

VR1 V2
Venue Remote
User Manual
Revision 1.2



www.nstaudio.com

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EU DECLARATION OF CONFORMITY

This declaration is issued under the sole responsibility of the manufacturer.

We:

NST Audio Ltd.
Unit 4C Seph Way
York Road Industrial Park
Malton
North Yorkshire
YO17 6YF
United Kingdom

Declare that this declaration of conformity is issued under our sole responsibility and belongs to the following product:

Kind of equipment: Audio processor
Model: VR1

The object of the declaration is in conformity with the relevant Union harmonisation legislation:

2014/35/EU Low Voltage Directive (LVD)
2014/30/EU Electromagnetic Compatibility Directive (EMC)

The following harmonised standard and technical specifications have been applied:

EN 62368-1:2014 - Audio/video, information and communication technology equipment - Safety requirements
EN 55032:2015 - Electromagnetic compatibility of multimedia equipment - Emission requirements
EN 55035:2017 - Electromagnetic compatibility of multimedia equipment - Immunity requirements

Signed:



Name: Dan Cartman

Position: Research and Development Manager

Date: September 2022



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YO17 6YF
United Kingdom

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Kind of equipment: Audio processor
Model: VR1

The object of the declaration is in conformity with the relevant statutory requirements:

2016 No. 1101 - Electrical Equipment (Safety) Regulations 2016
2016 No. 1091 - Electromagnetic Compatibility Regulations 2016

The following UK designated standards and technical specifications have been applied:

BS EN 62368-1:2014 - Audio/video, information and communication technology equipment - Safety requirements
BS EN 55032:2015 - Electromagnetic compatibility of multimedia equipment - Emission requirements
BS EN 55035:2017 - Electromagnetic compatibility of multimedia equipment - Immunity requirements

Signed:



Name: Dan Cartman

Position: Research and Development Manager

Date: September 2022

**UK
CA**

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: RISK OF ELECTRIC SHOCK. DO NOT OPEN.



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: Apparatus with CLASS I construction shall be connected to a MAINS socket outlet with a protective earthing connection.

WARNING: To prevent injury, this apparatus must be securely attached to the rack in accordance with the installation instructions.

- 1 : Read these instructions.
- 2 : Keep these instructions.
- 3 : Heed all warnings.
- 4 : Follow all instructions.
- 5 : Do not use this apparatus near water.
- 6 : Clean only with a dry cloth.
- 7 : Do not block any ventilation openings, install in accordance with the manufacturer's instructions.
- 8 : Do not install near any heat sources, such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
- 9 : Do not defeat the safety purpose of the polarised or grounding-type plug. A polarised plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10 : Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where they exit from the apparatus.
- 11 : Only use attachments/accessories specified by the manufacturer.
- 12 : Use only with the cart, tripod, bracket or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from a tip over.
- 13 : Unplug this apparatus during lightning storms or when unused for a long period of time.
- 14 : Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as if the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15 : Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.
- 16 : To completely disconnect this equipment from the AC mains, disconnect the power cord from the mains circuit breaker.
- 17 : This unit is fitted with a 3-wire power cord. For safety reasons, THE EARTH LEAD SHOULD NOT BE DISCONNECTED IN ANY CIRCUMSTANCE.
- 18 : Only replace the IEC inlet fuse with the correct part: T 3.15A H 250V.

ATTENTION: RISQUE DE CHOC ELECTRIQUE. NE PAS OUVRIR.



Le symbole représentant un éclair fléché dans un triangle équilatéral a pour but d'alerter l'utilisateur de la présence d'une "tension dangereuse" non isolée à l'intérieur du boîtier, pouvant être d'une force suffisante pour constituer un risque d'électrocution.



Le point d'exclamation dans un triangle équilatéral a pour but d'alerter l'utilisateur de la présence d'instructions importantes concernant le fonctionnement et la maintenance, dans la documentation qui accompagne l'appareil.

ATTENTION: Appareils de construction de CLASSE I doit être raccordé au réseau électrique via une prise de courant reliée à la terre.

ATTENTION: Pour éviter toute blessure, cet appareil doit être solidement fixé à la torture, conformément aux instructions d'installation.

1 : Lisez ces consignes.

2 : Conservez ces consignes.

3 : Respectez tous les avertissements.

4 : Respectez toutes les consignes d'utilisation.

5 : N'utilisez jamais l'appareil à proximité d'un liquide.

6 : Nettoyez l'appareil avec un chiffon sec.

7 : Veillez à ne pas empêcher la bonne ventilation de l'appareil via ses ouvertures de ventilation. Respectez les consignes du fabricant concernant l'installation de l'appareil.

8 : Ne placez pas l'appareil à proximité d'une source de chaleur telle qu'un chauffage, une cuisinière ou tout appareil dégageant de la chaleur (y compris un ampli de puissance).

9 : Ne supprimez jamais la sécurité des prises bipolaires ou des prises terre. Les prises bipolaires possèdent deux contacts de largeur différente. Le plus large est le contact de sécurité. Les prises terre possèdent deux contacts plus une mise à la terre servant de sécurité. Si la prise du bloc d'alimentation ou du cordon d'alimentation fourni ne correspond pas à celles de votre installation électrique, faites appel à un électricien pour effectuer le changement de prise.

10 : Installez le cordon d'alimentation de telle façon que personne ne puisse marcher dessus et qu'il soit protégé d'arêtes coupantes. Assurez-vous que le cordon d'alimentation est suffisamment protégé, notamment au niveau de sa prise électrique et de l'endroit où il est relié à l'appareil; cela est également valable pour une éventuelle rallonge électrique.

11 : Utilisez exclusivement des accessoires et des appareils supplémentaires recommandés par le fabricant.

12 : Utilisez exclusivement des chariots, des diables, des présentoirs, des pieds et des surfaces de travail recommandés par le fabricant ou livrés avec le produit. Déplacez précautionneusement tout chariot ou diable chargé pour éviter d'éventuelles blessures en cas de chute.

13 : Débranchez l'appareil de la tension secteur en cas d'orage ou si l'appareil reste inutilisé pendant une longue période de temps.

14 : Les travaux d'entretien de l'appareil doivent être effectués uniquement par du personnel qualifié. Aucun entretien n'est nécessaire sauf si l'appareil est endommagé de quelque façon que ce soit (dommages sur le cordon d'alimentation ou la prise par exemple), si un liquide ou un objet a pénétré à l'intérieur du châssis, si l'appareil a été exposé à la pluie ou à l'humidité, s'il ne fonctionne pas correctement ou à la suite d'une chute.

15 : N'exposez pas cet équipement au fait de tomber goutte à goutte ou au fait d'éclabousser et gardez qu'aucun objet rempli des liquides, comme les vases, n'est placé sur l'équipement.

16 : Pour complètement débrancher cet équipement de la conduite principale de courant alternatif, débranchez la corde de pouvoir du disjoncteur de conduite principale.

17 : Cette unité est correspondue avec une corde de pouvoir de 3 fils. Pour les raisons de sécurité, L'AVANCE DE TERRE NE DEVRAIT ETRE DÉBRANCHÉE DANS AUCUNE CIRCONSTANCE.

18 : Ne remplacez le fusible d'entrée IEC que par la pièce correcte: T 3.15A H 250V.

WEEE

Once your NST Audio product has reached the end of its useful life, please ensure that it is recycled in a proper manner.



"The WEEE Regulations 2013 are the UK interpretation of the EU WEEE Directive and aim to reduce the quantity of waste electrical and electronic equipment (WEEE) disposed of in the UK".



EEE producers are required to pay for the reuse, recycling and recovery of the products by registering as an EEE producer which requires them to join a producer compliance scheme.

NST Audio has been registered with producer compliance scheme Comply Direct since 2015 ensuring 100% compliance with the WEEE regulations 2013.

Our WEEE Producer Registration Number is WEE/HG5453ZY.

Old electrical equipment can be recycled along with its metal enclosure. Our products are marked with a crossed-out wheeled bin symbol on the rear of the product.

Please do not throw any electrical equipment (including those marked with the crossed out wheeled bin symbol) in your general waste bin.

NST Audio Ltd. is able to arrange WEEE collections for our customers through a trusted network of WEEE recycling facilities made available by Comply Direct. We are able to arrange collection and transportation of your WEEE to reprocess and recycle ensuring the minimum goes to landfill.

ROHS

The Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive (2011/65/EU).

NST Audio Ltd products are RoHS compliant, and are available for export as lead-free and RoHS compliant.

NST Audio Ltd is committed to eliminating the use of hazardous substances in the materials, manufacturing and packaging of our products in strict accordance with the RoHS directive.

With regards to the RoHS Directive 2002 / 95 / EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment, we declare that to the best of our knowledge, all products meet and fulfil all the requirements of the aforementioned directive.

THANK YOU

Thank you for choosing an NST Audio product for your application. Please spend a little time reading through this manual, so that you can obtain the best possible performance from the unit.

All NST products are carefully designed and engineered for cutting-edge performance and world-class reliability. If you would like further information about this, or any other NST product, please do not hesitate to contact us.

UNPACKING THE UNIT

After unpacking, please check the unit carefully for any damage. If any is found, immediately notify the carrier concerned - you, the consignee, must instigate any claim.

