D-Net
User Manual
Revision 1.11
Microsoft Windows, Apple MacOS & iPad App

www.nstaudio.com

Contents

Thank You

Thank you for choosing to download D-Net, by NST Audio, for your application. Please take some time to read through this manual, so that you can obtain the best from the software.

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.

Compatibility

D-Net is compatible with:

Microsoft Windows Vista or above
Apple Mac OSX 10.14 Mojave or above
Apple iPad OS11 and above

Installation

The latest version of D-Net, for Microsoft Windows and Apple Mac, 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 run the file 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 is available from the Apple app store. (There is also a link to this from the software page shown above).


Overview

D-Net is an Ethernet based computer control platform that gives you the ability to not only control all the devices on a network, but also to store presets and configure systems offline.

Compatible with Microsoft Windows, Apple Mac and Apple iPad, you can control your system the way that suits you.

USB connection (Microsoft Windows only) is also available on some devices, allowing quick connection to a single device.
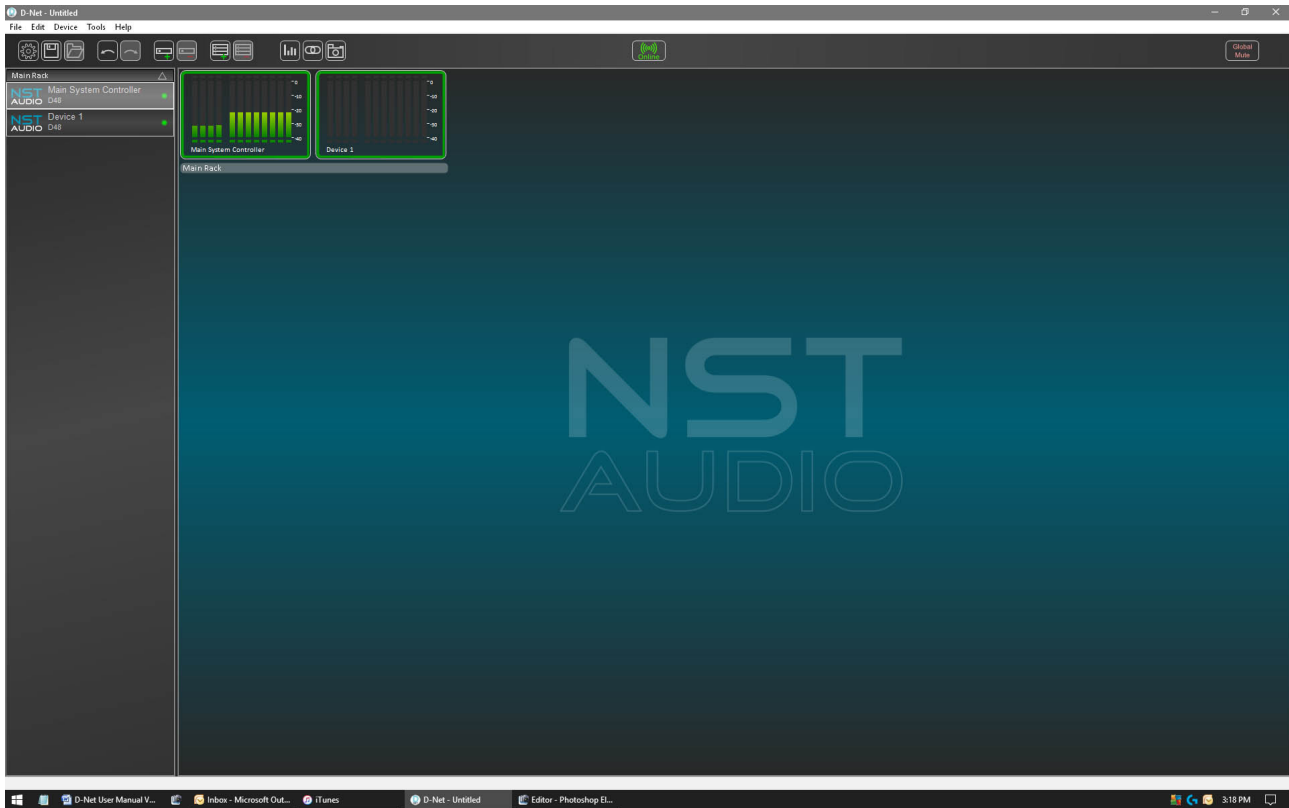
The default view of D-Net will look similar to the image above, depending on your operating system and screen size etc.

The very top of the application will show the application name, followed by the current file name, if one is in use.

Below this is the menu bar that allows various features to be accessed, detailed later in the manual.

Below this is the toolbar that allows quick access to common commands and features, detailed later in the manual.

To the left of the screen is the 'Virtual Rack' that shows all the devices in the current system. The devices can be named, rearranged and placed into various racks – double clicking / tapping a device in the rack will open a detailed window allow adjustment of all parameters, detailed later in the manual.

The main part of the application's screen is home to the System Monitor page. This shows all current devices along with real-time metering - double clicking / tapping a device in this screen will open a detailed window allow adjustment of all parameters, detailed later in the manual.

File Edit Device Tools Help

The menu bar will look similar to the image above, depending on your operating system. (The iPad app does not feature this menu).

The menu bar functions, from left to right, are as follows:

File

New: Starts a new D-Net (*.NST) file. This option is only available while offline.

Save: Saves the current system to file.

Save As...: Saves the current to file, asking for a file name to be entered.

Open: Opens a dialogue box allowing location and opening of existing D-Net (*.NST) files.

{Last Used Files}: This section of the menu shows the last used files, allowing for quick access.

Exit: Quits the D-Net application offering an opportunity to save the current system to file.

Edit

Undo: Reverts the last change made to its previous state. Note, this button can be pressed multiple times to undo multiple changes.

Redo: Cancels the last undo command and reverts the setting to its previous state. Note, this button can be pressed multiple times to redo multiple changes.

Cut: Removes any highlighted text, including parameters, and places it in your computers Clipboard.

Copy: Copies any highlighted text, including parameters, and places it in your computers Clipboard.

Paste: Pastes the contents of your clipboard into the selected name or parameter box.
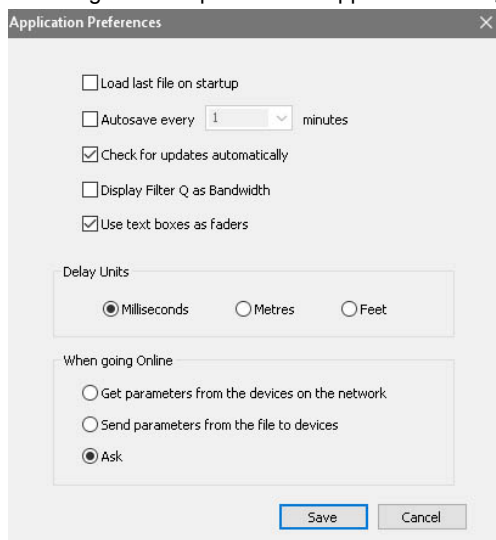
Device

Add>: Opens a menu, when the mouse pointer is hovered over it, allowing new devices to be added to the current system.

Go Online: Toggles between online and offline modes.

Tools

Application Settings...:

Selecting this will open D-Net's application settings.

Load Last File on Startup...: Checking this option will cause D-Net to automatically load the last D-Net (*.NST) that was used, when the application is opened.

Autosave Every x Minutes: Checking this option save the current file every x minutes, depending on what time is selected from the drop down menu options.

Check for Updates Automatically: Checking this option will cause D-Net to check the NST Audio software server for any updates / newer versions of the application and give the option whether to download and update the software.

Display Filter Q as Bandwidth: Checking this option will cause D-Net to display all filter width parameters in bandwidth instead of the default Q.

Use text boxes as faders: This option either disables or enables the use of text boxes as faders. If enabled, the cursor can be used to select a text entry box and then dragged up and down to adjust the value.

Delay Units: Gives the option of displaying delay parameters in Milliseconds, Metres or Feet.

When Going Online: Gives options for how D-Net behaves when selecting the Online function.

Get Parameters from the Devices on the Network: Selecting this option will cause D-Net to automatically retrieve the current settings, and any stored presets, from all connected devices when online is selected.

Send Parameters from the File to Devices: Selecting this option will cause D-Net to automatically send the parameters, and any stored presets, of all defined devices to connected units when online is selected.

Ask: Selecting the option (on as default) will cause D-Net to ask whether to send or retrieve settings, and any stored presets, to or from connected devices.

Help

Check for Updates: Selecting this will connect to NST Audio's software server to check for any available updates.

About D-Net...: Selecting this will open a dialogue box displaying the application version number and other details.

Toolbar Detail

The toolbar will look similar to the image above, depending on your operating system and screen size etc.

The toolbar functions, from left to right, are as follows:

Application Preferences Button: Opens the application preference options screen.

File Save Button: Saves the current file or asks for a file name if the current settings have not previously stored.

File Open Button: Opens a dialogue box to allow locating of *.NST files. Note, this button will be greyed out / disabled while online – go offline to enable opening of files.

Undo Button: Reverts the last change made to its previous state. Note, this button can be pressed multiple times to undo multiple changes.

Redo Button: Cancels the last undo command and reverts the setting to its previous state. Note, this button can be pressed multiple times to redo multiple changes.

