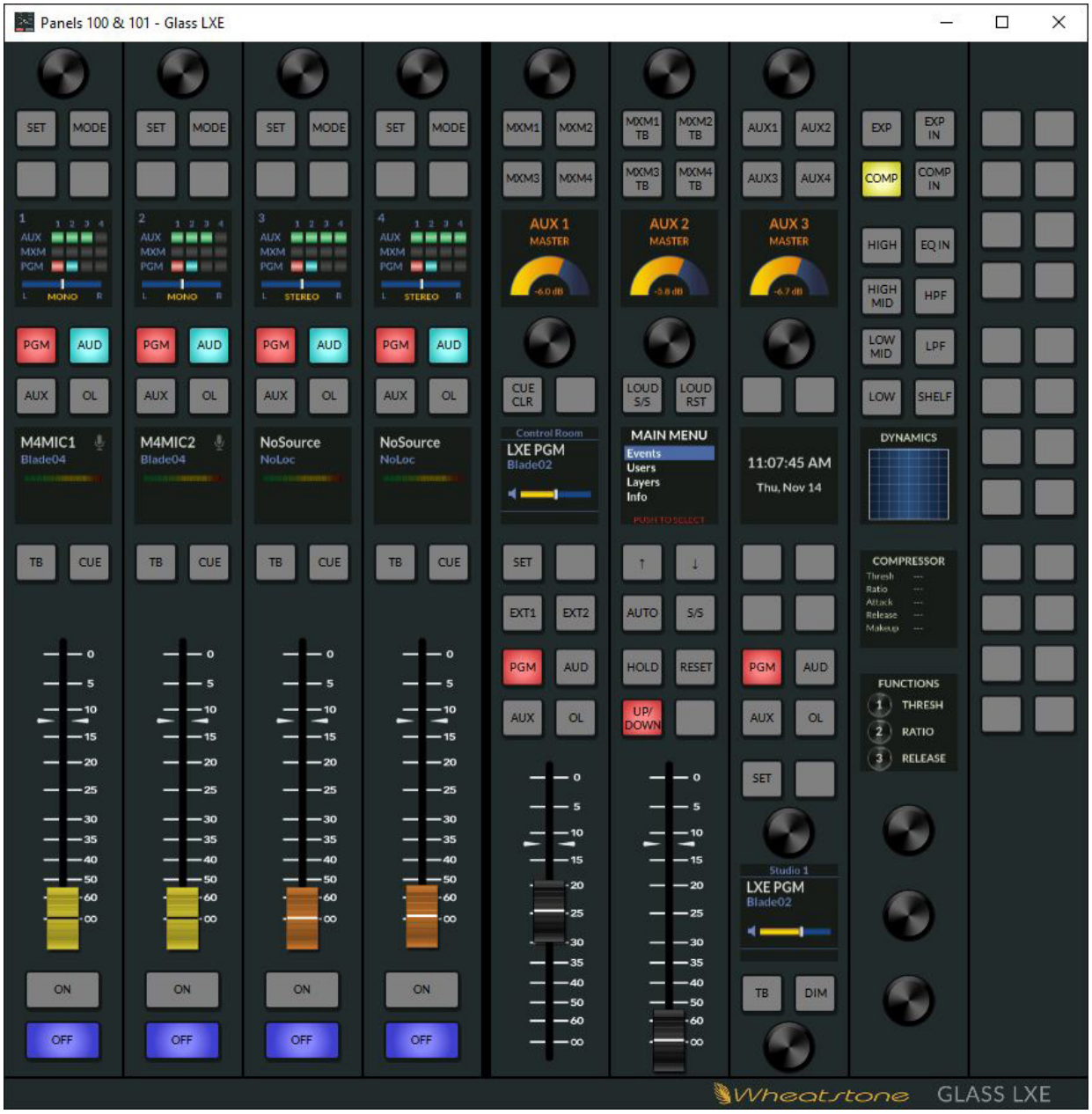
Once the Surface has restarted, and shows connected in the Setup GUI, your Module layout there should look something like the below example when you connect with Glass LXE.



Your Glass LXE Surface is now ready to bring in sources and mix to outputs. You will need to make crosspoints in the Navigator Software to bring Monitor Sources from the Surface to Blade Outputs, wired to speakers or headphones.



Some additional customization. In the Edit Profile screen, you can click Customize Fader colors and assign colors to the faders respectively.



Additionally for buttons programmed as scriptable buttons or spare buttons, you can use the LXE Surface Setup GUI, to add Txt to the Etched Label Field. This will cause the text to display in the Glass LXE Surface Buttons.

Selecting Buttons and giving them a function, and an Etched Label.

As you can see, much more customizing can be done with your Glass LXE Surface. As you learn your way around the Surface Configuration GUI and the Glass LXE Profile editor, your imagination is the limit.

Further information on the LXE Surface Setup GUI, will be found in the LXE Surface Manual.