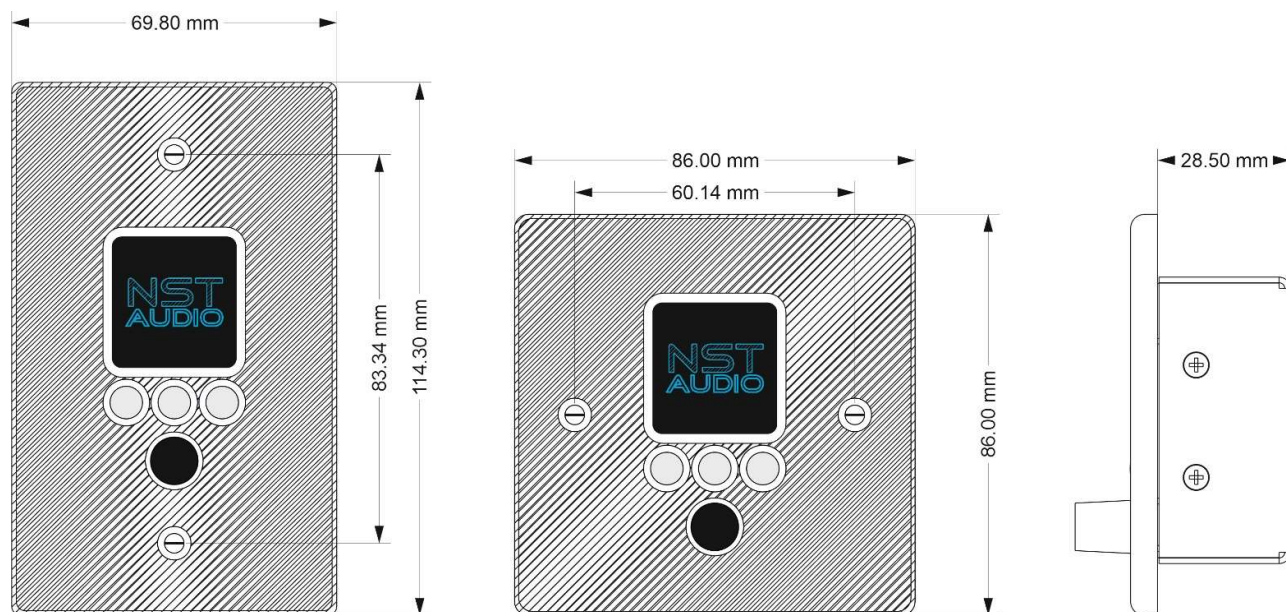
Please retain all packaging, in case of future re-shipment.

SPECIFICATIONS AND INSTALLATION

The VR1 wall panel control is designed to fit into a 35mm deep, standard single-gang UK electrical wall box, such as a light switch recess, and secured with two screws.

- Height, depth and width specifications are shown below
- Screen: Colour 128x128 pixel LCD
- Controls: 3 illuminated push buttons and 1 rotary control
- Connection: Standard RJ45 Ethernet port, requiring 48V PoE (Power Over Ethernet)

NOTE: We have tested the VR1 with a Netgear GS108PE and recommended the use of this PoE router.



SETTING UP THE VR1

To set-up the VR1, a computer running either Microsoft Windows or Apple Mac OS with D-Net installed, will be required, along with a network switch / router, capable of providing PoE (Power Over Ethernet) and CAT5 (or greater) Ethernet cable.

D-Net is available to download from the NST Audio website: nstaudio.com/software-downloads

Save the downloaded file to a known location on your computer and install the software from there by double-clicking on it.

Your computer may warn you or ask you about running the installation file - accept / ignore any warnings!

Windows user should select the 'More Info' link from within the warning dialogue box to proceed.

Read and follow the on-screen instructions to complete the installation.

Various shortcuts will be placed on your computer allowing you to launch the software from there.

The iPad version of D-Net is available from the Apple app store.
(There is a link to this from the software page URL shown above).

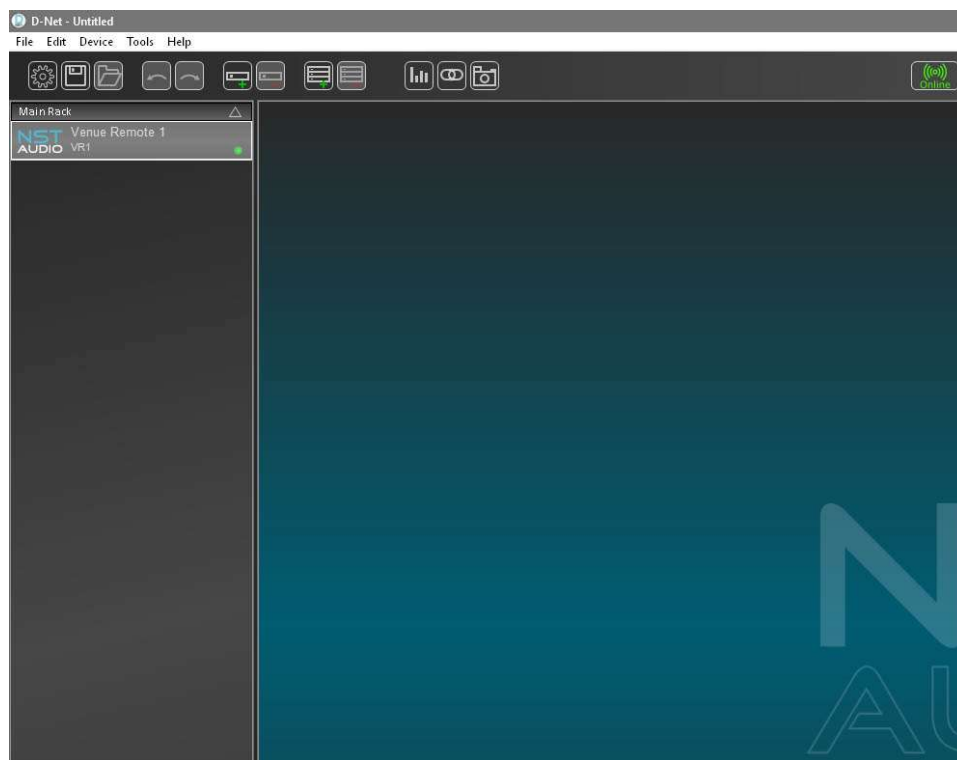


If you are unfamiliar with the D-Net software, a user manual is available to download, in PDF format, from the NST Audio website.

NOTE: The remainder of this manual presumes you have some prior knowledge of using D-Net

CONNECTING TO THE VR1

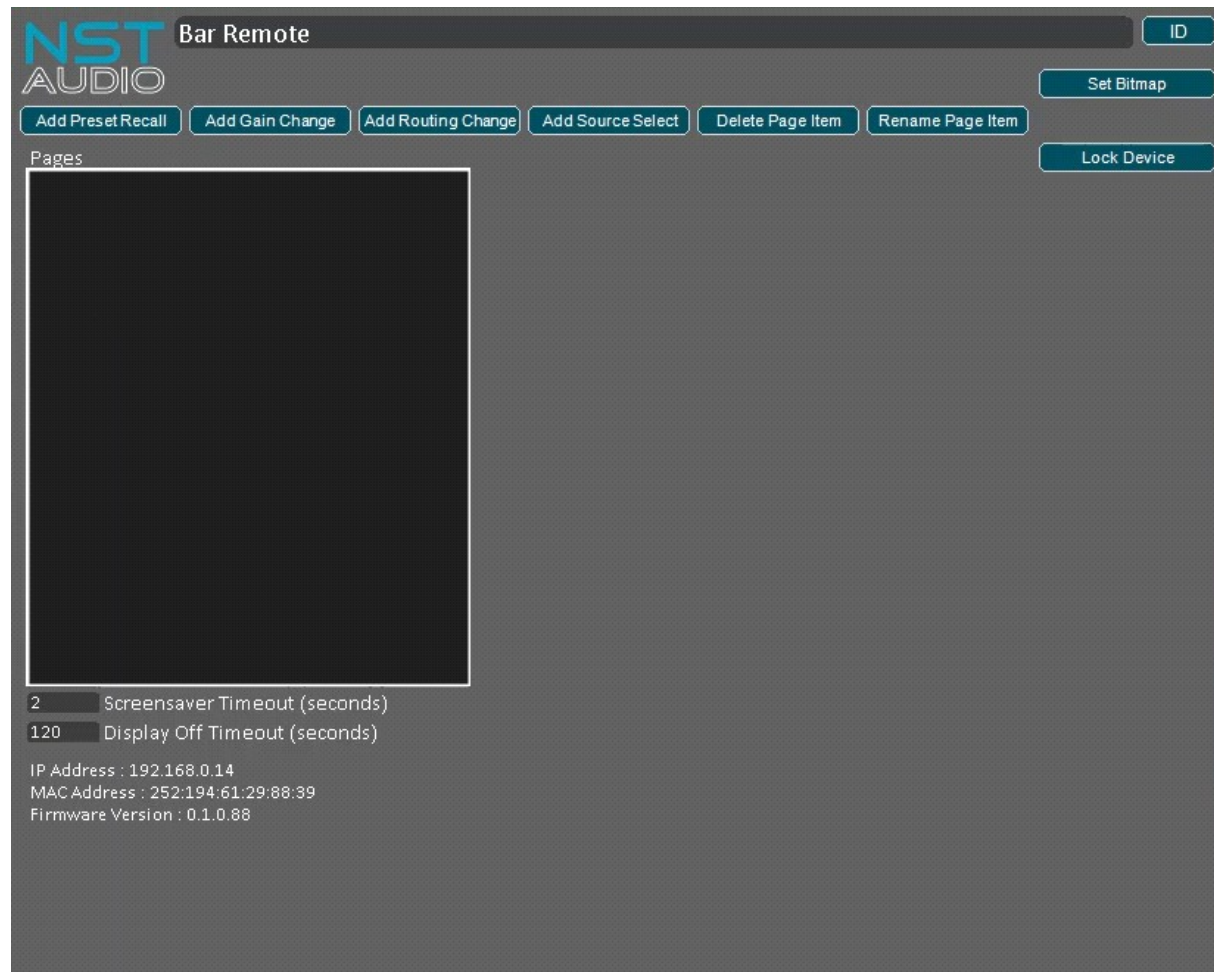
Once everything is connected and online, the VR1 remote will appear alongside the other NST Audio processors on the network, in D-Net's 'Virtual Rack', as shown in the example below:



To access the VR1's control panel, simply double click / tap the VR1 device on the left. This will open the VR1's control panel, to allow initial set-up or editing of an existing device.

VR1 CONTROL PAGE OVERVIEW

The initial VR1 control page will look similar to the example below – More options will appear upon adding Pages:



Device Name: Double click the device name to rename the VR1.

ID Button: Press to make the physical VR1 panel flash for five seconds.

This feature is useful for visually identifying a VR1 remote if more than one is installed in the same venue.

Set Bitmap Button: Allows a custom picture or logo to be sent to the VR1, which will be displayed on power on and before standby mode is entered. The file must be in Bitmap (*.BMP) format, and be 128 pixels in height by 128 pixels in width.

Add Preset Recall Button: Press to add a preset recall control page to the VR1.

Add Gain Change Button: Press to add a gain control page to the VR1.

Add Routing Change Button: Press to add a routing change / mute control page to the VR1.

Add Source Select Button: Press to add a set of source selections on a single control page to the VR1.

