



# system VUE Software

## Manual (Beta 3.8.5)



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# Introduction

SystemVUE software provides control and monitoring of VUE h Class systems and V4/6 Systems Engine rack mount amplifiers when connected to an ethernet network. SystemVUE runs on computers running the Windows (XP/7/8) or Mac OS X operating systems. The computer need to equipped with an ethernet wired interface or on a WiFi network with bridge to a wired ethernet network (all VUE systems and the computer running SystemVUE should all be on the the same subnet).

SystemVUE can be downloaded from the VUE Audiotechnik website [vueaudio.com](http://vueaudio.com) and updates to SystemVUE are regularly posted to the site and it is suggested to check for updates.

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## SAFETY PRECAUTIONS

- Before installation or use, be sure to carefully read all the instructions for correct and safe operation.
- Be sure to follow all the precautionary instructions in this section, which contain important warnings and/or cautions regarding safety.
- After reading, keep this manual handy for future reference.

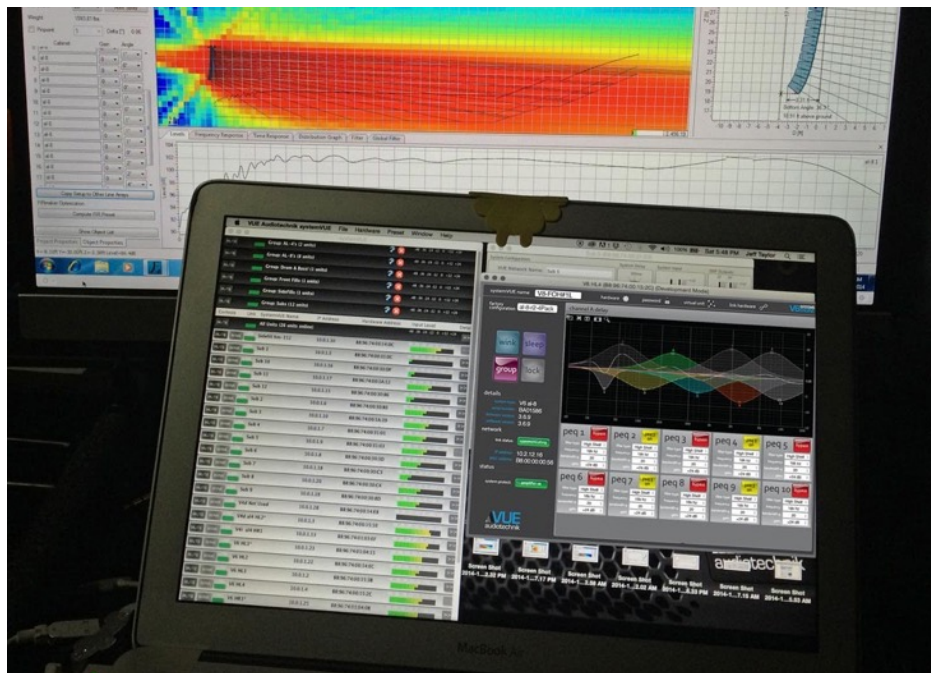
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## Thank you for choosing VUE Audiotechnik!

We have design our products and software to operate reliably over many years.

Please, take a few moments to read these instructions carefully, as we want you to enjoy your new VUE Audiotechnik products quickly and to the fullest.

For information about VUE Audiotechnik check out our website [www.vueaudio.com](http://www.vueaudio.com)



# SystemVUE Installation

## Computer Requirements

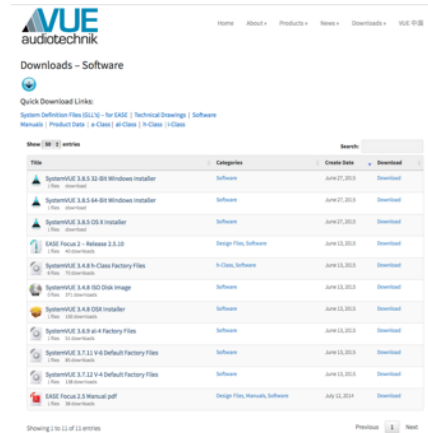
The following operating systems are supported by SystemVUE:

Windows XP with Service Pack 2 or greater, Windows 7, Windows 8.1

MAC OS-X10.5.8 or higher

## Downloading the Software

The latest version of SystemVUE can be downloaded from VUE's website at: <http://www.vueaudio.com/downloads-software/> to ensure you have the latest version, soft the list by date.



Make sure to elect the correct version of SystemVUE for you computer:

VUE publishes SystemVUE installation software with four download options:

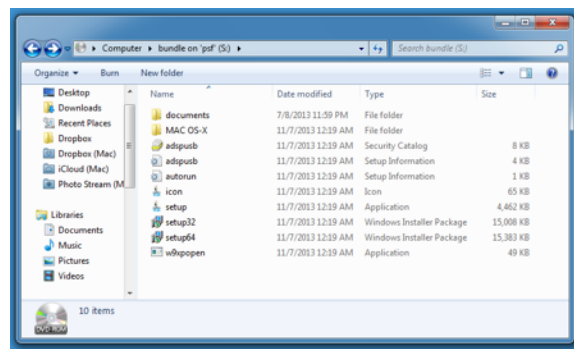
## Universal ISO CD Image

CD Image with all versions of SystemVUE as an **.iso** disk image file – containing both eh 64 and 32 bit Windows versions, the OS X version, as well as supporting documentation and an autostart feature with automatic 32/64 bit system detection for Windows.

The file will look like this: VUE\_Audiotechnik\_systemVUE\_v\_3\_X.X\_XXXXXXX.iso (the v\_3\_4\_8\_105536 part of the name will change to reflect the current release - V3.4.8 Build 105536 in this example).

This is a good option if you want to have a local copy of SystemVUE for all operating systems but is the largest and longest to download.

In Windows Vista and 7 you may need to download Microsoft's Virtual CD-ROM Control Panel to be able to mount (Open) the disk Image (by default Windows wants to burn the image to a physical CD Disk) it can be found here: <http://www.microsoft.com/en-us/download/details.aspx?id=38780>



## Windows 32 bit Installer

If you are running Windows XP or 7 in 32 bit mode you can download the installer in .msi format from the file VUE\_Audiotechnik\_systemVUE\_32\_bit\_v\_3\_X.X\_XXXXXXX.msi

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## Windows 64 bit Installer

If you are running Windows XP, 7 or 8.1 in 64 bit mode you can download the installer in .msi format from the file VUE\_Audiotechnik\_systemVUE\_64\_bit\_v\_3\_X\_X\_10XXXX.msi

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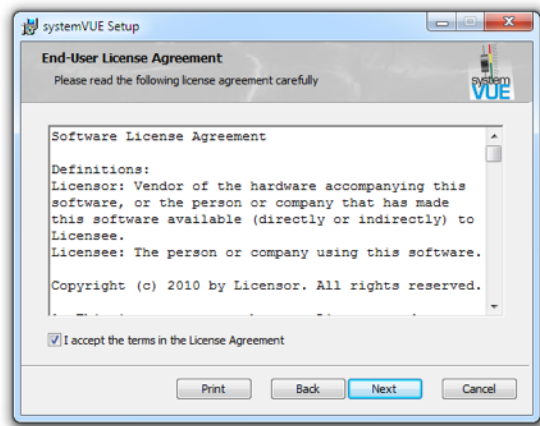
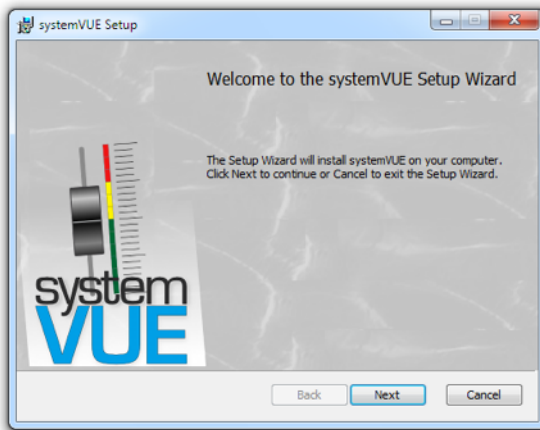
## Mac OS X Installer