Add Device Button: Opens a drop-down menu allowing a device to be added to the system.

Delete Device Button: Deletes the currently selected device. Note, this button will be greyed out / disabled while online – go offline to enable deletion of devices.

Add Rack Button: Adds a rack to the virtual rack, located on the left of the main screen.

Delete Rack Button: Deletes a rack from the virtual rack, located on the left of the main screen. Note, a device must be present in the rack and that device must be selected for the rack to be deleted.

Show System Monitor Button: Displays the default overview screen, showing monitoring of all devices.

Show Link Manager Button: Displays the Link Manager screen, detailed later in the manual.

Show System Snapshot Manager Button: Displays the System Snapshot screen, detailed later in the manual.

Online / Offline Button: Toggles between online and offline modes.

Global Mute Button: Toggles a system wide mute to all connected devices when online.

To connect D-Net to NST Audio devices, we recommend using an Ethernet connection, so a Cat5 cable will be required.
A USB connection is also possible (Windows only, single device only), so an A to B style USB connector cable will be required.
To connect to multiple NST Audio devices, you'll need a network switch or router – these are available in varying port sizes, depending on how many devices you wish to connect simultaneously.
If using an iPad to connect D-Net to NST Audio devices, you will need a WiFi enabled router.

**There are two ways to go online / connect to devices:**

You can either retrieve settings and presets from connected devices, or you can define devices and presets offline and send the settings to connected devices.

To SEND settings to connected devices, define devices in D-Net, using the Device menu or toolbar Add Device button, and input the settings required.
Use the Device menu to go online, or use the toolbar Online button – choose to 'Send device settings from this file to the devices'.
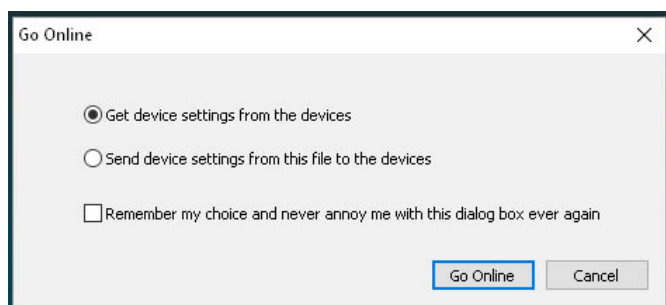

If D-Net finds a matching device, it will ask whether to send the settings to the device, and also give options for identifying the device:
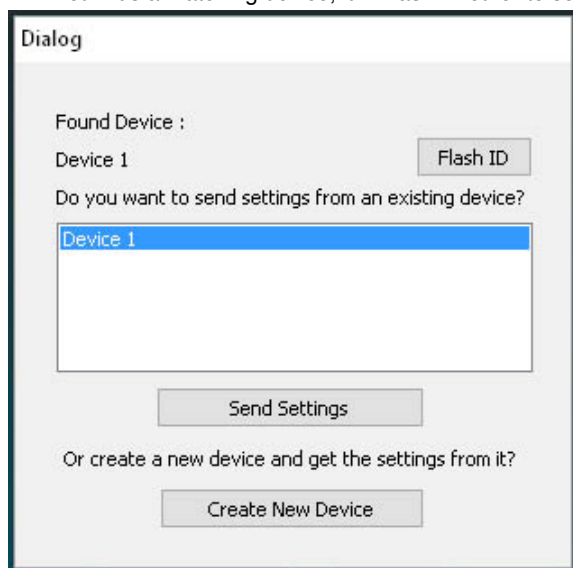
To RETRIEVE settings from connected devices, use the Device menu to go online, or use the toolbar Online button – choose to 'Get device settings from to the devices'.

D-Net will then search for connected devices and display the devices found, along with their current settings and any stored presets.
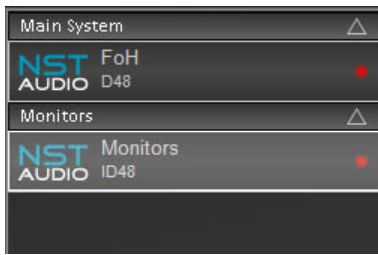
Located on the left side of D-Net, the Virtual Rack shows all connected or defined devices.

If a device shows a red light, it is not connected (or hasn't been discovered yet) or D-Net is offline.
This is also reflected on the main system monitor screen, whereby the device will have a red border.

If a device shows a green light, it is connected correctly when D-Net is online.
This is also reflected on the main system monitor screen, whereby the device will have a green border.

Devices may show a yellow exclamation mark (!) accompanied by a message, such as alerting the user there is a firmware update available for the device. This is detailed later in the manual.

Double clicking devices in the rack will open the devices main window, allowing editing of all parameters, including the device name, detailed later in the manual.

Devices can dragged and dropped up and down to reorder them as desired.

Devices can also be placed into new rack sections – add new racks by using the toolbar button.

Racks can be renamed by double clicking / tapping on them.

Clicking on the triangle*, located at the right of each rack, will collapse or expand the rack – this is useful when large quantities of devices are in use and the virtual rack becomes large.
[*This feature is not available on the iPad app]

The rack names are also displayed under the devices in the main system monitor screen.

To edit a device's settings, double click / tap a device either in the rack or in the main system monitor screen.

NOTE: An NST Audio D48S device will be used for this user manual, as it's one of the most comprehensive devices, thus it will cover all the parameter editing you will come across.

At the top of this device window, the title bar will show the device type and then the device name – the device name can be edited by double clicking / tapping the text to the right of the NST logo.

The left-hand of this panel shows the input channels – the right shows the output channels and routing.

All parameters can be edited by clicking / tapping and holding on the desired parameter box, and then dragging the cursor up and down – direct text entry is also possible by clicking / tapping on the relevant box. Faders and control knobs work this way too! Alternatively, you can select a parameter, e.g. delay, which will highlight the parameter box and then use the up / down cursor keys to adjust the parameter or press the enter key to enable editing by direct text entry.
Pressing the TAB key will move to the next parameter – press the enter key again to enter values.

Routing Page

Input Compressors
Threshold: Adjusts the input compressor's threshold (where it starts to come into effect).
Attack: Adjusts the compressors attack time (How fast the compressor reacts once the threshold has been exceeded).
Release: Adjusts the compressors release time (How fast the compressor releases compression once the threshold has been exceeded).
Ratio: Adjusts the ratio of compression once the threshold has been exceeded (I.E a ratio of 2 will halve the signals level above the threshold – so if the threshold is exceeded by 6dB, the compressor will limit this to 3dB).
Knee: Adjusts the 'knee' of the compressor / how hard the compressor reacts at the threshold. Higher knee values will give a softer compression around the threshold.

Input EQ Preview Window

This graphic shows any input EQ in effect – click / tap the window to directly access the input EQ for that channel.

Input Delay

Adjusts the input delay from between 0ms to 1.3 seconds. The unit can be changed to metres of feet via the Application Settings found in the Tools menu on the menu bar.

Tip: you can enter delay values in metres (m) or feet (') and D-Net will convert these automatically to ms.

Also, holding down the shift key, while using the cursor keys to adjust delay, will alter the delay in 1/10th steps.

Input Gain

Adjusts the input channel gain by either dragging the fader or dragging your cursor over the gain text box.

Note that you can select / highlight the gain value box and use the cursor up and down keys to adjust the gain.

Input Mute Button

Toggles the channel mute – the channel is muted when the button illuminates in red.

Input Phase Button

Toggles the channel phase – the channel is 180 degrees out of phase when the button illuminates in yellow.

Input Channel Name

Double click the channel name to edit. The channel name will also be shown on devices with an LCD screen.

The right-hand side of this screen shows the output settings and routing...

The routing mode can be either a matrix mixer or routing grid. (Routing options can be accessed through the routing wizard, located at the top right of this screen).

Assuming the matrix mixer is in use, like the picture shows, channel levels can be adjusted dragging the rotary controls up and down to adjust level, or double clicked to mute or un-mute the input feed.

Matrix levels can also be directly entered by double clicking the text value under each matrix rotary control.

Output EQ Preview Window

This graphic shows any output EQ in effect – click / tap the window to directly access the output EQ for that channel.

Output Delay

Adjusts the input delay from between 0ms to 1.3 seconds. The unit can be changed to metres of feet via the Application Settings found in the Tools menu on the menu bar.

Tip: you can enter delay values in metres (m) or feet (') and D-Net will convert these automatically to ms.

Also, holding down the shift key, while using the cursor keys to adjust delay, will alter the delay in 1/10th steps.

Output Gain

Adjusts the output channel gain by either dragging the fader or dragging the cursor over the gain text box.

Note that you can select / highlight the gain value box and use the cursor up and down keys to adjust the gain.

Output Mute Button

Toggles the channel mute – the channel is muted when the button illuminates in red.

Output Phase Button

Toggles the channel phase – the channel is 180 degrees out of phase when the button illuminates in yellow.

Output Channel Name

Double click the channel name to edit. The channel name will also be shown on devices with an LCD screen.

Pressing the Routing Wizard button, located at the top right, will open a 3-tab window allowing various routing options, linking controls and a quick crossover setup page.

Routing Tab:

Choose between manual routing, Matrix Mixer mode or Routing Grid mode, or predefined crossover routing.