Delete Page Item Button: Press this button to delete the currently selected / highlighted page.

Rename Page Item Button: Press this button to rename the currently selected / highlighted page. Alternatively, a page can be double clicked to rename it. Press Enter or Return, on the computers keyboard, to confirm the change.

Pages Window: Shows the various pages, which have been created, and will be displayed on the VR1's LCD screen.

Page Contents Window: Shows the various parameters contained within the currently selected page.

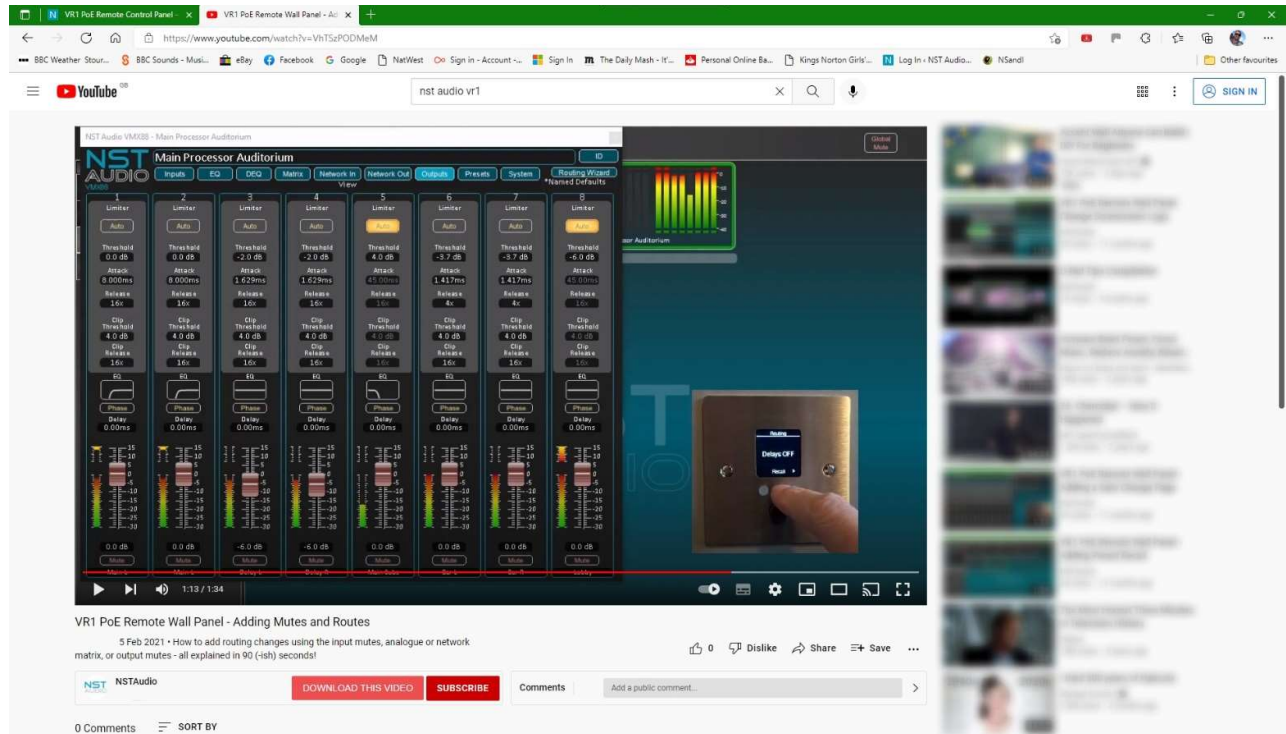
Available Parameter Window: Shows the parameters available that can be added to the currently selected page.

Add / Remove Buttons: These buttons add or remove parameters from the page contents window.

NOTE: If a new VR1 firmware update is available, a button stating this will appear under the Set Bitmap button. Press this button to update the firmware, in the connected VR1, and follow the on-screen instructions.

VR1 CONTROL PAGES IN DETAIL

Check out a full suite of VR1 quick training videos on our Youtube Channel - Just search "NST Audio VR1"



Scan the QR code by each page type below to go directly to the 90 second training video.

Add Preset Recall:

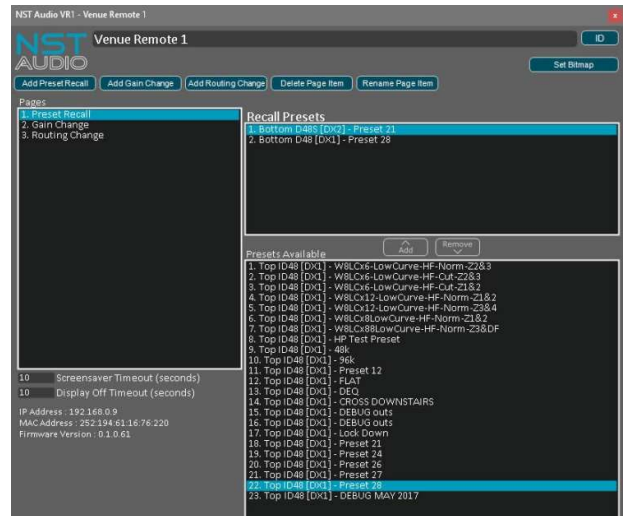
Press this button to create a preset recall page.

Press the Rename Page Item button to rename the currently selected / highlighted page. Alternatively, a page can be renamed by double clicking on it, in the left-hand Pages window. Press Enter or Return, on the computers keyboard, to confirm the change.

Available presets, from all devices, will be shown in the Presets Available Window. Select a preset to be included in this page and use the Add/Up button to add it. The preset will then appear in the Page Contents window above.

Add additional presets, from other devices, by repeating this process.

All presets contained within the Page Contents window, will recall simultaneously, from a single page shown on the VR1's display.



Add Gain Change:

Press this button to create a gain change page.

Press the Rename Page Item button to rename the currently selected / highlighted page. Alternatively, a page can be renamed by double clicking on it, in the left-hand Pages window. Press Enter or Return, on the computers keyboard, to confirm the change.

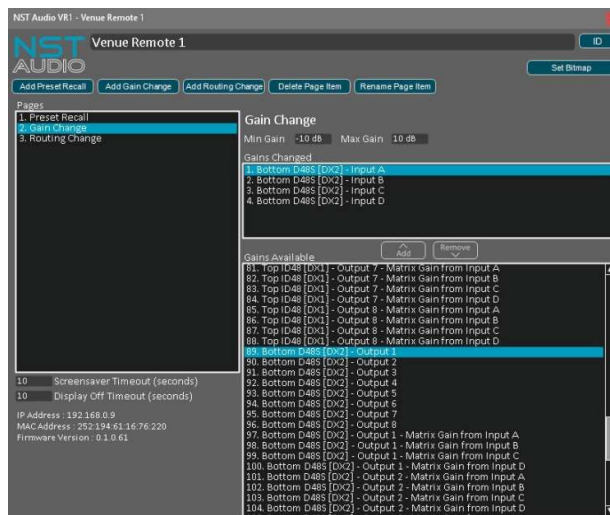
Available channel gains, from all devices, will be shown in the Gains Available window. Select a channel to be included in this page and use the Add/Up button to add it.

The gain parameter will then appear in the Page Contents window above.

Add additional channels, from other devices, by repeating this process.

All gain parameters contained within the Page Contents Window, will adjust simultaneously, from a single page shown on the VR1's display.

NOTE: Use the Min / Max gain options, to set an allowable minimum and maximum gain.



Add Routing Change:

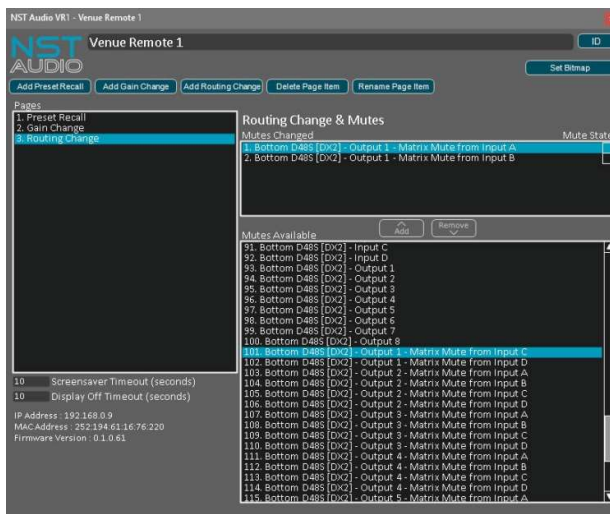
Press this button to create a routing change / mute state page.

Press the Rename Page Item button to rename the currently selected / highlighted page. Alternatively, a page can be renamed by double clicking on it, in the left-hand Pages window. Press Enter or Return, on the computers keyboard, to confirm the change.

Available parameters, from all devices, will be shown in the Mutes Available window. Select a routing or mute section to be included in this page and use the Add/Up button to add it.

The parameter will then appear in the Page Contents window above. Add additional parameters, from other devices, by repeating this process.

All parameters contained within the Page Contents window, will adjust simultaneously, from a single page shown on the VR1's display.



Add Source Selections:

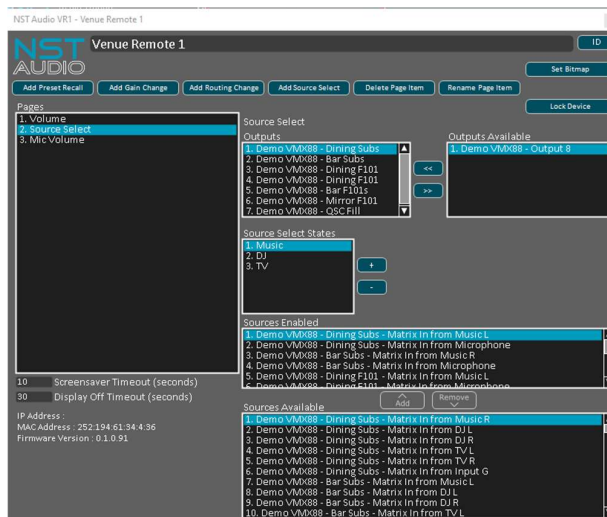
Press this button to create a set of source selections on a single page.

Press the Rename Page Item button to rename the currently selected / highlighted page. Alternatively, a page can be renamed by double clicking on it, in the left-hand Pages window. Press Enter or Return, on the computers keyboard, to confirm the change.