If you are running Mac OS X you can download the installer in .mpkg.zip format from the file VUE\_Audiotechnik\_systemVUE.mpkg\_v\_3\_X\_X\_10XXXX.zip

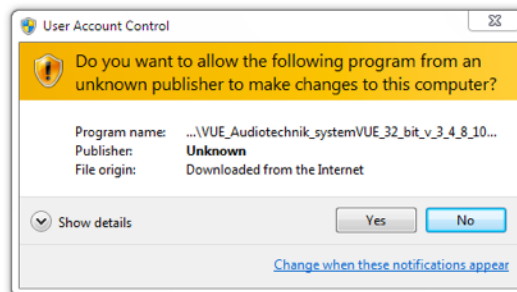
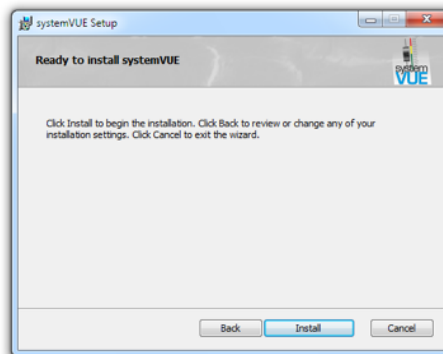
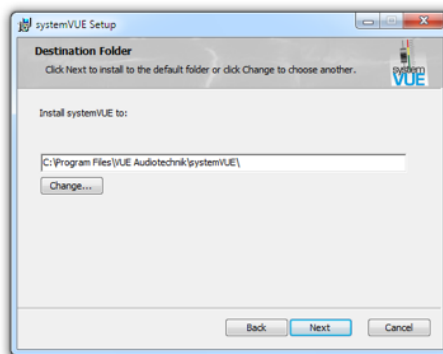
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## Windows Systems Installation

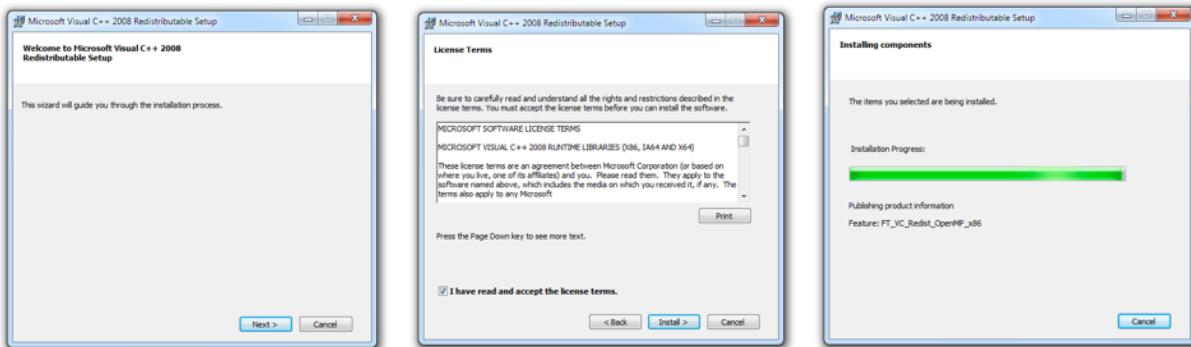
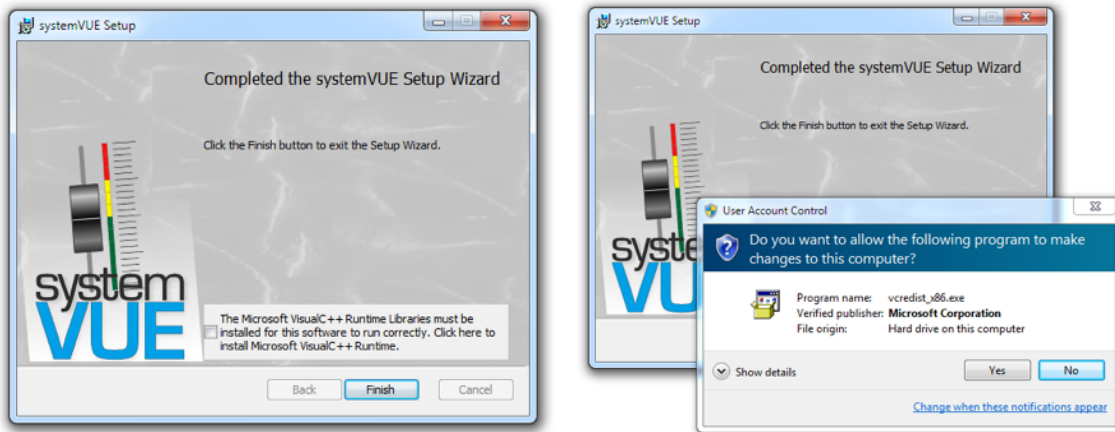
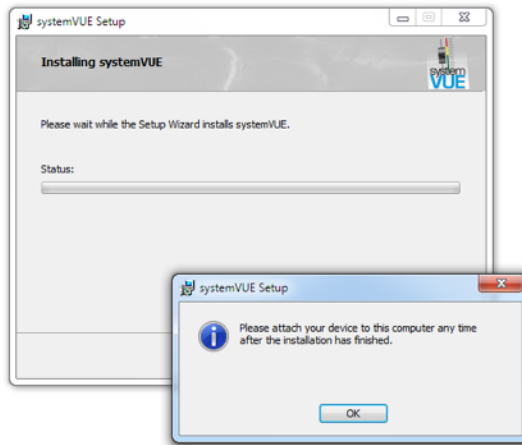
Once you have downloaded the current versions of the SystemVUE installation package for your system from our website and open it. The installer will guide you through the installation procedure. It is not needed to remove any older version; it will be removed automatically (you can currently only have one version of SystemVUE installed under Windows).



You must accept there License Agreement to continue.



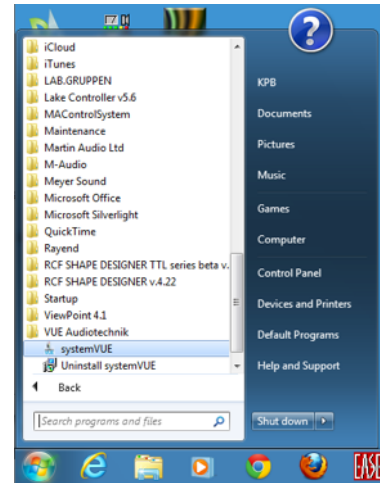
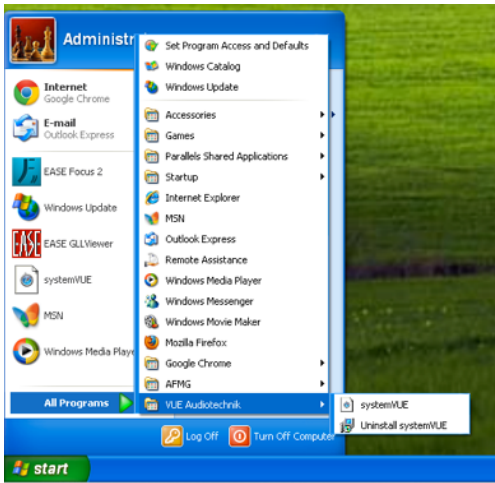
You have to say yes User Account Control Warning to allow the installation of SystemVUE.