The Use Auto Channel Naming check box will automatically generically name the outputs depending on the routing selected.

The Reset the Current Settings to Default check box will reset the current settings to default with the routing selected.

Linking Tab:

This page allows input or output channels to be linked together, so any parameter changes will be immediately reflected onto the linked channels in real time.

NOTE: The left-hand channels are used to make the initial link, so if say output 1 and output 5 are linked, the settings from output 1 will be initially copied to output 5; they will then track together here on in.

Crossover Tab:

This page allows for quick initial crossover setups – enter the desired parameters into the various boxes, and make sure that the '**Apply the Above Crossover to Current Settings**' check box is selected, before pressing OK.

Limiter Page

Pressing the Limiters button will show the output limiter parameters instead of the routing. The top parameters control the RMS limiter on each channel, and the lower parameters control the 'clip' or 'peak' limiters (Excluding D48 96kHz mode) giving a two-stage limiting system, which utilises our Predictive eXcursion Limiter (PXL) algorithm - designed to offer the best driver protection with the lowest distortion..

Auto:
Auto mode (on by default) will automatically set the limiters' attack and release times, based on the output channel's HPF frequency.

Threshold:
Adjusts the point at which the RMS limiter comes into effect.

Attack:
Adjusts the RMS limiter's attack time - (How fast the limiter reacts once the threshold has been exceeded).
The attack time can only be edited in manual mode (Auto off)

Release:
Adjusts the RMS limiter's release time - (How fast the limiter releases once the signal drops below the threshold).
The release time can only be edited in manual mode (Auto off)

Clip Threshold (Excluding D48 96kHz mode):
Adjusts the point at which the clip limiter comes into effect in relation to the RMS limiter threshold.

Clip Release (Excluding D48 96kHz mode):
Adjusts the clip limiter's release time - (How fast the clip limiter releases once the signal drops below the threshold).

Note: The output meters are directly related to the limiters – the limiter threshold is represented by the 0dB mark and the ballistics of the meter are governed by the attack and release. Once the threshold is exceeded, the gain reduction meter will show above.
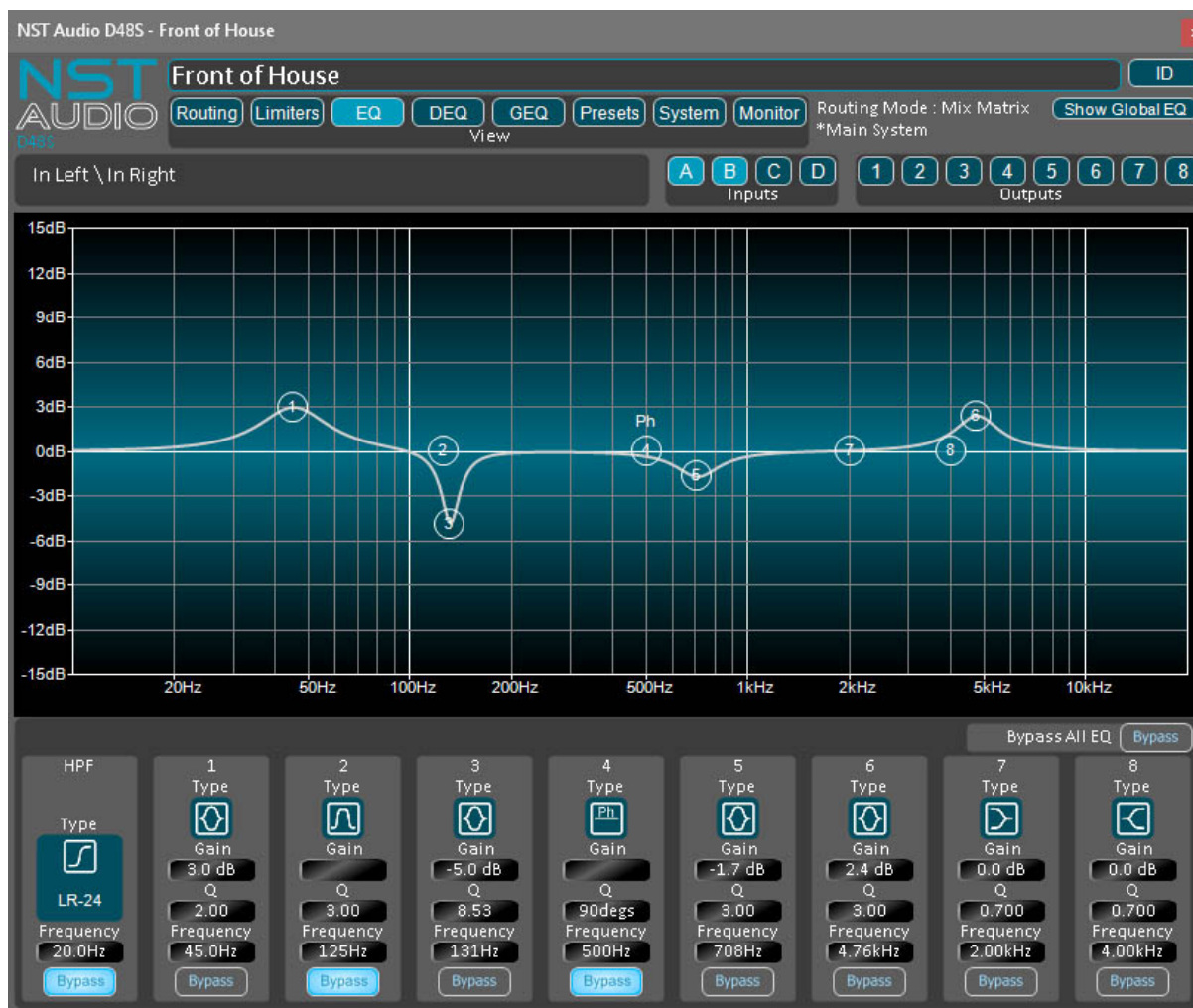
Clicking / tapping on the EQ buttons gives access to all the input EQ parameters.
Use the input, A, B, C, D access buttons to edit the desired channel's EQ.

Input HPF:
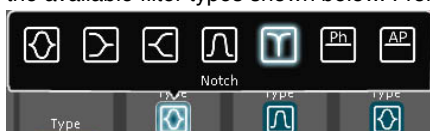Clicking / tapping on the type box will allow selection of available filter shapes.
The frequency can either be typed in directly, by double-clicking on the frequency box, or the filter can be dragged by clicking and holding down the left mouse button on the frequency box, and dragging up and down to adjust.

Input PEQs:
Each input has either 8 (D48S Only) or 6 (D48 Only) parametric EQs – these can be edited by either be double-clicking on the frequency, Q or gain box, and entering the desired parameter, or the filter can be dragged by clicking and holding down the left mouse button on the frequency box, Q or gain, and dragging up and down to adjust.
Alternatively, the filter node, on the EQ graph, can be dragged around in real-time.

To change the EQ filter type, bypass the filter, by clicking on the filter's Bypass button, and then clicking on the Type box – this will then show the available filter types shown below. From left to right: Parametric, Low-Shelf, High-Shelf, Bandpass, Notch, Phase, All-Pass.


Note: Double clicking on the EQ graph will toggle the phase response display. The top and bottom of the graph being +/- 180 degrees.