Start by creating the list of possible source selections you want on the page (max 4 per page) in the "Source Select States" window.

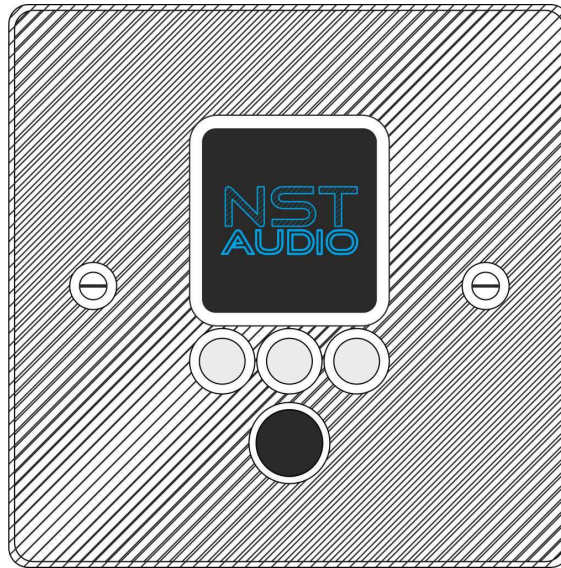
For each Source Select State, choose the outputs which will change and choose the matrix outputs to unmute for this state (all other matrix feeds will automatically be muted). Repeat the process for each Source Select State.

All parameters contained within the Page Contents window, will adjust simultaneously, from a single page shown on the VR1's display.



Set Bitmap Button: Allows a custom picture or logo to be sent to the VR1, which will be displayed on power on and for the period after the screensaver timeout has expired (user defined). The file must be in RGB Bitmap (*.BMP) format, and be 128 pixels in height by 128 pixels in width.





Once the VR1 has been set-up, using D-Net, the panel is operated by using the three illuminated push buttons and the single rotary control.

The left and right hand buttons move between the parameter pages available – The LCD screen will display arrows above these buttons, showing other pages are available to view.

The centre button is used to confirm choices, such as recalling a preset – Again, the LCD screen will display a message above this button, stating what its function is on the current page.

NOTE: If nothing is shown on the LCD above a button, then that particular button has no function on the current page.

The brightness of the display can be adjusted by accessing the 'Info' page.

To do this, press both outer buttons simultaneously – The panel will then show device information and allow the brightness to be adjusted, using the rotary control.

To exit the Info page, simply press either of the outside two buttons.

NOTE: The VR1 will go into standby mode, when it is not being used. The device is functioning perfectly normal, and will immediately 'wake-up' when up when any control is used. This feature is designed to save power, and also to extend the life of the LCD display and LEDs.

Introduction and Polite Warning

This release of firmware now gives VMO16 devices support for static IP addressing on their Ethernet control ports. This document section assumes the user is familiar with D-Net, our remote control application, and with networking terminology and configurations. It is possible to set a device to a static IP address that will no longer be accessible to D-Net making it impossible to reset without complex reconfiguration of the controlling device, which can be a lengthy process.

We strongly recommend using DHCP IP addressing for NST Audio products unless strictly necessary within your network infrastructure to do otherwise, and do not undertake swapping to static IP addressing during a critical performance!

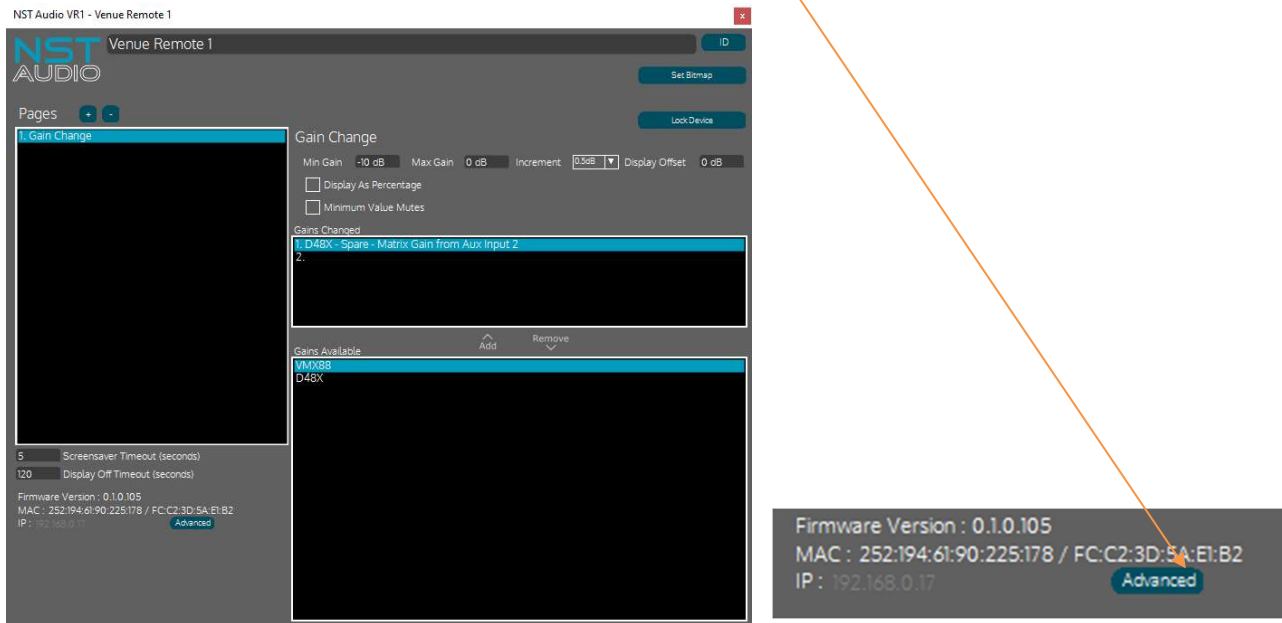
DHCP and Static IP Addressing Modes

By default, all products leaves the factory in DHCP mode. This means the control network interface will be to get an IP address from a DHCP server. Should a DHCP server not be available it will resort to link local autoconfiguration /automatic private IP addressing mode and auto assign one in the 169.254.*.* range.

For communications between a computer and a device both must have IP addresses in the same range. For example if auto assigned, both must be in the 169.254.*.* range or if obtaining addresses from a DHCP server both in the 192.168.*.* range. Note : 192.168.*.* is just common default range used by many DHCP servers.

Checking a device's IP address in D-Net

After the device has been discovered by D-Net, opening it for editing (double click on device in the left hand rack view). For VR1 devices the system information is shown on the initial pane bottom left:



The "Advanced" button then reveals the DHCP status of the device and shows the current subnet mask.

The subnet mask number format is shown in the CIDR format, where the shorthand mask value is appended onto the end of the IP address. This is normally shown in the form 192.168.0.20/16 with the /16 being the subnet mask. It is separated it out in D-Net allowing it to be hidden unless required.

Information

MAC : 252:194:61:33:218:7 / FC:C2:3D:21:DA:07

Sample Rate : 96000

Firmware Version : 0.2.0.158

Message Error Count : 0

IP : 192.168.0.20

DHCP

Subnet Mask 16

Advanced
Apply

In our example, set to /16, this equates to an actual subnet mask of 255.255.0.0. Swapping from one format to the other is straightforward - the value in CIDR format is the number of bits shifted in from the MSB of the top octet in the mask.

So, a value of /3 for the subnet mask equates to 11100000.00000000.00000000.00000000 or 224.0.0.0 in decimal.

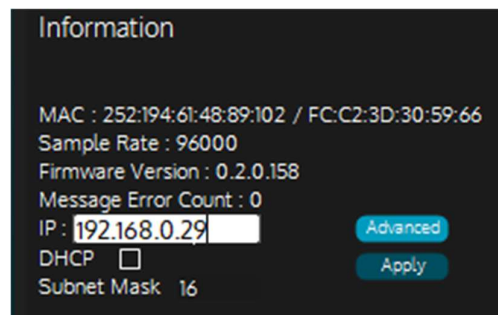
| CIDR | SUBNET MASK |
|------|---------------|
| /24 | 255.255.255.0 |
| /23 | 255.255.254.0 |
| /22 | 255.255.252.0 |
| /21 | 255.255.248.0 |
| /20 | 255.255.240.0 |
| /19 | 255.255.224.0 |
| /18 | 255.255.192.0 |
| /17 | 255.255.128.0 |
| /16 | 255.255.0.0 |
| /15 | 255.254.0.0 |
| /14 | 255.252.0.0 |
| /13 | 255.248.0.0 |
| /12 | 255.240.0.0 |
| /11 | 255.224.0.0 |
| /10 | 255.192.0.0 |
| /9 | 255.128.0.0 |
| /8 | 255.0.0.0 |
| /7 | 254.0.0.0 |
| /6 | 252.0.0.0 |
| /5 | 248.0.0.0 |
| /4 | 240.0.0.0 |
| /3 | 224.0.0.0 |
| /2 | 192.0.0.0 |
| /1 | 128.0.0.0 |
| /0 | 0.0.0.0 |

Another Polite Warning!

We strongly recommend using DHCP IP addressing for NST Audio products unless strictly necessary within your network infrastructure to do otherwise, and do not undertake swapping to static IP addressing during a critical performance!

Changing a device's IP address in D-Net

Having pressed the "Advanced" button, it is now possible to type in a new IP address for the device and to adjust the value of the subnet mask. Be aware that setting the IP address to something outside of the address space that the computer is using will immediately render it unreachable by D-Net and you will not be able to switch it back.



Set the required IP address and press ENTER. Make sure you then press "Apply" to reconfigure the IP address. The device will go offline for a brief period while the network interface resets to use this new address. This will only be for about 1-2 seconds.

Any longer than this, and the IP address chosen is out of the range of the computer. *This is a not immediately recoverable state and restarting D-Net, your computer or the device will NOT fix this!*

If The Worst Has Happened...

A device with an out of range IP address may still be discoverable by your computer and D-Net as the type of messages used for discovery use a different method not tied to the device's IP address. This allows D-Net to find all devices without having to know their individual IP addresses beforehand, and some limited information is returned following a broadcast exchange, including its name, its model and type and its IP address/subnet mask.