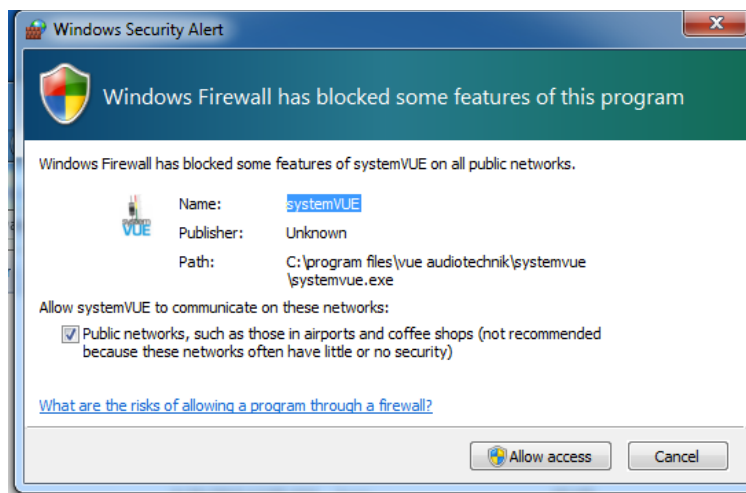
Start the SystemVUE software by double-clicking the desktop icon, or by selecting **Start > Programs > VUE Audiotechnik – systemVUE.**

Windows XP

Windows 7



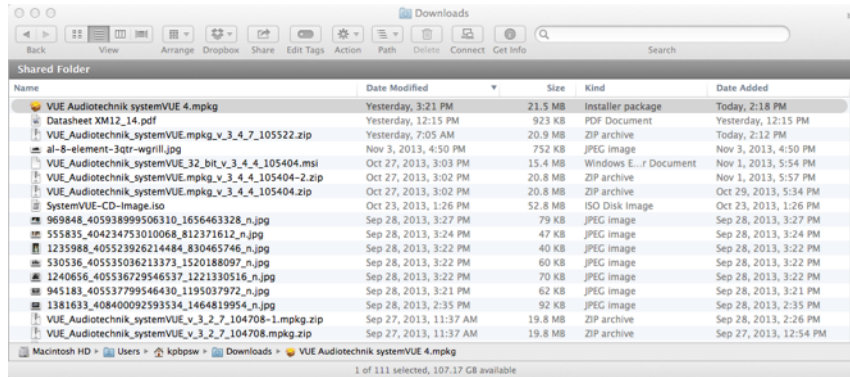
The first time SystemVUE is run in Windows 7 you may be asked to allow the program to run on all networks (depending on security settings):



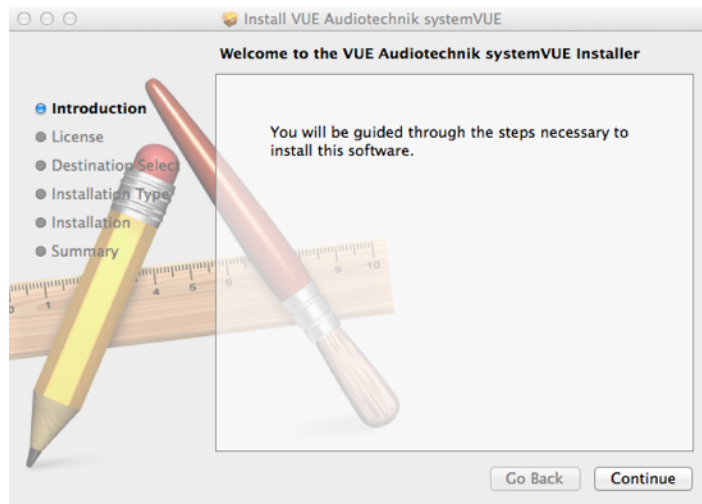
You will need to Allow Access for SystemVUE to find devices on the network

# Mac OS X Installation

## OSX 10.9

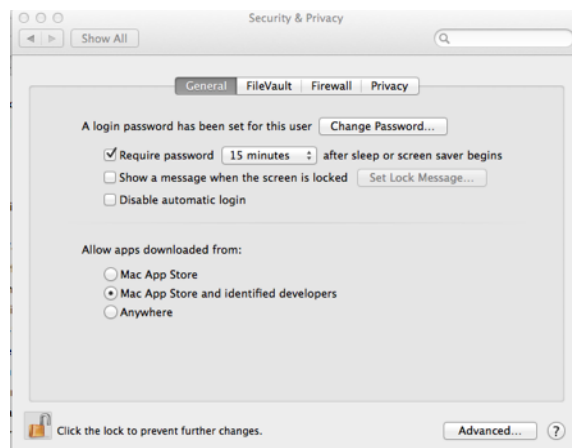


Run the Installer:



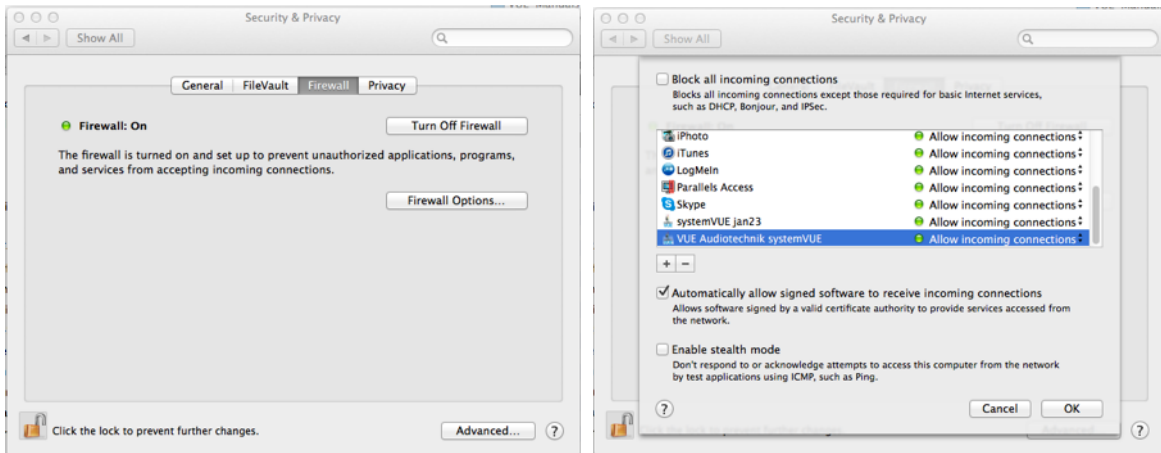
## Security and Firewall Setting

To enable the installer to work you must have your general Security setting to allow non Mac App Store Applications to be installed:



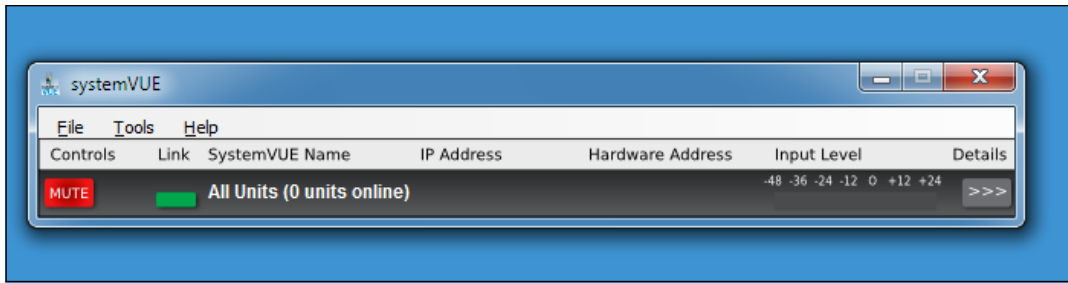
Once the installation is Complete you should check your firewall setting to make sure SystemVUE can communicate over the network

Firewall on Setting:

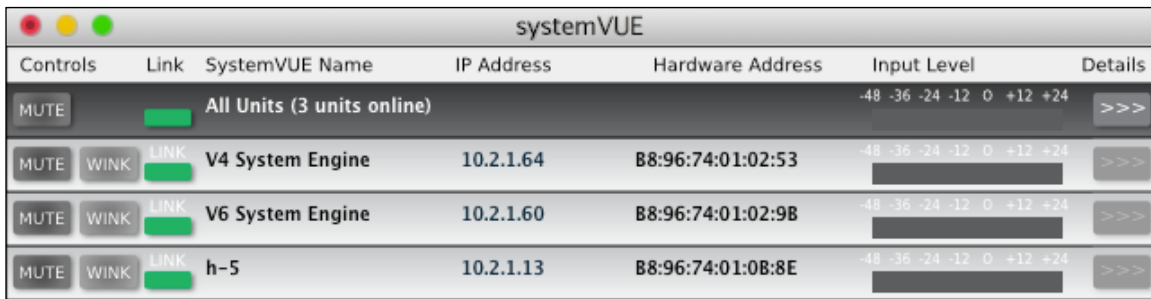


# SystemVUE Network Browser Window:

The network browser window shows all VUE systems available on the network as well as an overview of their current status. It also allows users to create, monitor, and select groups.