Show Global EQ button:
This function toggles showing an overlay of any other EQ present on other input channels in the background of the EQ graph.
Bypass All EQ button:
This function toggles the bypasses on all EQ sections, on the selected channel. (This does not bypass the HPF filter).
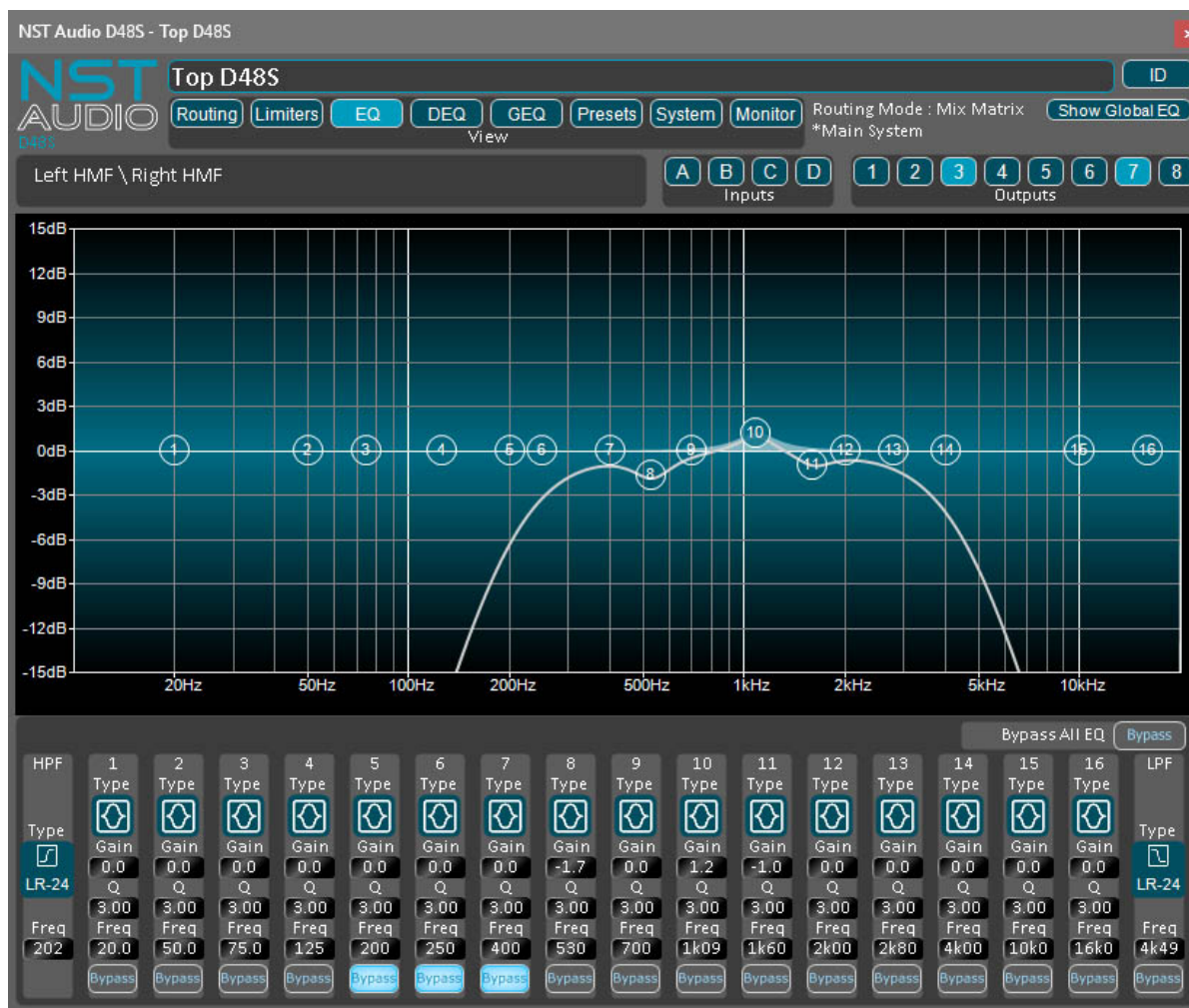
Clicking / tapping on the EQ buttons gives access to all the output EQ and crossover parameters.

Use the output 1, 2, 3, 4, 5, 6, 7, 8 access buttons to edit the desired channel.

Output HPF and LPF:

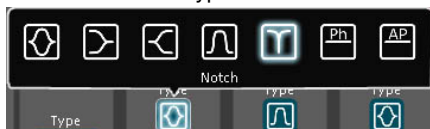Clicking / tapping on the type box will allow selection of available filter shapes.

The frequency can either be typed in directly, by double-clicking on the frequency box, or the filter can be dragged by clicking and holding down the left mouse button on the frequency box, and dragging up and down to adjust. (The HPF does not have bypass for safety reasons).

Output PEQs:

Each output has either 16 (D48S Only) or 8 (D48 Only) parametric EQs – these can be edited by either be double-clicking / tapping on the frequency, Q or gain box, and entering the desired parameter, or the filter can be dragged by clicking / pressing and holding down the left mouse button on the frequency box, Q or gain, and dragging up and down to adjust.

Alternatively, the filter node, on the EQ graph, can be dragged around in real-time.

To change the EQ filter type, <u>bypass the filter</u>, by clicking on the filter's Bypass button, and then clicking on the Type box – this will then show the available filter types shown below. From left to right: Parametric, Low-Shelf, High-Shelf, Bandpass, Notch, Phase, All-Pass.


Note: Double clicking on the EQ graph will toggle the phase response display. The top and bottom of the graph being +/- 180 degrees.

Show Global EQ button:

This function toggles showing an overlay of any other EQ present on other output channels in the background of the EQ graph.

Bypass All EQ button:

This function toggles the bypasses on all EQ sections, on the selected channel. (This does not bypass HPF and LPF filters).
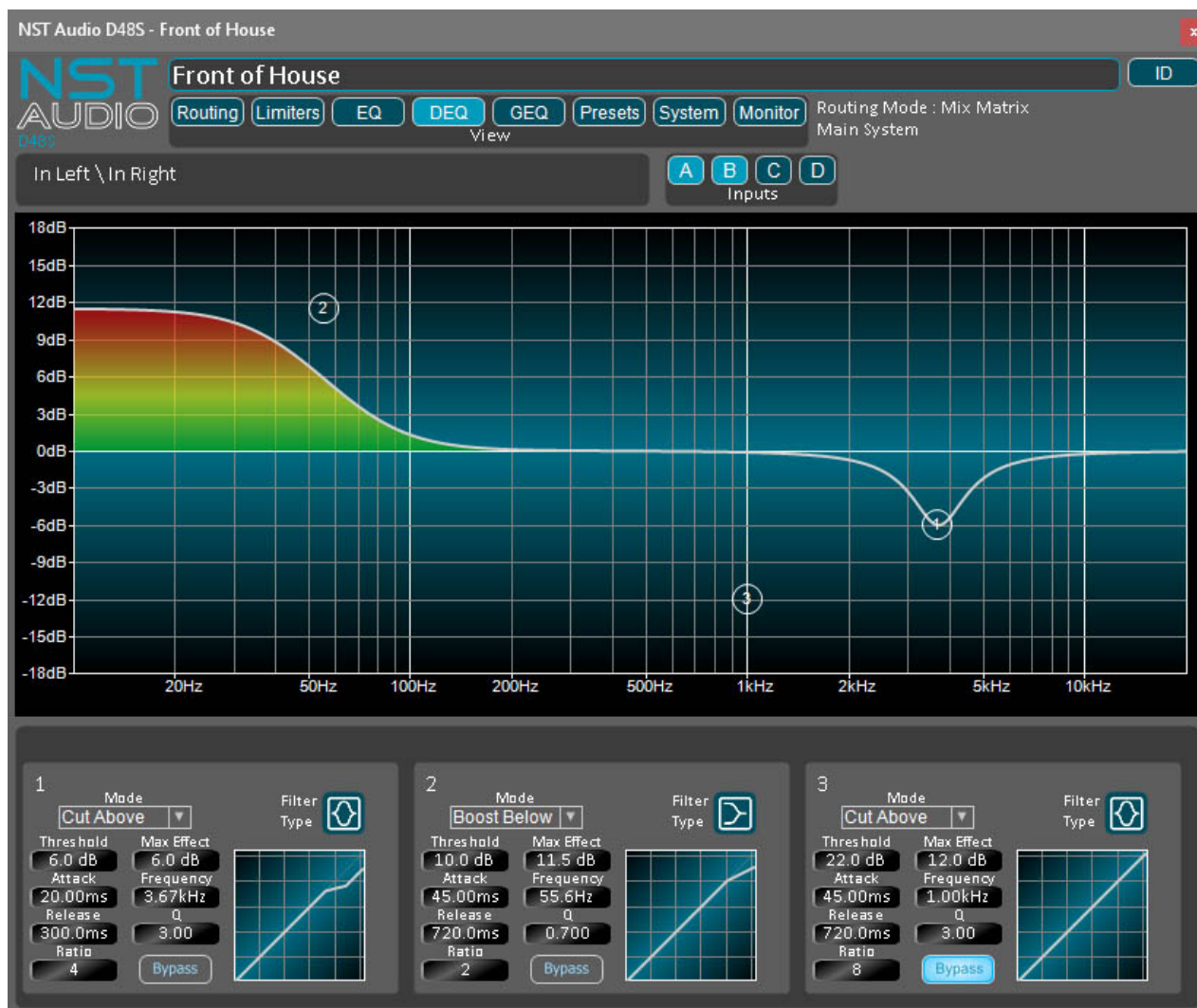
Clicking / tapping on the DEQ button gives access to the DEQ parameters.
Note: (D48 Only) Dynamic EQ filters are only available when the unit is in 48kHz sampling mode (see System Page).

Each input channel has 3 DEQ filters.
(D48 Only: Each input channel has two DEQ filters and each output channel has two DEQ filters).

Use the input A, B, C, D and output 1, 2, 3, 4, 5, 6, 7, 8 (D48 Only) access buttons to edit the desired channel.

The settings can either be typed in directly, by double-clicking / tapping on a parameter box, or can be dragged by clicking and holding down the left mouse button on the frequency box, and dragging up and down to adjust.
Alternatively, the filter node, on the EQ graph, can be dragged around in real-time.
Note: If your mouse has a wheel, this can be used to edit the Q whiles dragging a DEQ node.

To change the DEQ filter type, bypass the filter, by clicking / tapping on the filter's bypass button, and then click on the type box – this will then show the available filter types.

Each DEQ filter can be put into one of four modes:
Cut above – This mode will attenuate the set frequency when the filter's threshold has is exceeded.

Cut Below - This mode will attenuate the set frequency when the signal is lower than the filter's threshold.

Boost Above - This mode will amplify the set frequency when the filter's threshold has is exceeded.