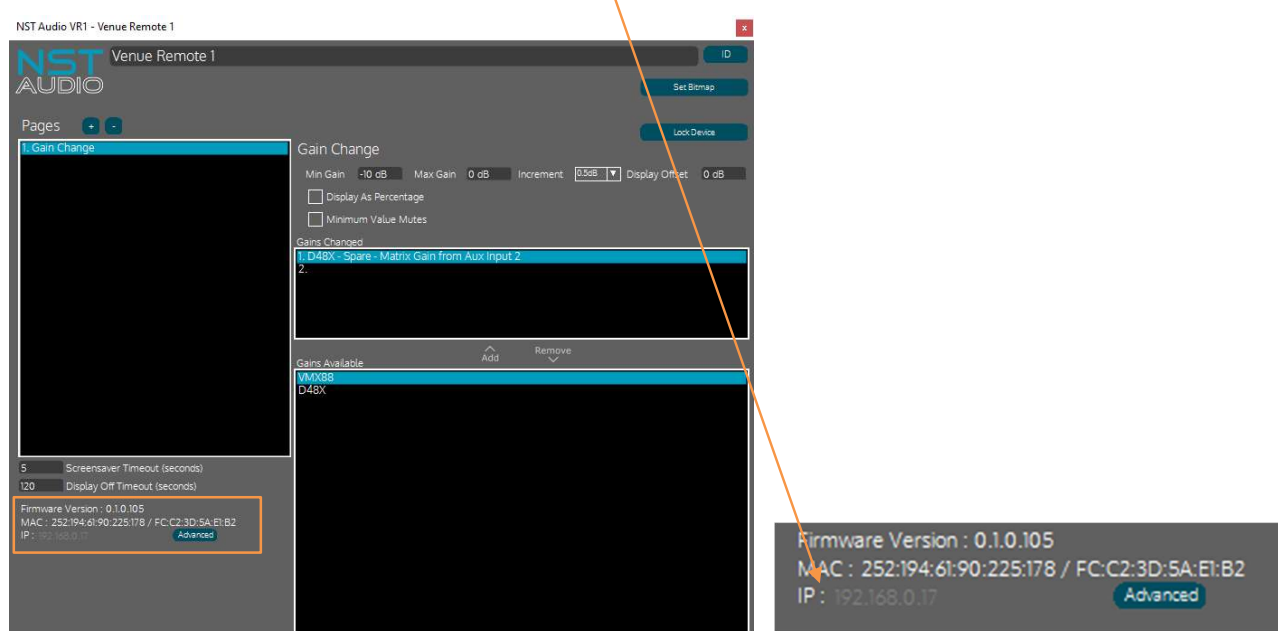
D-Net may show a device that is flashing green (connected normally) but primarily red (on a 1-2second cycle). This most likely a device that is out of range. If the device has appeared in D-Net but it will not respond to a Global Mute command while all other devices will, this confirms an out of range IP configuration.

The quickest method to recover the device and reset to a working address space is a direct connection to a PC. The following sections deal with recovering a device to an IP address that is in range, and shows how on both Windows and Mac OS.

IP Address Settings Recovery via Direct Connection

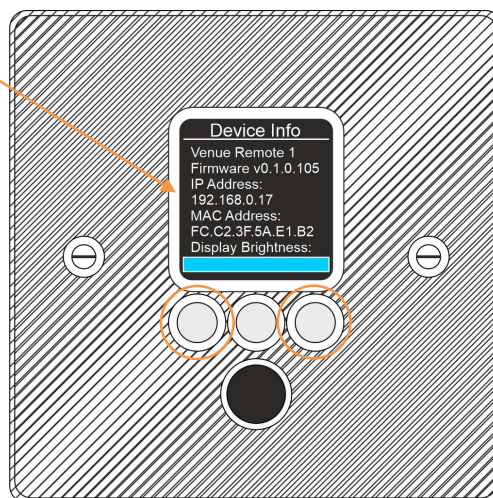
We need to know the IP address and subnet mask on the device that is not responding correctly. If you have been able to discover it in D-Net, double click on device in the left hand rack view and select the "System" tab.

In this instance the device's IP address is set to 192.168.0.17.



If the device cannot be discovered using D-Net, it can be the VR1 can also show its IP addresses directly on its own screen by accessing the system info pages.

For a VR1, press the two outside buttons together and the IP address is listed here:



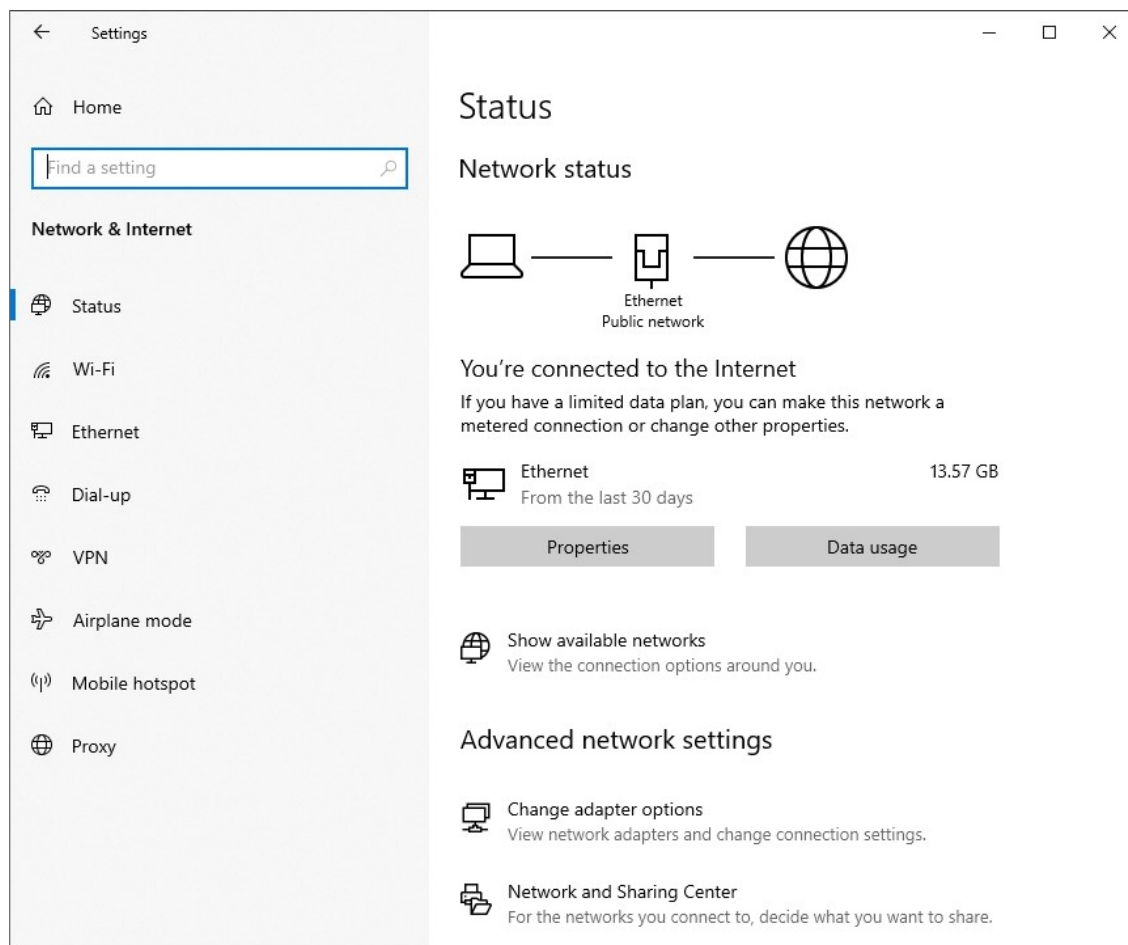
Whichever method is used to obtain the IP address and subnet mask information, the next step is the same. Configuration for a Windows PC starts overleaf and for Mac OS starts on page 26.

Direct Connection to a Computer (Windows)

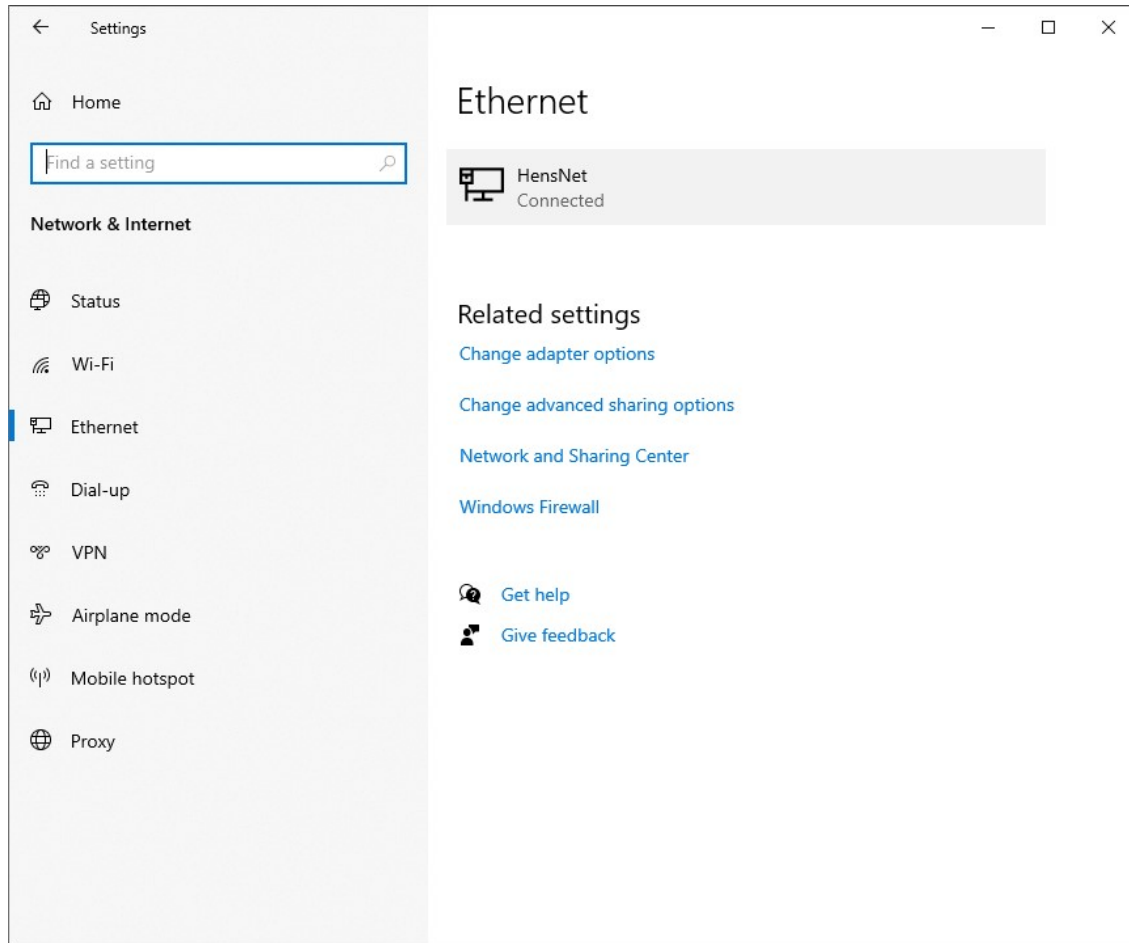
The next step is to set the computer's wired network IP address to be in a suitable range to allow visibility of the static IP erroneously assigned to the device. This method is largely the same on Windows 10 & 11, and our example shows Windows 10.