Empty SystemVUE Browser Window (Windows 7)



SystemVUE Browser Window (OS X)

**Group Master**  
Overview of each group and access to group set-up and control panel

**All Units Master**  
The top level group is made up of all units on the network

**Network Devices**  
Every VUE DSP-enabled device on the network will be individually listed for control and monitoring

**Network Link Status**  
Shows green when the network connection is working

**Group Name**  
Set during group set-up and is editable in the group setup window

**Group Delete button:** You got this.  
**Group Setup button:** Brings up the group configure window

**Group Meters:**  
Multi-segment LED meters show output signal to the amplifier module from -48dB to +24dB.

**Mute button/indicator:** Duh!  
**Wink button/indicator:** Visual connection verification

**Control Window button**  
Opens a control window for each group or device

# Unit Control Window

## V4 & V6 Control Window

### SystemVUE V-6 System Engine Control Window

**Wink button/indicator:** Visual connection verification

**Sleep button/indicator:** amplifier powered down. DSP and network remain active

**SystemVUE Name** Editable field allows you to label and identify individual VUE products via the browser, group list, and control windows

**Configuration Pop Up and Load Button** Select from pre-loaded parameters for specific VUE models (Ex. choose from various high pass filters when combining full range systems with subwoofers)

**System Delay** Set overall system delay by keying a specific value directly into the field

**Digital Input** Select digital input channel. Indicator shows red when no signal is detected. (Note: If digital signal is lost, amplifier will automatically switch to analog to avoid interruption.)

**Link** Makes all settings made to Channel A on channel B (greys out channel B)

**Input EQ** Opens EQ page of this input

**Input Mute** Duh

**Phase Reverse** Inverts the Phase of the input (useful for CSA Subwoofer arrays)

**Input B** Links the input from Channel A

**DSP Outputs** Multi-segment LED meters show output signal to the amplifier module from -48dB to +12dB.

**Gain REduction Meters:** Multi-segment LED meters show any gain reduction due to the protection limiters, they read from 0dB to -68dB.

**System Protection** Shows green when a system's amplifier has not encountered any faults. Shows red when a fault is detected and will remain red until the fault is cleared and power cycled. Faults can include shorts, DC on output, over current or voltage, and temperature.

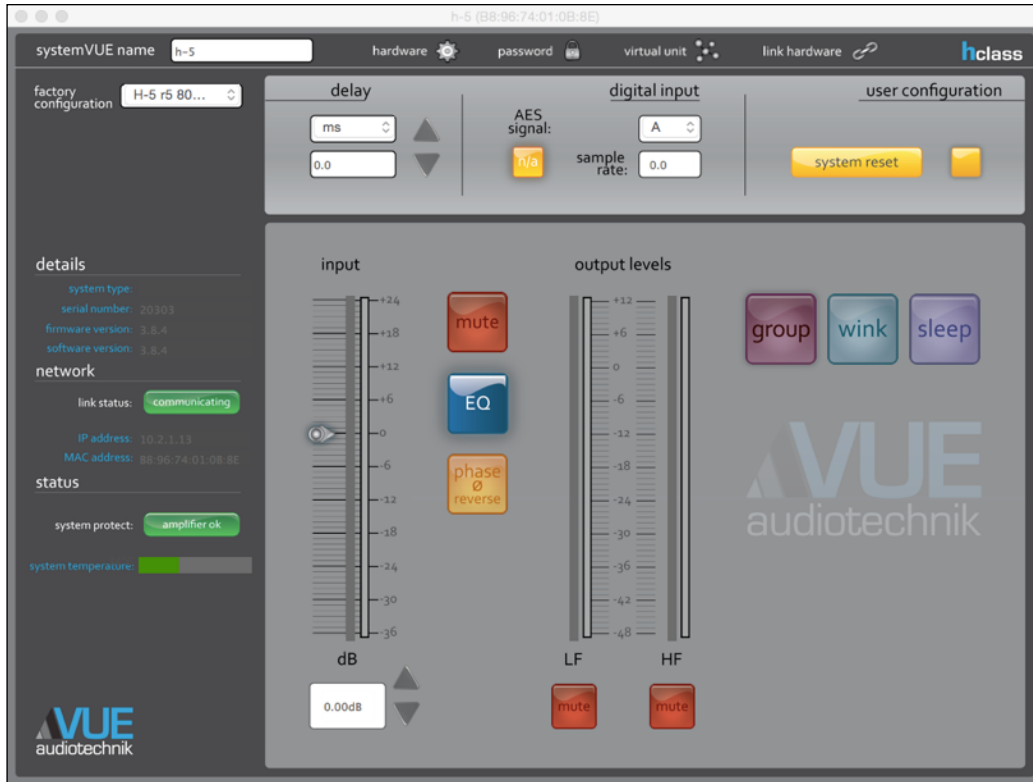
**Network Link Status** Shows green when the network connection is working

**IP Address and Configuration** Displays the IP address for each VUE device on the network. Use the Menu to Change from DHCP-assigned IP address to a manual assigned IP address for complex fixed IP-based networks.

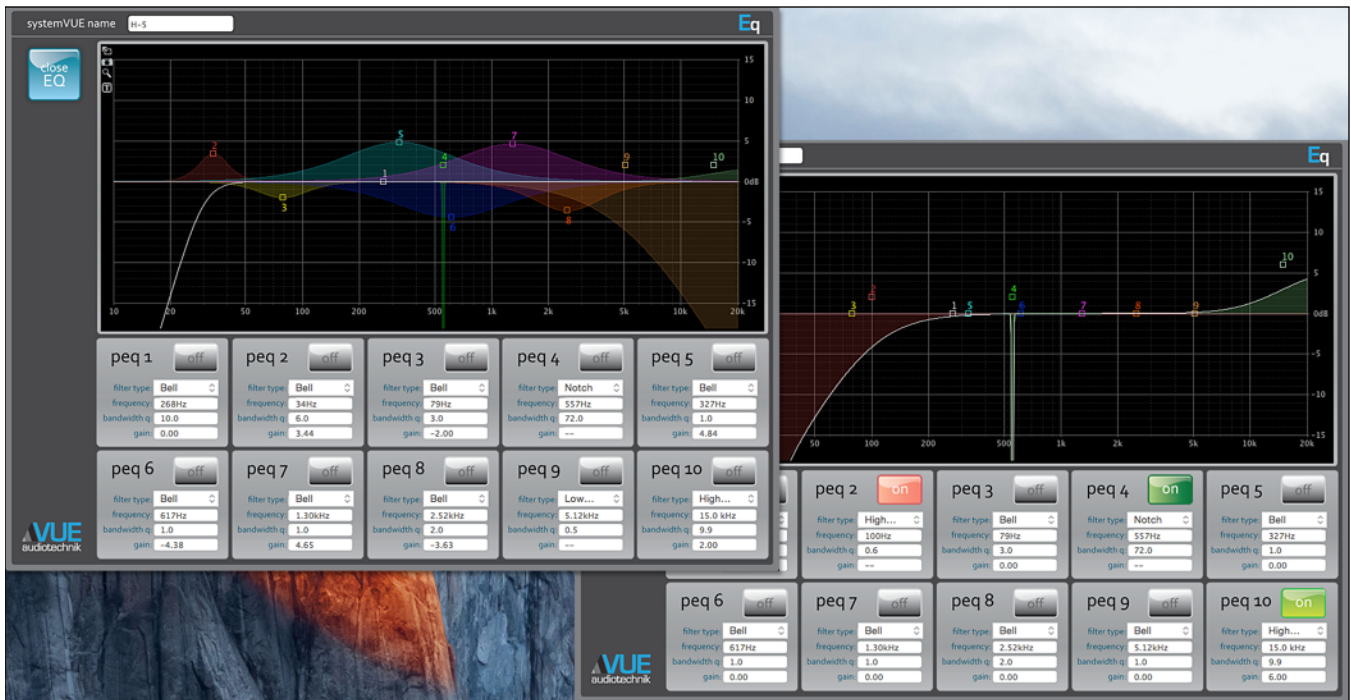
**System Input** Set input level with the virtual fader or by keying a specific value directly into the field