Boost Below - This mode will amplify the set frequency when the signal is lower than the filter's threshold.
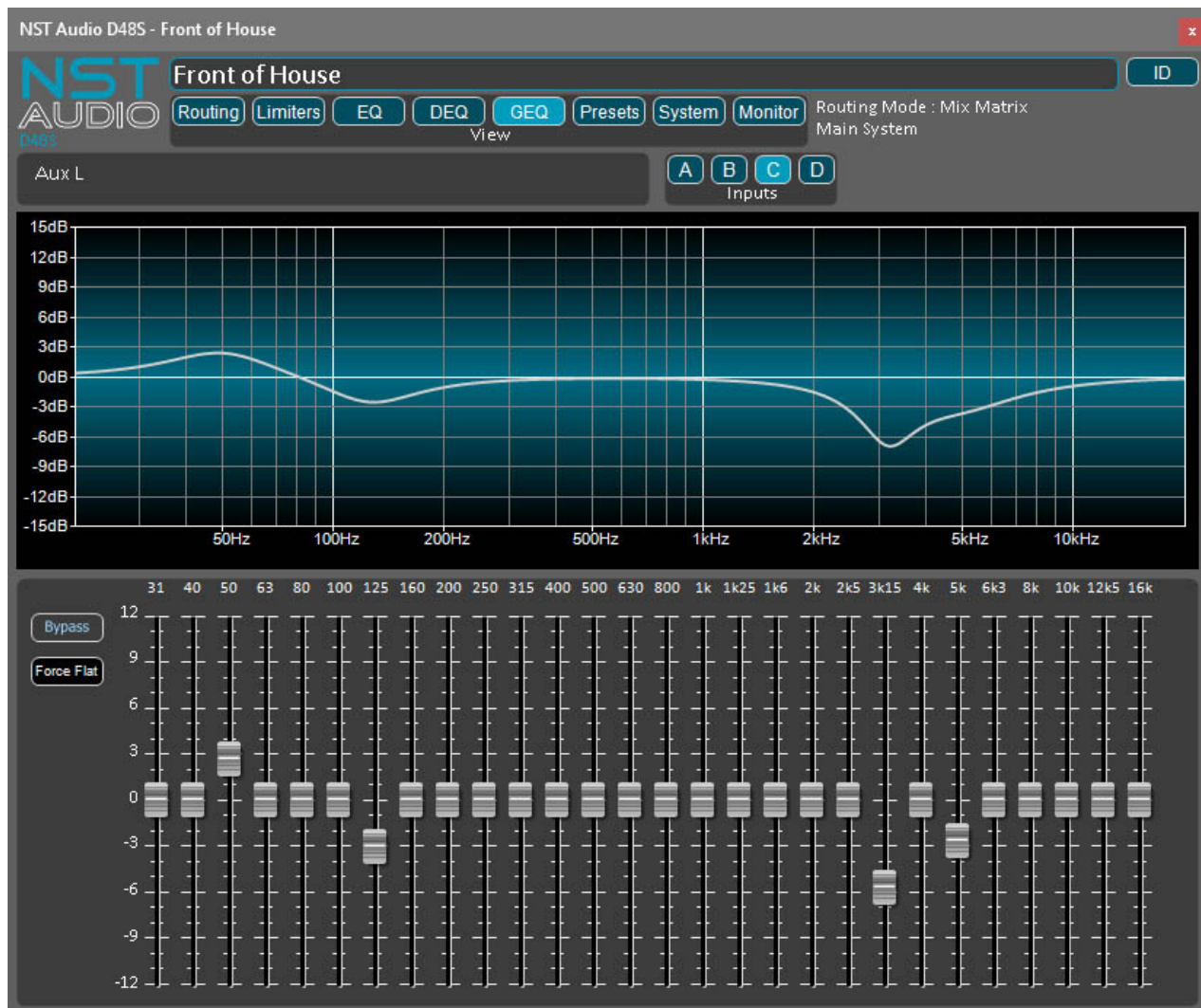
Note: This feature is only available on the D48S.

Clicking / tapping on the GEQ button gives access to all the input Graphic Equaliser parameters.

Use the input A, B, C, D access buttons to edit the desired channel's GEQ.

Each input channel has a 28-band Graphic Equaliser- the faders can be edited by simply dragging them by clicking / pressing and holding down the left mouse button on the text box and dragging up and down to adjust.

Bypass:
Use the Bypass button, located on the left, to toggle temporarily setting the channel's faders to 0dB.

Force Flat:
Use the Force Flat button, located on the left, to permanently reset all faders to 0dB.
A confirmation box will be displayed, allowing the function to be executed, or cancelled.

Note: The iPad app will display the gain, of the filter being edited, at the top of the fader track. This allows the gain to easily be seen, as fingers block the view of the fader on a touch screen.
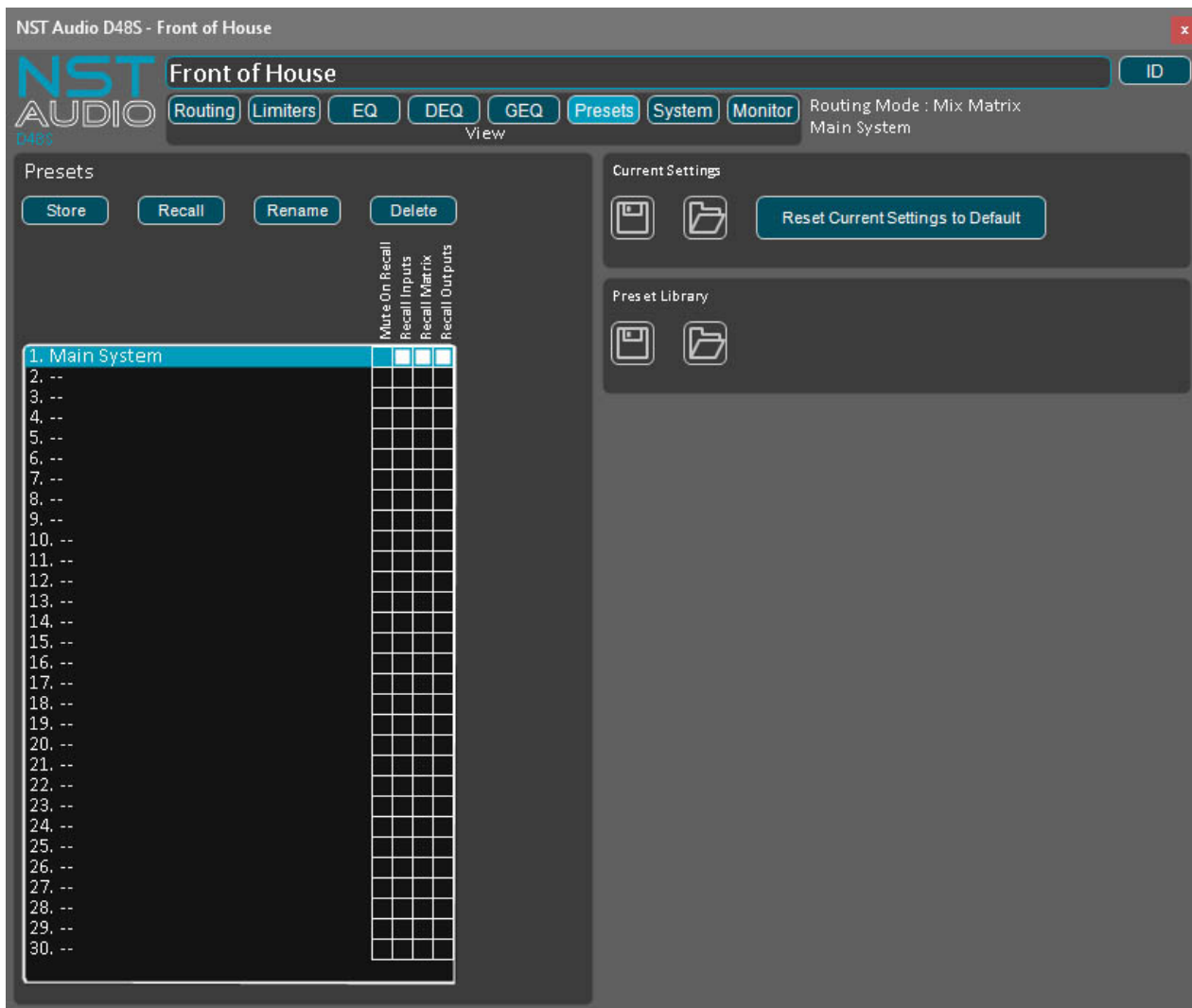
Clicking / tapping on the Presets button will show the presets settings - Up to 30 presets can be stored in each device.

Presets:
To store a preset, click / press a number allocation and then press the Store button.
This will save the device's current parameters to memory, including in the device, if online.

Double click / tap the preset or use the Rename button to edit the name of the preset.

To recall a preset, select a number allocation; then use the selection boxes to select what to recall (detailed on the next page), and then press the Recall button. This will recall the saved parameters from memory, including on the device, if online.
Note: all outputs will mute upon a preset recall, unless the Mute on Recall option is de-selected – this is for safety reasons, as there's potential to damage speaker components, if a wrong preset with incompatible settings were to be recalled.

Current Settings (Feature not included in the iPad app):
Current settings can be saved to file, for back up or distribution purposes.
Use the disk icon to save settings to file.
Use the folder icon to locate and open previously saved files.

Reset Current Settings to Default – the button resets the current parameters to default.