Plug an ethernet cable directly into the Comms socket on the rear of the device and into the Ethernet port on the computer. We also recommend temporarily turning off WiFi if in use on the computer.

- 1) Go into Settings > Network & Internet

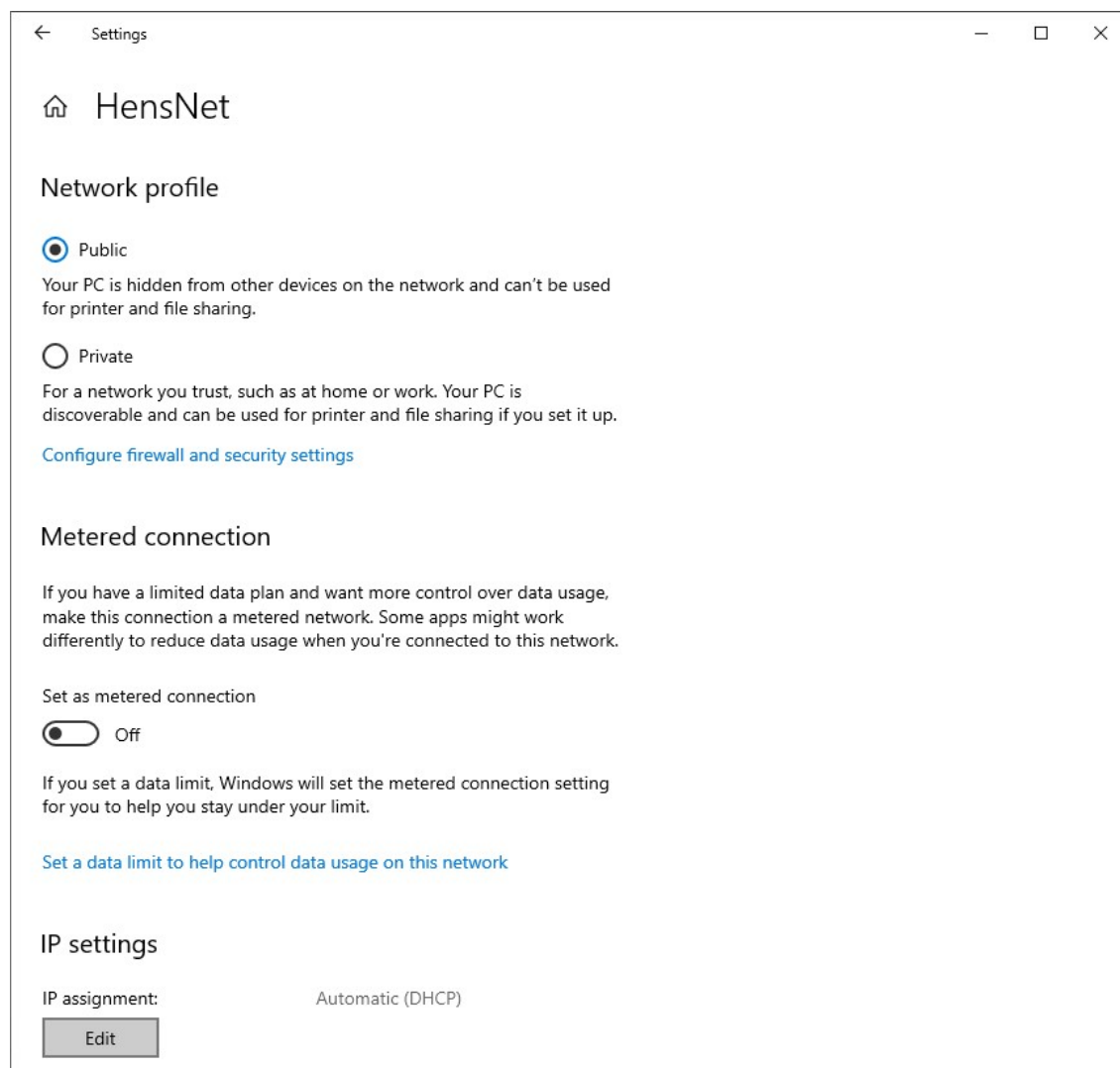


2) Select the Ethernet connection from the left hand list.



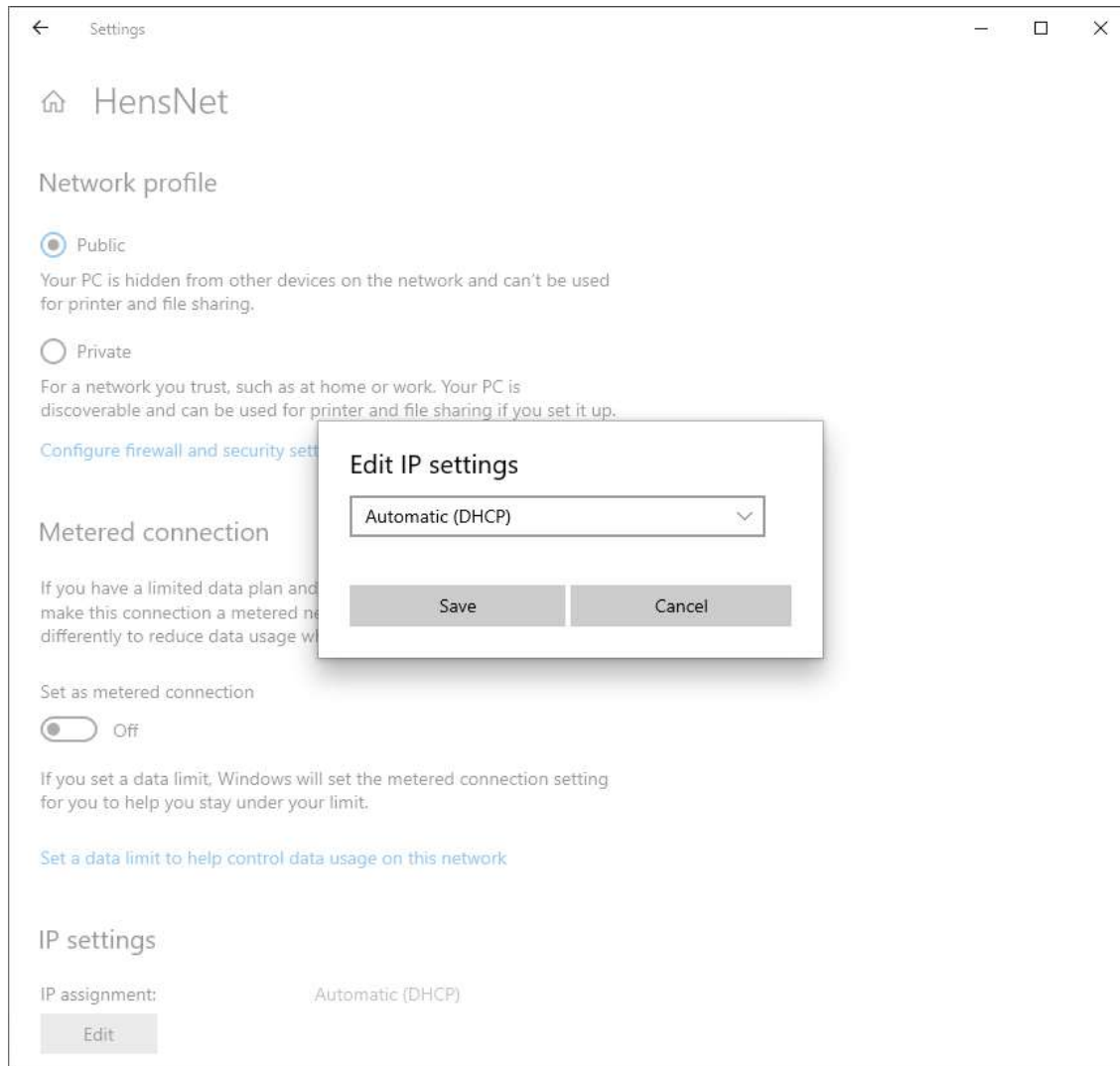
3) Click on the Ethernet network listed (in this example "HensNet").

IP settings are shown towards the bottom of the page. In most instances this will be set to DHCP, as in our case.