**Output Mutes** Duh (great for making sure everything is working during set-up)

# h-Class Control Window



# Unit EQ Control Window

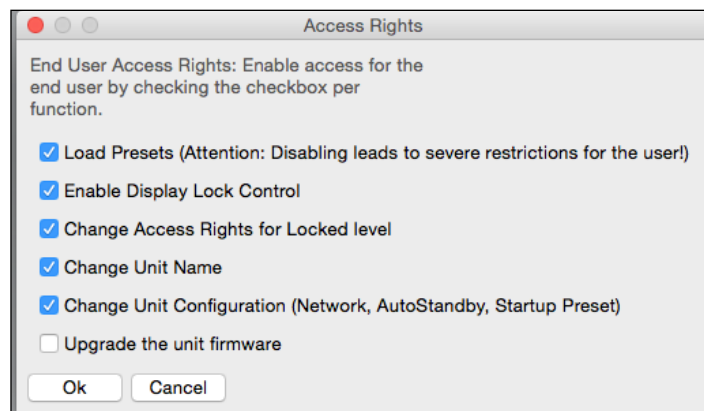
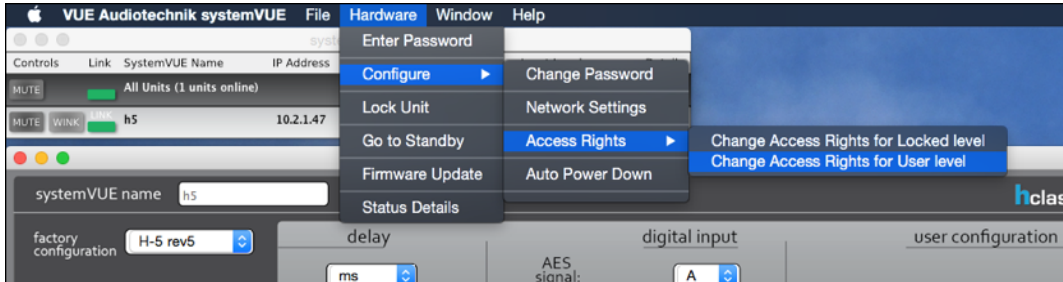


# Unit Operating Modes

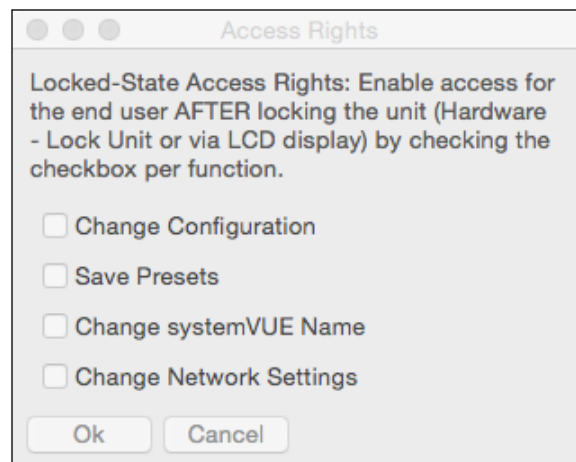
h-Class and V Series units have three operating modes:

**Administrator** - Full control of parameters including switching factory configuration modes, input selection, and volume and delay settings.

**User** - The capabilities of this operating mode are controlled from the Administrator mode with the menu item:



**Locked** - Locked mode can be set from the Hardware menu for the unit, and locked rights can be set by the administrator.



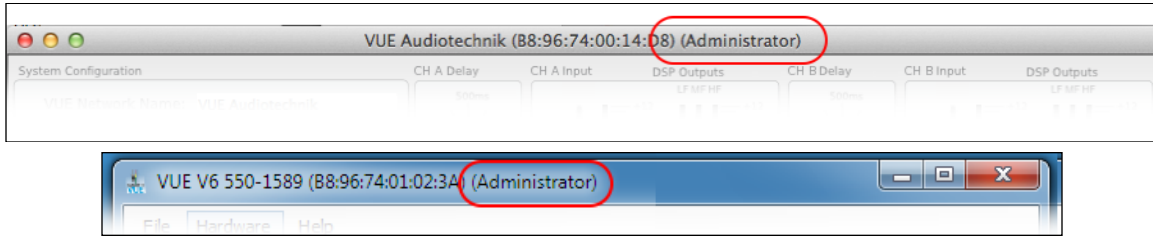
## Administrator Mode

To do a firmware update or have complete control of a unit you must be in Administrator mode. You switch Modes by entering a password. The default passwords (as units ship from VUE) are:

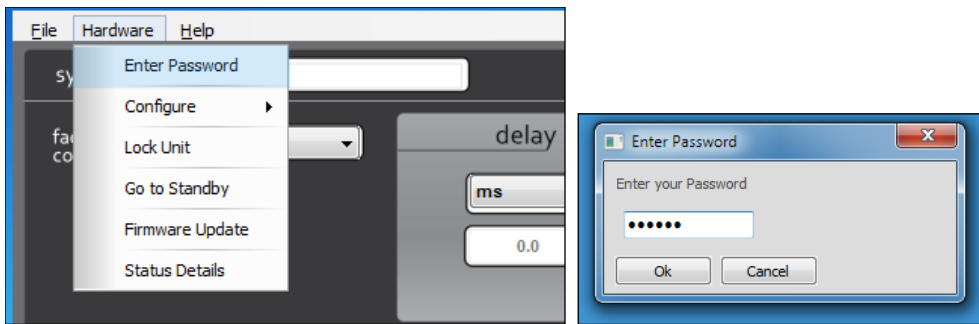
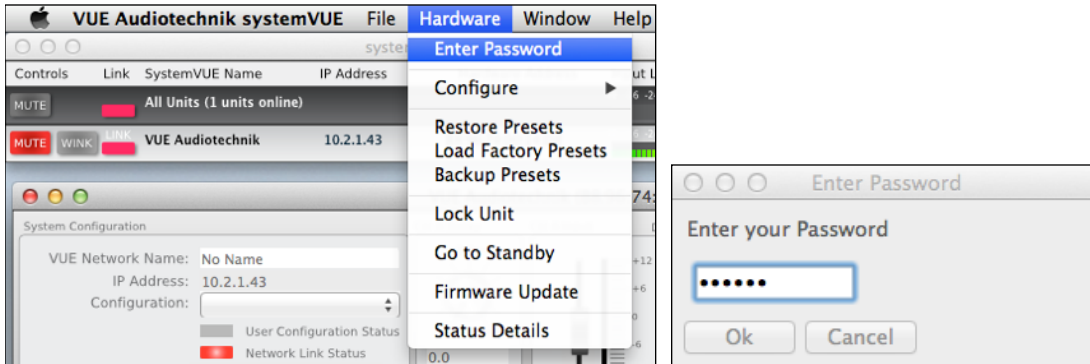
User Mode	Password
Administrator	Ad_min

You can tell if you are in Administrator mode by the unit's control panel window's title bar:

(Administrator) will be listed in the title bar after the Name and (Mac Address):



To change to Administrator Mode select Enter password from the hardware menu:



To return to User Mode enter the user password. The default passwords (as units ship from VUE) are:

User Mode      Password

# Firmware Updates

Updating the Firmware in your VUE h-Class and V Series units to the latest version ensures that you have access to the latest features and faster performance when using SystemVUE software. But the current software will work with units regales of the firmware in the unit.