Preset Library (Feature not included in the iPad app):
The entire preset library (shown on the left) can be saved to file, for back up or distribution purposes.
Use the disk icon to save settings to file.
Use the folder icon to locate and open previously saved files.
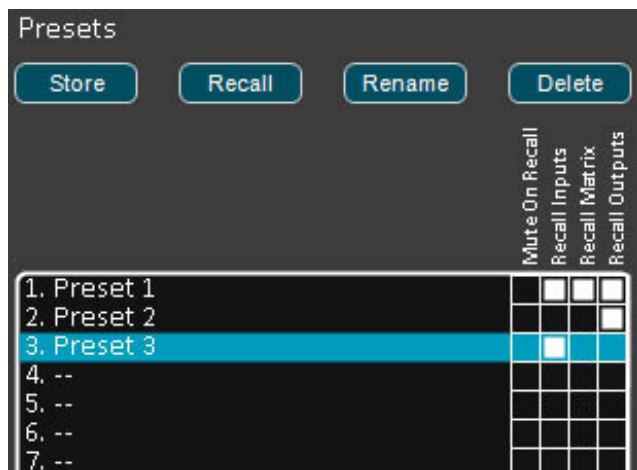
When recalling a stored preset, all contained parameters will recall by default (all boxes checked in white).

However, it is possible to exclude certain parameter sections from being recalled, by deselecting any of the four boxes.

This allows for greater flexibility, and simplifies the amount of presets possibly required, to achieve the same results.

There are many reasons why this functionality comes in useful; for example, you may wish to recall part of a preset that contains a set of particular input equalisation parameters, but for the recall not to affect the output settings and routing.

The example screenshot, displayed above, shows the following:

Recalling Preset 1 will not mute upon recall.
Recalling Preset 2 will only load its output parameters.
Recalling Preset 3 will only load its input parameters.
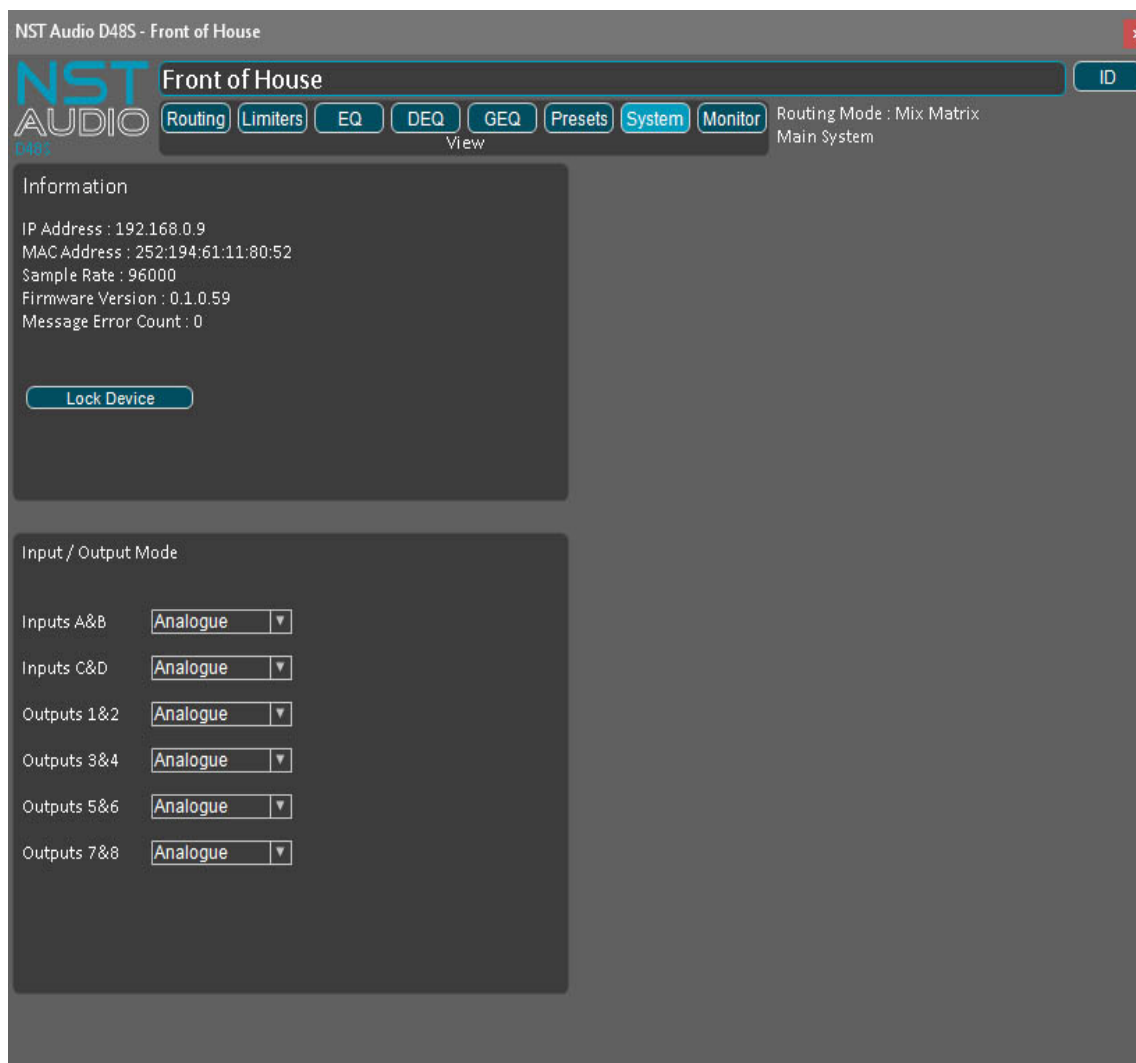
Clicking / tapping on the System button will show the device's System settings.

Information:
This section shows the IP and MAC address of the device, and the sample rate it is running at and the firmware version.

Switch Sample Rates (D48 Only – button not shown above):
To switch sample rates between 48kHz and 96kHz, use the Switch Sample Rate button.
(You will need to reboot the physical device after switching sample rate).
NOTE: If using a D48 at 96kHz sample rate, DEQ filters, 48dB crossover slopes and clip limiters will not be available. (All available on a D48S).

Input / Output Mode:
This section allows inputs and outputs to be either analogue or digital or a mixture.
Please refer to the product user manual for wiring specifications.

Lock Device:
This feature allows locking of the device (and physical unit if online) with a 4-digit password.
You will be given the option to allow preset recalls from the front panel(s), of the physical devices, and also the option of allowing user-defined restricted controls of the device in D-Net.

Continued overleaf...

To lock the device, enter a 4-digit password and press OK or the enter key.
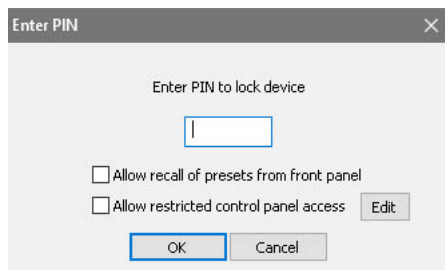
D-Net will then ask for confirmation of the password – enter the same password again to lock the device.

Once the device has been closed, it cannot be opened again without entering the password (unless restricted access has been defined) – the device will still appear on the system and show metering on the System Monitor page, but cannot be opened.

NOTE: Remember that the physical unit will also be locked – see the product user manual regarding locking on the device.

To allow restricted access of parameters, before locking the device, check the Allow Restricted Control Panel Access box, and select the Edit button to customise parameter access.
Doing this will open the Edit Control Panel Permissions screen – available parameter groups will be shown, along with the option to disable editing of the parameters and also the option of disabling viewing of the parameters.
NOTE: This is a D-Net feature only, and will not be reflected on the physical devices' front panel, which will remain locked out.

Simply select the various parameter groups that are to be disabled and press the OK button or enter key to confirm this.
The PIN code screen, as shown above, is then shown – follow the instructions above to lock the device.


Shown above is the Restricted Control Panel Permission options, and an example screen of how these options effect a device:
The input compressors and routing have their editing disabled (parameters can be seen, but appear greyed out and can't be edited).
The outputs have had their gain, mute, EQ, and delay editing and view disabled (Not visible at all on the control panel).

Clicking on the Monitor button will show a larger scale monitor page.