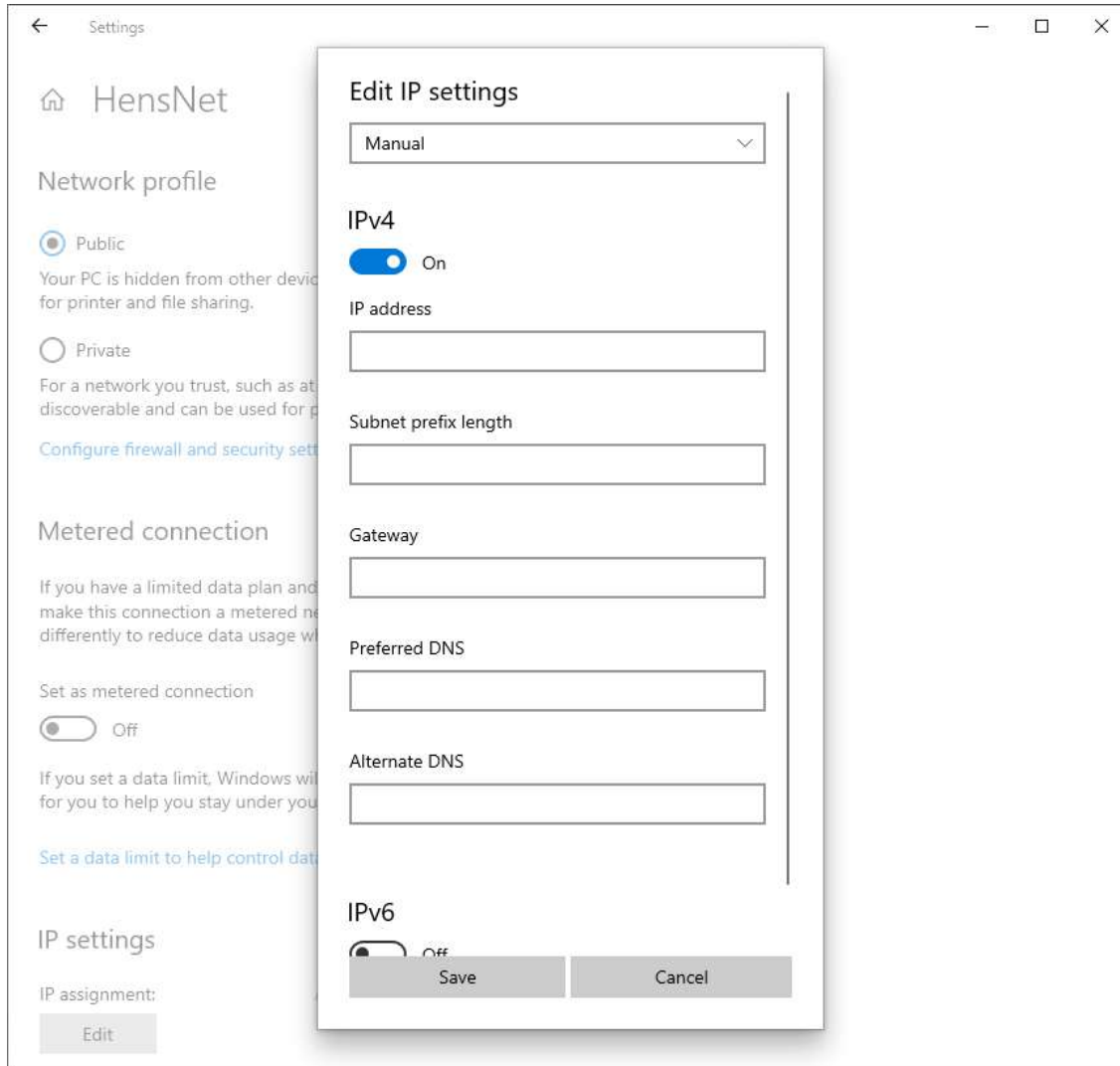


4) Press the Edit button to access the settings.

If set to DHCP, a small window will appear with a drop down list to allow swapping to manual configuration from DHCP.

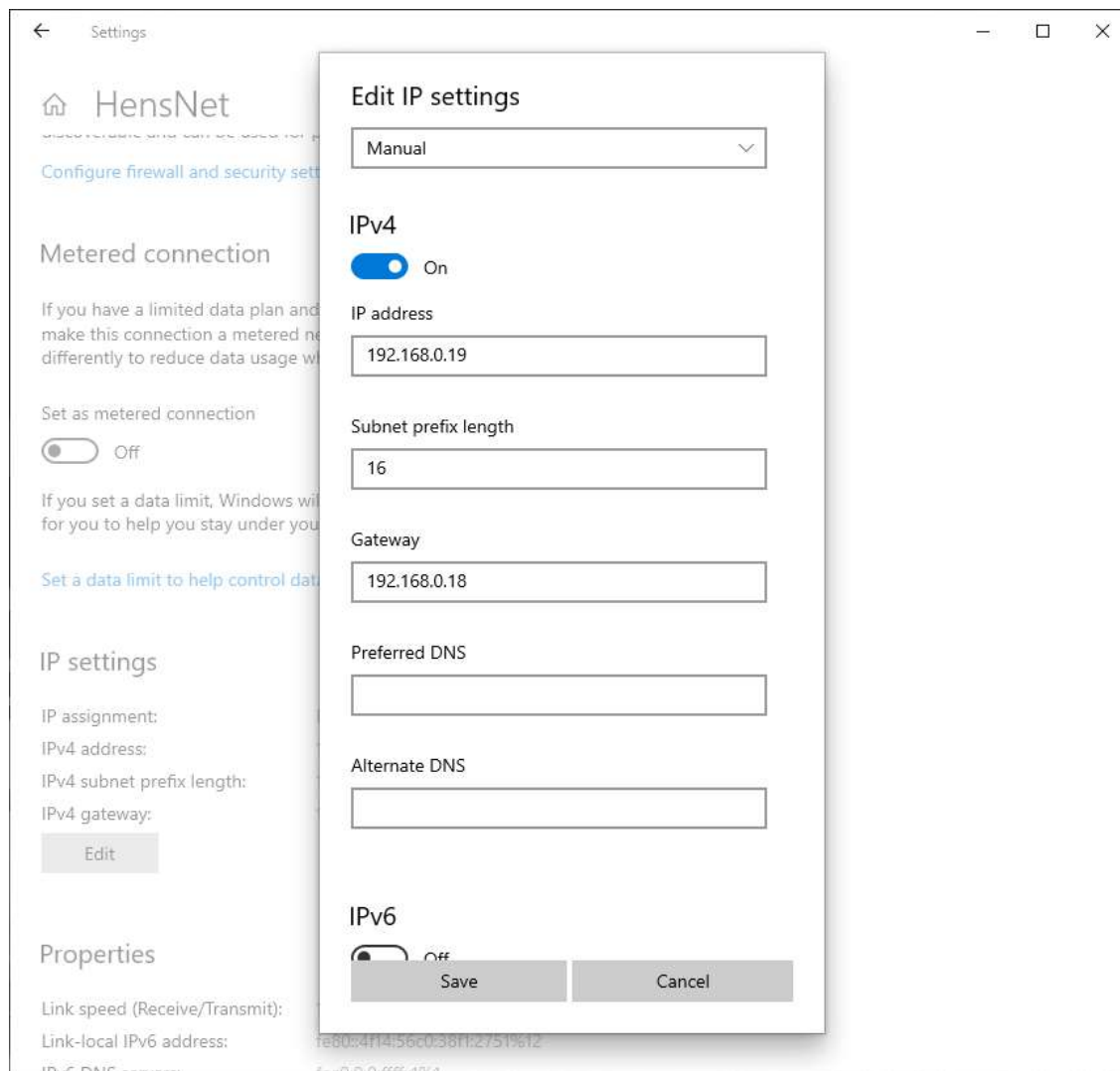


5) Select "Manual" and set the IPV4 switch to "On" to immediately display the manual addressing options.



6) Configure the IP address manually.

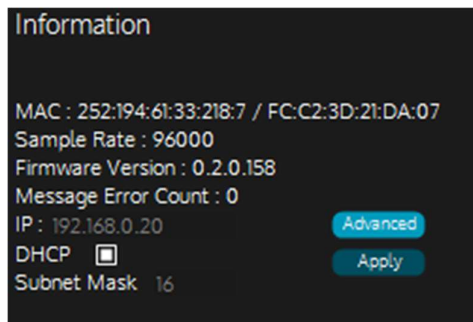
Based on the IP address and subnet mask of the device, we now populate these settings. Our advice would be to set the IP address to be one less than the device's and the Gateway to one less again. So, if the IP address of the device was 192.168.0.20 and the subnet mask was 16, we would type the following values in:



Leave the DNS fields blank. Press "Save" and you're done.

7) Open D-Net and go online.

The device should be discovered and be fully controllable. Test with the Global Mute button and confirm that this is working.



Access the device's IP address settings on the System tab, and press the "Advanced" button. Either set a static IP address in the correct range, or reselect DHCP.

Remember to press "Apply".

The device will most likely go offline now, and you will have to reset your PC's network interface to DHCP (and reconnect it physically to the network, as well as plugging your device back into the network).

8) Reestablish a connection with the device normally on the network.

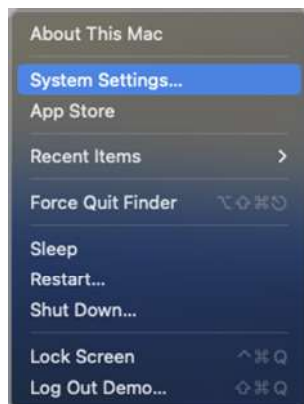
Once the IP configuration of the computer has been returned to normal, open D-Net once again and go online to confirm that all previous devices are visible as well as the one that has just been reset to DHCP (or the preferred static IP address).

Direct Connection to a Computer (Mac OS)

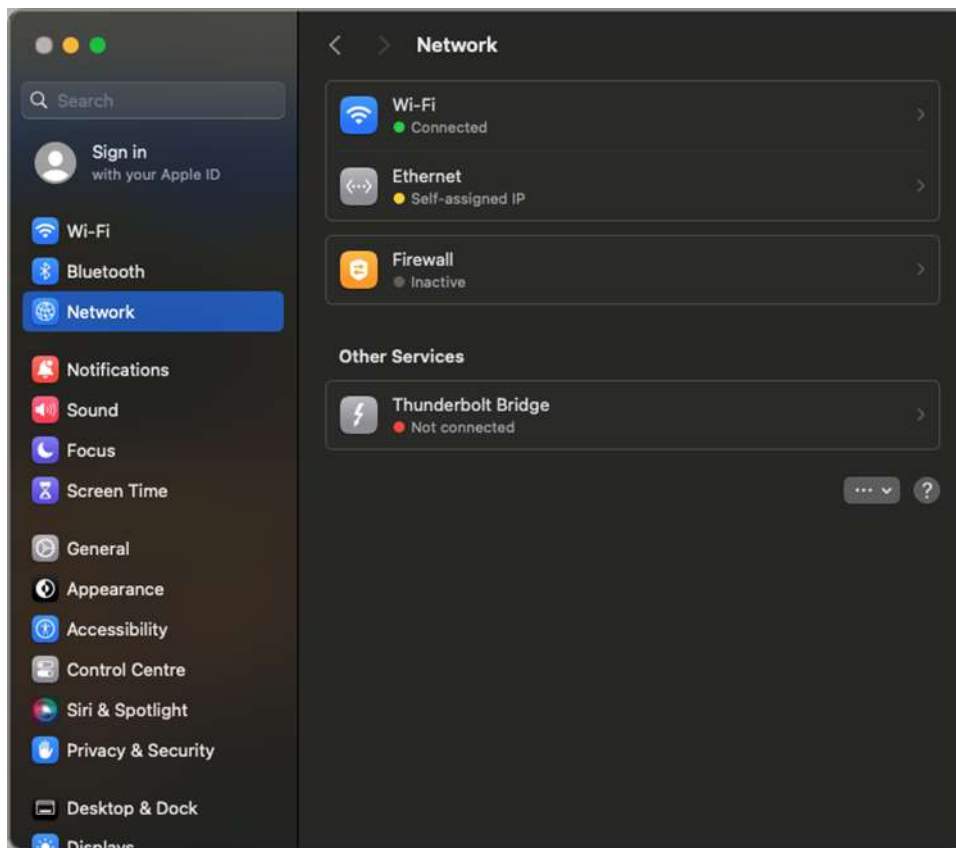
The next step is to set the computer's wired network IP address to be in a suitable range to allow visibility of the static IP erroneously assigned to the device.