Firmware updating requires you to load new operating firmware and factory settings in the speaker or system engine and if not done successfully and or if interrupted during update can cause the unit to become non functional. **We only recommend updating firmware in a controlled setting and never when you do not have time to trouble shoot any problems that may arise.** Always make sure you are operating not he correct unit (best practice is to only have on unit currently on the network).

Updating the firmware will erase all setting, make sure to note any setting you have in the unit including factory configuration, delay, level, input section and eq. You will need to manually input these once the upgrade is complete.

The firmware update may take more that one pass to complete and will always require the loading of the correct factory/Flash file as the last step in the process.

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## Flash vs Factory Files

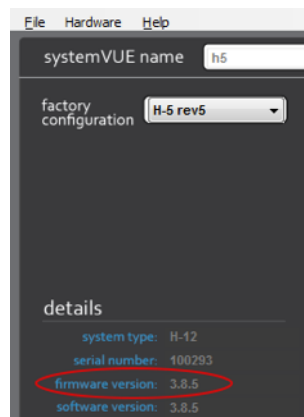
Flash files (have the extension .ffi) replace the current memory of the unit including firmware and factory settings. It will only run successfully if ht unit already has a version of firmware that supports flash updates (3.7.9 or later). If your unit currently has a version of firmware before 3.7.9 you will need to manually update the firmware and then load the correct factory or flash file into the unit.

Factory files (have the file extension .Factory) have all the setting for a unit with the firmware itself. It can be loaded once the Firmware is updated and is a slower process than flash updating as it loads and verifies each factory preset option individually.

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## How to tell what Firmware you are running

The firmware version in your unit will be displayed int he details section of the unit's control window:



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## Updating Firmware on h-Class Systems

Most h-Class systems delivery before July of 2015 come with 3.2.1 or 3.4.8 firmware installed. These will work with 3.8.5 software but will communicate faster if updated to 3.8.5 ro later firmware. The update from 3.4.8 requires a firmware update and then a factory/flash file installation. It is critical that you elect the correct factory file for installation for the type of unit you have. Selecting the wrong model factory/flash file will result in non-optimal performance and can in some cases damage the loudspeaker.

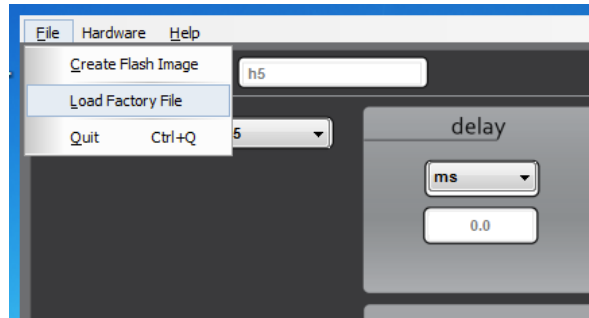
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## Updating Firmware on V Series Systems Engines

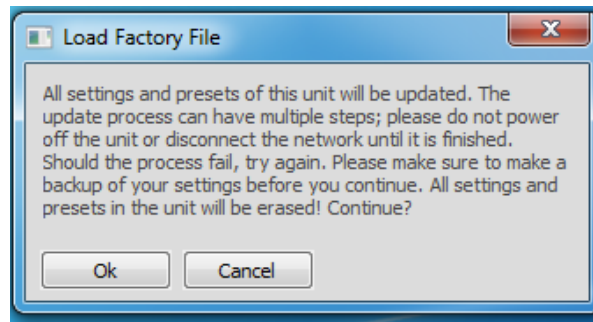
Depending on the age of your V4 or V6 it may come with 3.4.8 or 3.6.9 or 3.7.X firmware. For all units with pre 3.7.9 we recommend updating the firmware then installing a Factory/Flash file. If you have 3.7.9 or later you can update simply by loading a flash file.

## Updating the Firmware by loading a Flash File

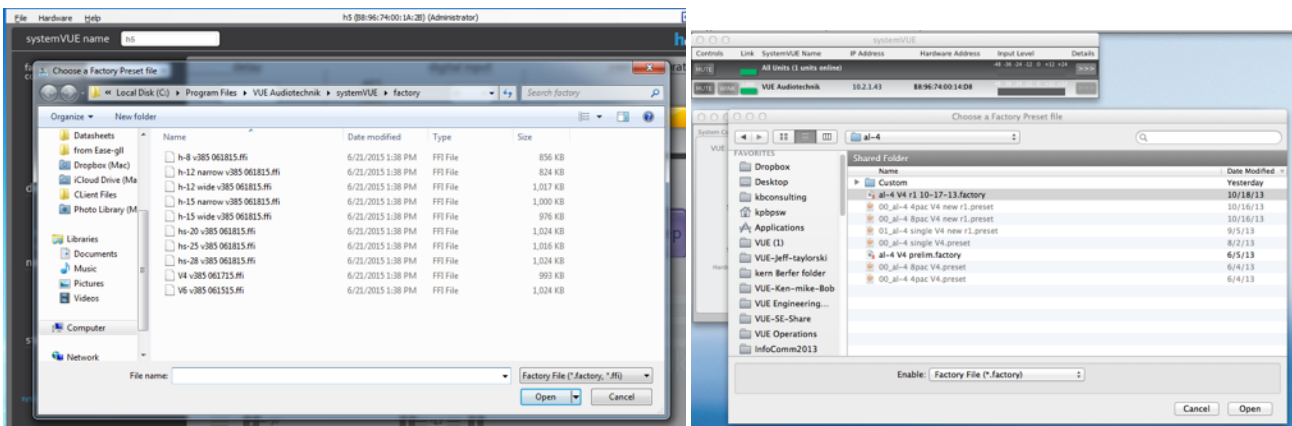
If your system has 3.7.9 or later firmware installed you can bypass the firmware update and go directly to using a flash file. You can load a flash file by going to the File Menu for the unit you want to update:



Warning Window for Factory / Flash UpDate:



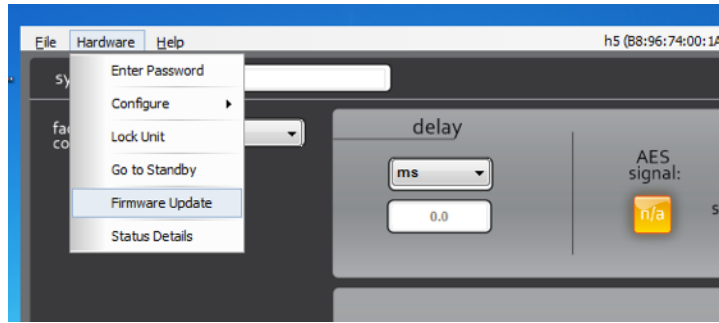
It will open a dialog box to elect the factory /flash file (by default it will open to the directory the SystemVUE installer put all current factory/flash files:



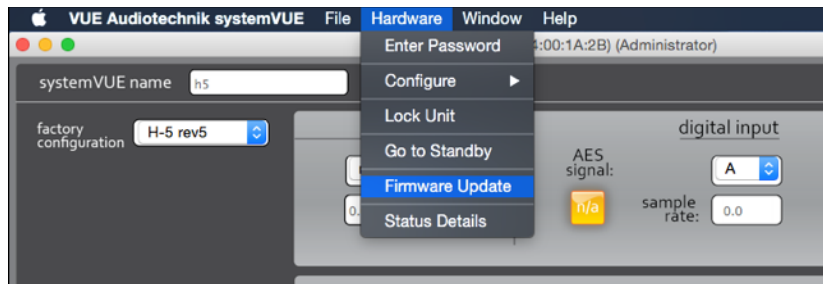
Flash files all have the file extension .ffi and install the current firmware along with the factory settings.