This page has no exclusive controls; it's just a more visual page showing larger metering and only access to common controls.
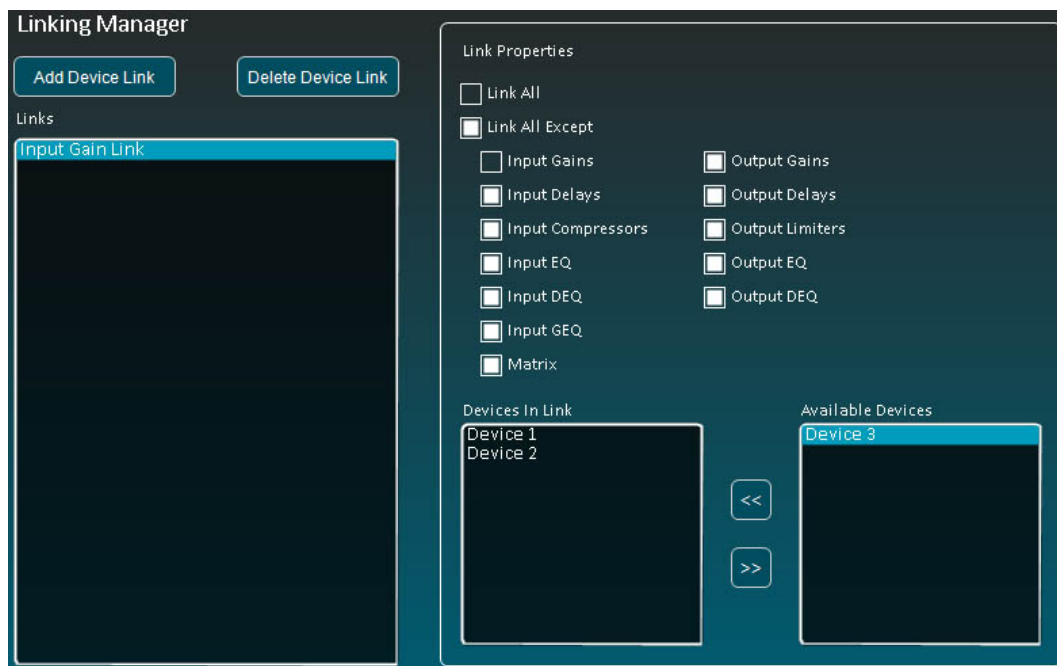
Linking Manager allows various parameter groups to be linked across multiple devices – this allows parameters specified in the link to be adjusted in real time on any device in the link - all devices in the link will respond together immediately to the desired parameter setting.

To access the Link Manager, click / tap on the chain link icon on the toolbar.

To set up a link, select the Add Device Link button.
This will cause a link name to appear in the Links window - double click / tap the device link to rename it, if desired.

Now choose the parameter group to link from the Link Properties section.
Link All will link all the parameters across specified devices.
Link All Accept will link only the parameter groups not selected from the options given.

Now choose which devices are to be contained within the link, by selecting a device in the right-hand Available Devices window and clicking on the << button to add it to the link window to the left. (Devices can be removed from a link by selecting it in the left Devices In Link window and clicking on the >> button).
Repeat this for all devices you wish to be contained in the link.
Once a link has been added, the chain link icon on the toolbar will glow green.

The example shown above will link the input gains on Device 1 and Device 2.

Note that you can set up multiple links, by clicking / tapping on the Add Device Link button to add another.

NOTE: This feature does not allow for offsets, so if any parameter in the link is adjusted, all devices will change to this value initially!

System Snapshots in Detail
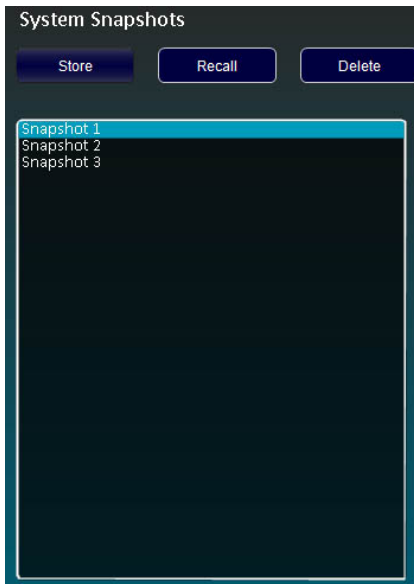
System Snapshots store all of the current settings on all devices defined to memory within the current D-Net (*.NST) file. This allows quick storing and recalling of settings across the entire current system.
(Note that System Snapshots are not stored or sent to connected devices; the feature is specific to the D-Net software, so remember to save your file!).

To access System Snapshots, click / tap on the camera icon on the toolbar.

To store a System Snapshot, click / tap on the Store button – this will store all current settings to this snapshot.

Double click / tap a snapshot to rename it if desired.

To store multiple System Snapshots, click / tap on the Store button again, whereby you will be prompted whether to create a new snapshot or overwrite the snapshot highlighted in the snapshot list.

To recall a snapshot, click / tap on the snapshot you wish to recall and then click / tap the Recall button.

To delete a snapshot, click / tap on the snapshot you wish to delete and then click / tap the Delete button.

Once a System Snapshot is stored, the camera icon on the toolbar will glow green.

NOTE: System Snapshots recall seamlessly and instantaneously, so please be aware of recalling a snapshot that could contain parameters or routing that may damage your equipment.
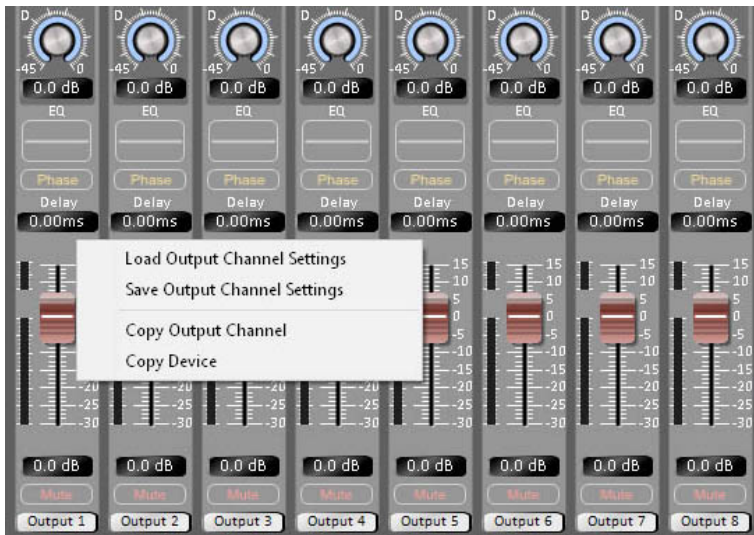
To quickly copy channel settings, or save them to file, right mouse click on an output channel in either the Routing page or Monitor page. Right click another output channel again to paste or load the settings into the channel selected.

Note: If using the Apple iPad app version of D-Net, press and hold a channel to enable the copy and paste menu – Note: savings settings to file is not available on the app.

Alternatively, the entire device can be copied and then pasted into another.
Once a channel has been copied, and another channel is right clicked, the paste options are shown as below:

Editing FIR filtering parameters isn't necessary for most users, so by default it is disabled. However, even when editing of parameters is disabled in D-Net, the filters still take effect in the hardware unit and are loaded with presets when present.
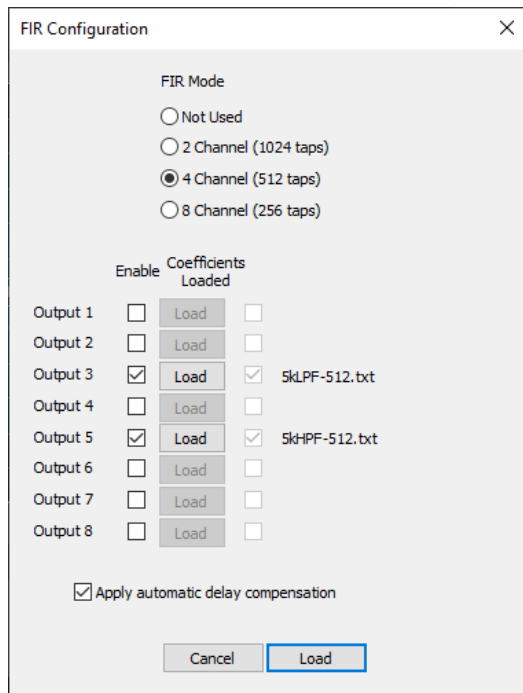
To enable editing of FIR filter parameters, go to the Application Settings menu option and check the "Show FIR configuration controls" checkbox :
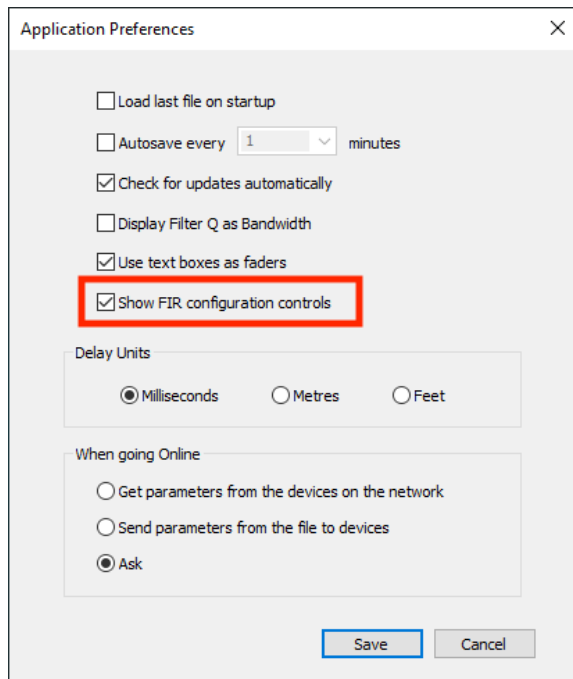
Once this is enabled, the output EQ sections will show the "FIR Config" button :
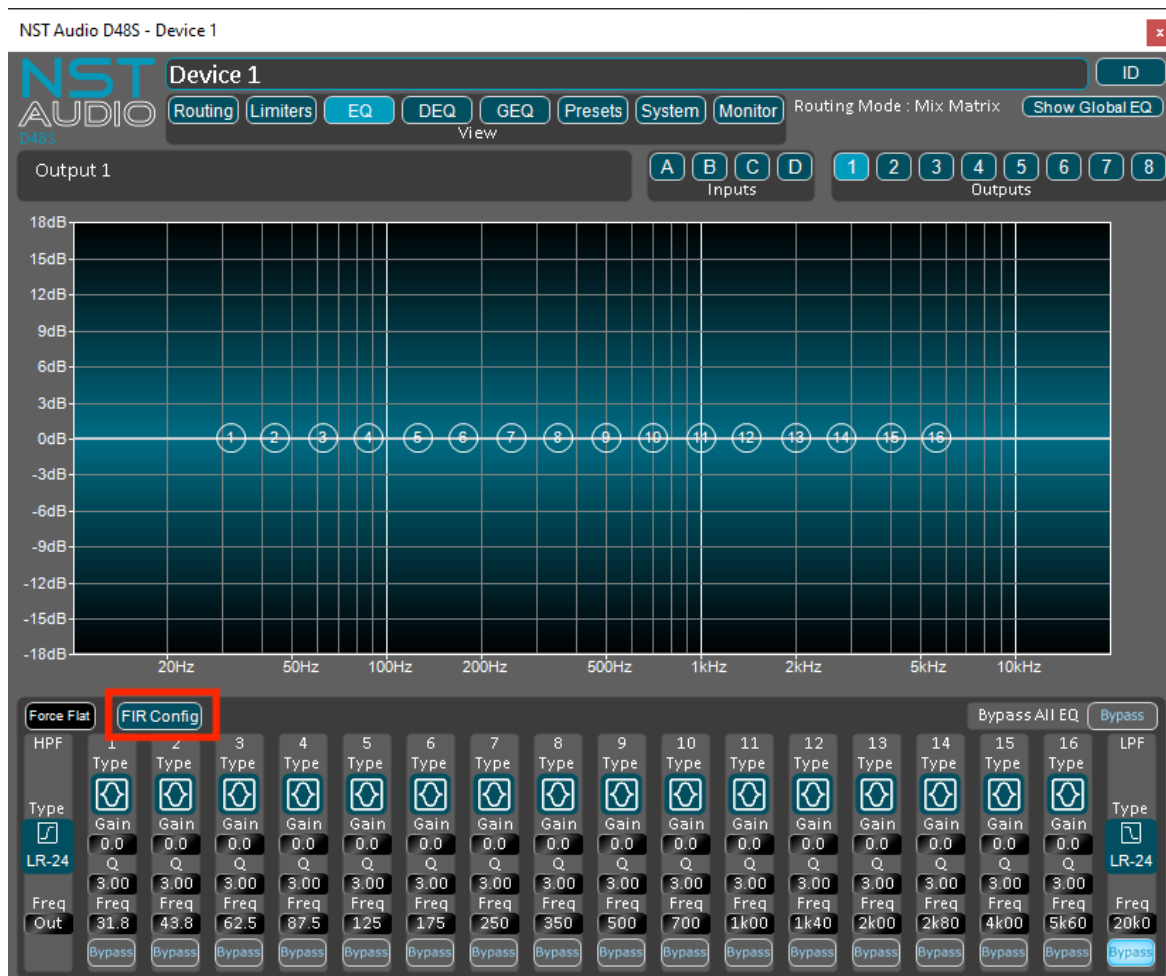
When the "FIR config" button is pressed, it brings up the FIR configuration dialog box :