Plug an ethernet cable directly into the Comms socket on the rear of the device and into the Ethernet port on the computer. We also recommend temporarily turning off WiFi if in use on the computer.

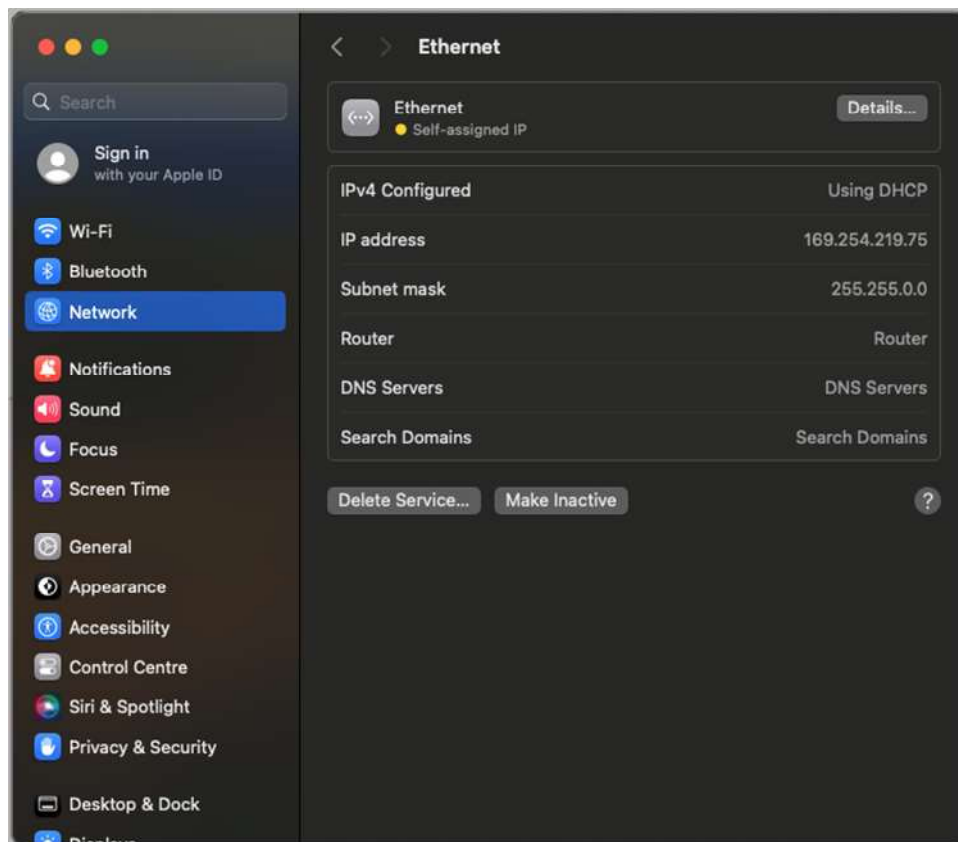
- 1) Click on the Apple icon and then System Settings:



- 2) Open "Network":

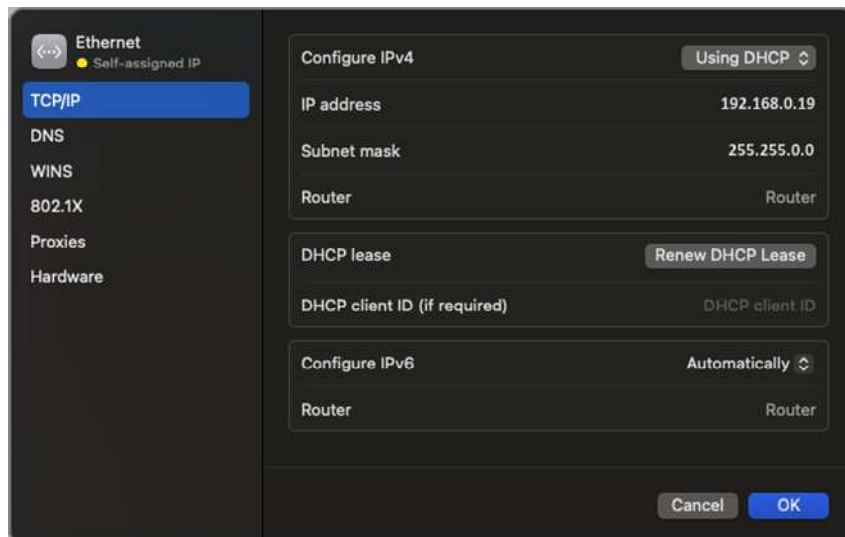


3) Select "Ethernet" and then the "Details" button.



4) In the network settings, select TCP/IP, and select "Manually" from the "Configure IPV4" option.

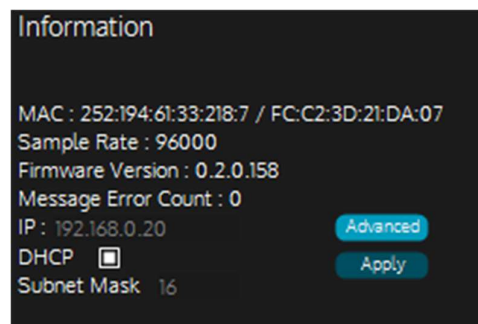
Our advice would be to set the IP address to be one less than the device's and make sure the subnet mask matches that of the device. So, if the IP address of the device was 192.168.0.20 and the subnet mask was 16, we would type the following values in:



Click OK and you're done.

5) Open D-Net and go online.

The device should be discovered and be fully controllable. Test with the Global Mute button and confirm that this is working.



Access the device's IP address settings on the System tab, and press the "Advanced" button. Either set a static IP address in the correct range, or reselect DHCP.

Remember to press "Apply".

The device will most likely go offline now, and you will have to reset your PC's network interface to DHCP (and reconnect it physically to the network, as well as plugging your device back into the network).

5) Reestablish a connection with the device normally on the network.

Once the IP configuration of the computer has been returned to normal, open D-Net once again and go online to confirm that all previous devices are visible as well as the one that has just been reset to DHCP (or the preferred static IP address).

Final notes on the use of static IP addressing

The use of static IP addressing for VM and VR products is only recommended when network infrastructure does not allow DHCP addressing, or where the possibility of the IP address changing could affect operation, such as controlling the devices with third party hardware such as a Q-Sys or Crestron controller.

Note that VR1 and VR2 devices do NOT require the devices they are to control to have static IP addresses. Their addressing of other devices is through a combination of MAC address and device type.

Not having a DHCP server on a network will mean that devices use "link local" addressing and will still operate normally and be controllable with D-Net connected to a simple switch.

FAQS (FREQUENTLY ASKED QUESTIONS)

What is PoE or Power Over Ethernet?

- PoE is a system that passes electric power, along with data, on standard twisted pair Ethernet cables. This allows a single cable to provide both a data connection and an electric power source, from a PoE capable network router or switch, to VCP devices.

There are lots of standards for PoE – which one do I use?

- The different standards are concerned with the power delivery capability from a single PoE router/switch output – the VR1 is classed as a low power device and will work with all standards – PoE, PoE+, and PoE++. All of these systems run at approx. 48V output.

Where can I purchase a network switch / router with PoE?

- These are very common, and are available from many online shops. They are generally inexpensive and work very well, but we obviously cannot guarantee that every model available will work, so we advise purchasing one from a leading manufacturer (such as Netgear, Belkin, Cisco, TP Link), as we have tested several of these devices, and found they work perfectly.

Do I need special Ethernet cables for PoE use?

- No. Any good quality CAT5 (or greater) standard Ethernet cables will work.

What happens if I accidentally connect a standard Ethernet device to the PoE port?

- Nothing. The electrical power is sent down 'reserved' wires, in the Ethernet cable, that are not normally used and will not be connected, so a PoE port can be used the same as a conventional port.

The VR1 wall panel appears to turn itself off when not being used – Is this normal?

- Yes. The VR1 will go into standby mode, when it is not being used. The device is functioning perfectly normal, and will immediately 'wake-up' when up when any control is used. This feature is designed to save power, and also to extend the life of the LCD display and LEDs.

MAINTENANCE

The VR1 will require very little routine maintenance. Cleaning the panel and switches should only be done with a cloth lightly dampened with water only! The use of chemical or abrasive cleaners may damage the paint finish. Do not spray cleaner onto the LCD screen - spray onto cloth and then clean screen if required.

SERVICING

There are no user serviceable parts within the unit!
Please contact us to arrange returning any units to us that require servicing or repairing.

WARRANTY

This product comes with a warranty against defects in components and workmanship only, for a period of five years from the date of shipment to the customer. During the warranty period, NST Audio will, at its discretion, either repair or replace products that prove to be defective, provided that the product is returned, shipping prepaid, to an authorised NST Audio service facility.

Defects caused by unauthorised modifications, misuse, negligence, act of God or accident, or any use of this product that is not in accordance with the instructions provided by NST Audio, are not covered by this warranty.

This warranty is exclusive and no other warranty is expressed or implied.
NST Audio is not liable for consequential damages.

CONTACT

If you have any questions or comments about the information contained within this manual, or require further assistance, then please do not hesitate to contact us:



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Thank you!

NST
AUDIO

The NST Audio team