## Firmware Update:

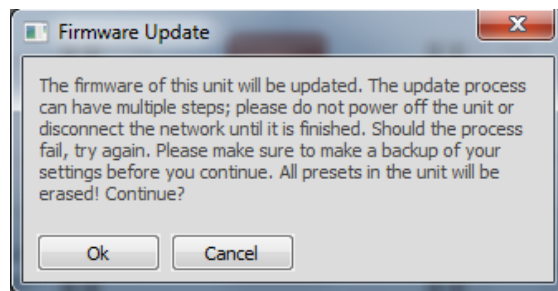
Select Firmware up date from the hardware menu  
For windows this menu will be at the top of the Unit's control panel window:



In OS X the Hardware Menu will be at the top in the main Menu Bar if the Unit's control Panel window is selected:

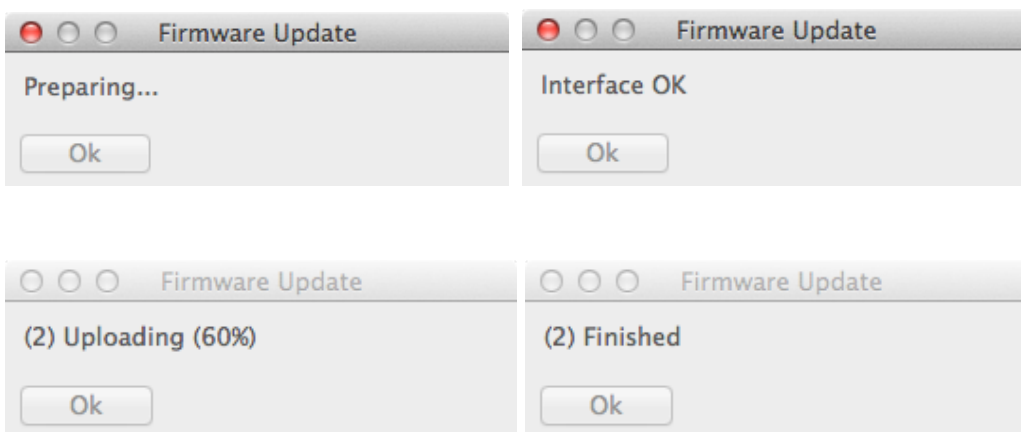


A warning will come up:

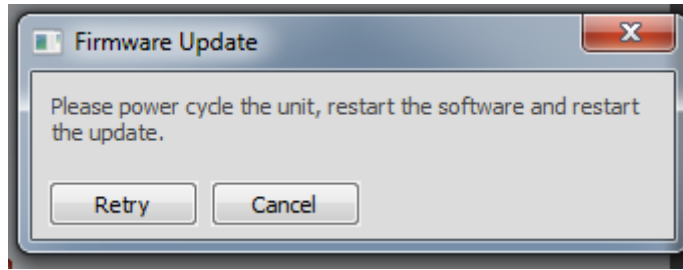


Click Ok to update the Firmware

The progress indicators will be displayed and (depending on the version of firmware the unit has currently) you may be told to restart the units and the software (it is important that you do both step to successfully update the firmware):



You may bet the flooding dialog box if follow the directions throughly:



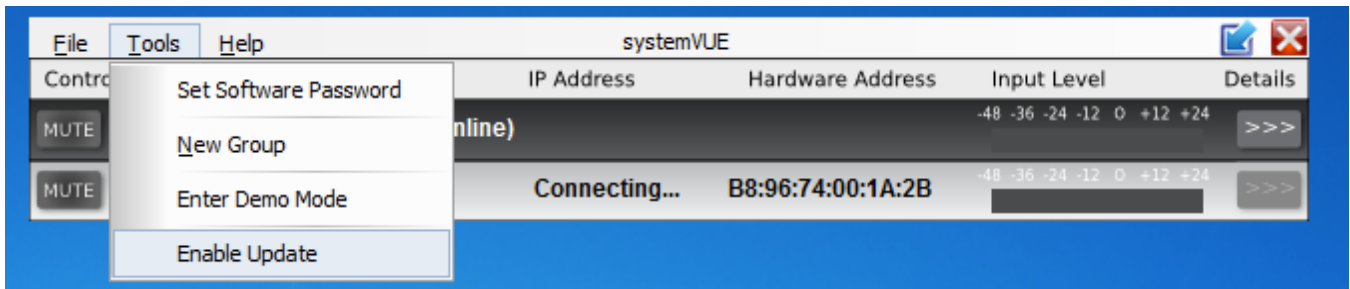
When the Dialog Box says Finished the Firmware Update is complete!

You can select Ok to dismiss the window (it will close automatically after a while).

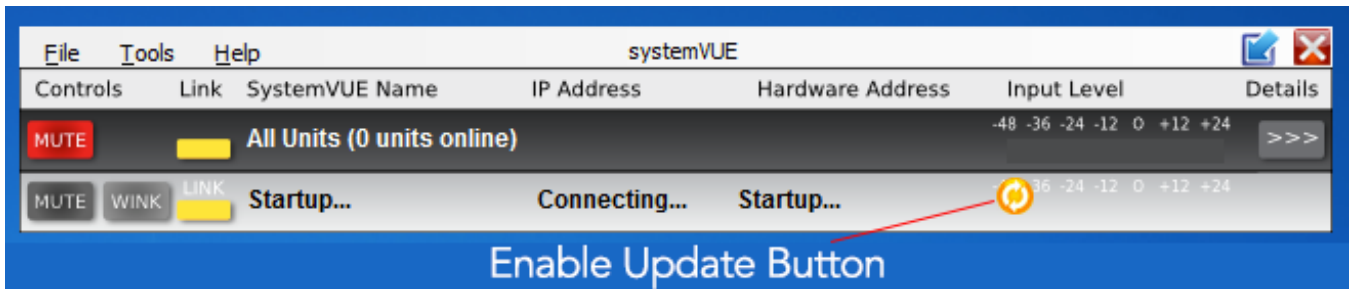
The units has new Firmware but it's configurations are empty. The next step is to load a factory/Flash file for the unit to be useable and up to date.


## Using Enable Update to fix a problem firmware update

If there is a problem during a firmware update or if the unit does not show up in the browser you can use the Enable Update function to find and update the unit. With the unit powered down open the software and elect Enable Update from the tool menu:



Then power up the problem unit and you should see:



The enable update button on the unit  can be clicked to force start a Firmware update. "Enable Update" also works as a recovery tool. If the firmware update somehow gets interrupted, e.g. through power loss in the middle of updating, the unit can end up in fault state. The Enable Update tool can, in most circumstances, reach the faulty unit and re-update the Firmware, bringing it back to normal. This tool can also be used if the firmware is corrupted for any reason.

# Networking VUE Systems

## Networking FAQ

### Don't have more than one computer running SystemVUE on the same network!

### SystemVUE Wireless Network Support

SystemVUE Wireless control using a WiFi-equipped computer or an iPad requires there to be a WiFi access point/router bridging the wired network with h-Class and or V Series Systems engines on it.

### It's OK to hot plug devices

Should the network connection or power to VUE speakers or V Series Systems Engines go down their link status will change in SystemVUE and you will not be able to control them, but once network connection is restored they should regain link status and operate normally.

### What happens if the network goes down?

Should the network connection be interrupted between the SystemVUE computer (or iPad) and any h-Class or V Series systems engines , they will continue to function with no interruption of audio or functionality. However, no adjustments of levels or parameters will be possible using SystemVUE until the network connection is restored.

### Ethernet Cable Restrictions

Since SystemVUE runs on standard ethernet it is limited to ethernet standards for cable type and length here are the standards:

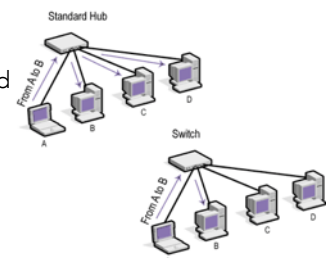
#### Cat 5 or Category 5 and Car 6 or Category 6 Cables – Maximum cable segment length

The maximum length for a cable Cat 5 segment is 100 m (328 feet) per TIA/EIA 568-5-A. If longer runs are required, the use of active hardware such as a repeater or switch is necessary. The specifications for 10BASE-T networking specify a 100 meter length between active devices. This allows for 90 meters of solid-core permanent wiring, two connectors and two stranded patch cables of 5 meters, one at each end.

When used for 10/100/1000BASE-T, the maximum allowed length of a Cat 6 cable is 100 meters or 328 feet. This consists of 90 meters (300 ft) of solid "horizontal" cabling between the patch panel and the wall jack, plus 10 meters (33 ft) of stranded patch cable between each jack and the attached device. Since stranded cable has higher attenuation than solid cable, exceeding 10 meters of patch cabling will reduce the permissible length of horizontal cable.

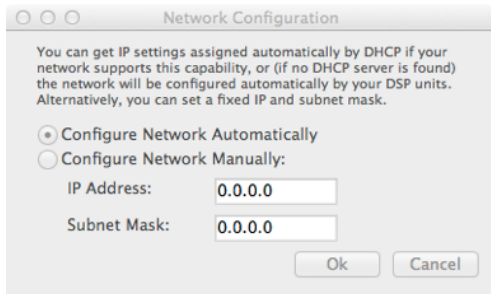
### Hubs Switches and Bridges

SystemVUE uses standard TCP-IP and UDP networking for control and should operate with and standard ethernet hubs and switches. In will also work over WiFi as long as the wired network with the VUE speakers or Systems engines is bridged via a WiFi access point to the WiFi network. SystemVUE is only sending control signals so it will not be a significant drain on newark bandwidth and works well over slower WiFi and 10MB ethernet connections.



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## Fixed IP Networking



For more info on using fixed IP: [wikipedia.org/wiki/IP\\_address](http://wikipedia.org/wiki/IP_address) and <http://www.ciscopress.com/articles/article.asp?p=1393495>

Static IP address assignment (sometimes also called fixed addressing) is an alternative to dynamic addressing (normally, DHCP) on Internet Protocol networks. Dynamic addressing is convenient. It also allows mobile computers to more easily move between different networks.

However, static IP addressing also offers some advantages:

- A static IP address best supports name resolution, so that a computer can be most reliably reached over the network by its host / domain name. Web and FTP servers in particular benefit from fixed addressing for this reason.
- Using static IP addresses on home networks gives somewhat better protection against network security problems than does DHCP address assignment.
- Some network devices do not support DHCP. Using static IP address assignment for all devices on the home network guarantees to avoid potential address conflicts where DHCP may supply an address already assigned statically elsewhere.

When using static IP addresses on home and other private networks, they should be chosen from within the standard private IP address ranges listed:

- 10.0.0.0 through 10.255.255.255
- 172.16.0.0 through 172.31.255.255
- 192.168.0.0 through 192.168.255.255

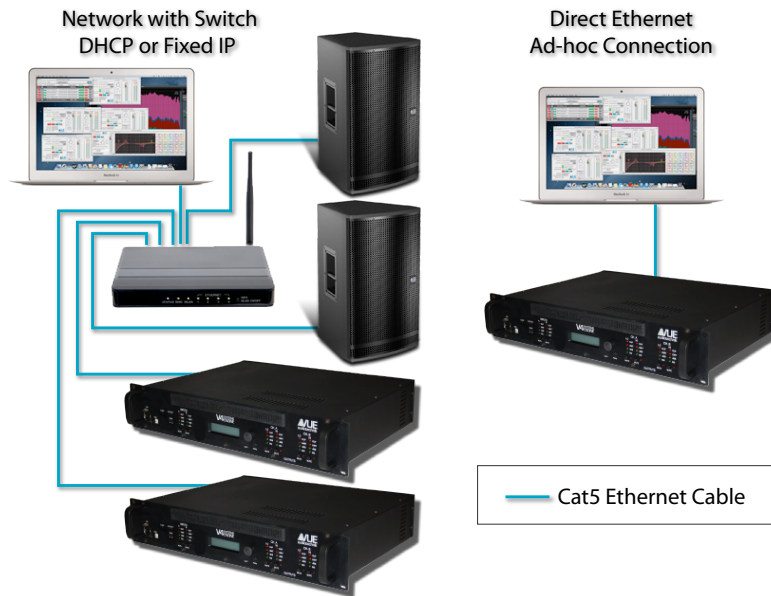
These ranges support many thousands of different IP addresses. It's common for people to assume that any address in these ranges can be chosen and the specific choice doesn't matter much. This is untrue. To choose and set specific static IP addresses suitable for your network, follow these guidelines.

1. Do not choose any addresses that end with ".0" or ".255" - these addresses are generally reserved for use by network protocols.
2. Do not choose the addresses at the beginning of a private range. IP addresses like 10.0.0.1 and 192.168.0.1 are very commonly used by network routers and other consumer devices. These are the first addresses someone will attack when trying to break into a private computer network.
3. Do not choose an address that falls outside the range of your local network. For example, to support all addresses in the 10.x.x.x private range, the subnet mask on all devices must be set to 255.0.0.0, otherwise some static IP addresses in this range will not work.

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## Ad Hock vs Infrastructure Mode Switched

SystemVUE works best and defaults to DHCP based ethernet network configurations, as this is the most typical network. It is important that your network has a DHCP server. Most WiFi access points, cable modems/routers etc include DHCP servers (sometimes as part of a NAT (Network Address Translation) service).



All VUE systems with an ethernet connection will support a direct ad-hoc connection between the computer running SystemVUE and a single VUE unit. In some cases this will work with multiple units on the same network but for ad-hoc connections you should only have a single unit connected directly to the computer as in the diagram above.

**Note:** Direct connection from the SystemVUE computer to an h-Class or V Series unit may require a crossed cable or an MDI/X-capable network interface card. However, most newer laptop computers will work with a standard network cable and the built-in interface card.

**Note:** different version of Windows have various levels of support and requirements for connecting on an ad-Hoc network: Here are some links to help you determine the best way to use windows without a DHCP server:

Microsoft Help: Connect two computers using a crossover cable:

<http://windows.microsoft.com/en-us/windows/connect-two-computers-crossover-cable#1TC=windows-7>

How To Create Wireless Ad Hoc Internet Connection In Windows 8:

<http://www.addictivetips.com/windows-tips/how-to-create-wireless-ad-hoc-internet-connection-in-windows-8/>

Ad-Hoc Networks on OS X:

<http://www.macworld.com/article/1046658/octmobilemac.html>

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## Bridging Wired & Wireless Networks

Here are some links to help you bridge a wireless network with a wired network:

Windows Create a network bridge:

<http://windows.microsoft.com/en-ca/windows/create-network-bridge#1TC=windows-7>

OS X Yosemite: Bridge virtual network interfaces:

[https://support.apple.com/kb/PH18510?viewlocale=en\\_US&locale=en\\_US](https://support.apple.com/kb/PH18510?viewlocale=en_US&locale=en_US)

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## What to do if the device doesn't come up in the browser

Check that all cables are connected and that the network switch and routers are powered on.

Check that your network is operating correctly and that the computer is on the same sub-net as the loudspeakers and or V Series systems engines.

Make sure there is a DHCP server on the network. (Here is a link for free Windows DHCP servers: [https://en.wikipedia.org/wiki/Comparison\\_of\\_DHCP\\_server\\_software](https://en.wikipedia.org/wiki/Comparison_of_DHCP_server_software) - On OS X you can use internet sharing to set up a DHCP server to share a WiFi

convention with the wired connection even if there is not internet on the WiFi network, this only works if the Mac directly is on the wired network)

Check your computers firewall settings and make sure you allow SystemVUE and UDP to access the network.