The D48S and ID48S have a total of 2048 FIR filtering taps available at 96kHz. These are available in 3 different configurations :

- 2 channels of 1024 taps
- 4 channels of 512 taps
- 8 channels of 256 taps

Once the FIR mode is selected, the channels which need to have FIR filters loaded must be enabled using the checkboxes. Once checked, an open file dialog box will be launched to select an FIR tap file to load. FIR tap files should be in .txt or .csv format. It is very important that the coefficients to be loaded have been generated for 96kHz sampling rate.

The "Apply automatic delay compensation" checkbox specifies whether delay corrections should be applied to each output to compensate for the group delay which has been introduced by any FIR filters which will be used. If in doubt, leave this checkbox selected.

Once the FIR filter coefficients are loaded, the channels which have FIR filters running will show with an FIR icon :
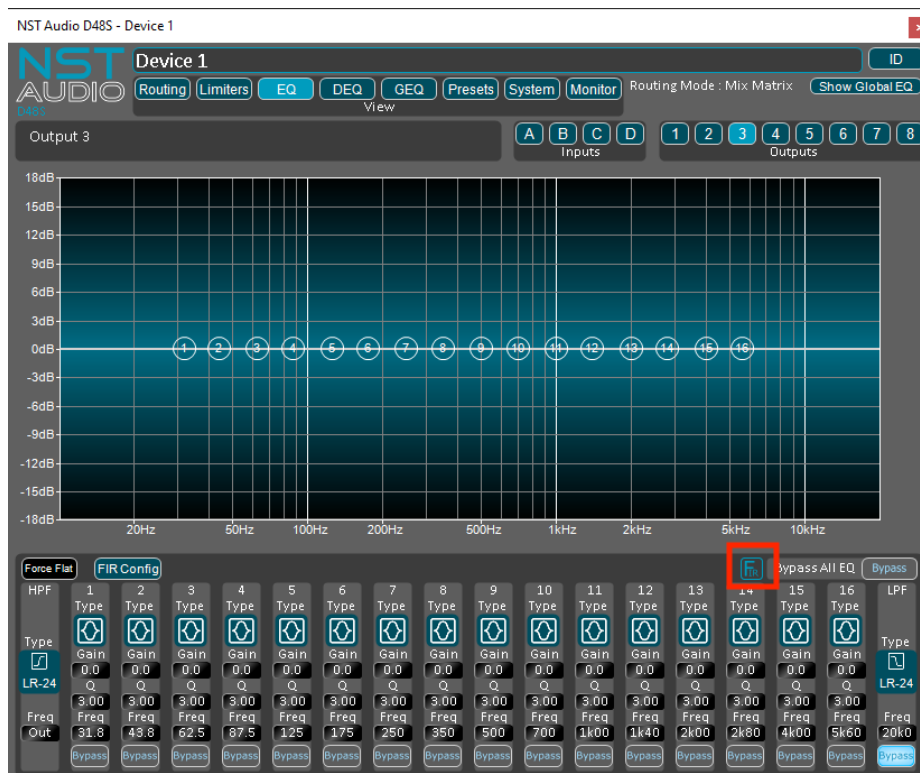
It may sometimes be necessary to prevent the editing of FIR coefficients by users. In this case, when creating a locked preset select the "Lock all FIR filters checkbox :

When this checkbox has been selected during creation of a locked preset, the "FIR Config" button will disappear on the EQ page when that preset is loaded.

What computer operating systems is D-Net compatible with?
- D-Net is compatible with Microsoft Windows Vista and above, Apple Mac OSX V10.9 and above, and Apple iPad iOS 9 and above.

How do I make connections to multiple devices, so I can control them at the same time?
- You will need a multiple port network router or switch. These are very common, and are available from computer stores and many online shops. They are generally inexpensive, so we advise purchasing one from a leading manufacturer, such as Netgear.
If you want the option of a WiFi connection too, then a multi-port router is recommended. They generally come with four Ethernet ports, allowing a wired connection to your computer, and three ports to connect up to three devices – if a WiFi link is used, then all four Ethernet ports can be used.
If you require only a wired link, then network switches are available in many different Ethernet port sizes.
Note: You can simply connect network switches and routers together, to expand the number of Ethernet ports required!

My computer hasn't got a physical CAT5 Ethernet port, so how can I make a connection?
- We recommend you use a USB to Ethernet adapter.
These are very common, and are available from computer stores and 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.

Can I utilise a WiFi connection, to my router / hub to establish a connection?
- Yes. Just set-up a standard WiFi link, as you normally would between your computer and router, and D-Net will do the rest!

Can multiple computers, running D-Net, be used at the same time?
- This is possible, but not recommended; as any changes made using one instance of D-Net will not be reflected on another computer (and vice-versa), unless the software is taken offline and then put back online, to fetch any changes.

Why won't D-Net connect to any units?
- Check that the computer or tablet is connected to the correct network that the units are connected to.
- Check your password matches what is set on the router (if applicable)
- Check that IGMP Snooping is disabled.
- Check that any Passthru features are enabled.
- Give the app ample time to locate all connected units. Depending on IP allocation etc, in rare cases, it can take up to a minute for some connected devices to appear on the app.
- Check the network lights on the units. The Link light should be on steady and the Activity light should be flashing...
- Check all units are physically connected to the router or switch with suitable CAT5 (or above) cables.
- Check all units are powered on.
- Check for faulty network cables / try replacing cables to units that are not responding.
- Check the port settings for any management if using a managed switch.
- Check the latest version of D-Net is installed, by clicking on the Help menu, then 'Check for updates...' or check the Apple App Store, if using an iPad. The latest versions are listed and available on our website too.
- Check the units contain the latest firmware. Firmware updates are included in D-Net, so if one is available, D-Net will show a warning triangle on devices in the rack, and also on the System page of devices.

Can the iPad app be installed on any type of iPad?

- Yes, the app will run on any iPad running iOS 9.0 or later, but it is best suited to larger iPad screen sizes.

Can the iPad app be installed on an iPhone?

- No, the app is designed specifically for an iPad, due to available screen size and usability.

The iPad app doesn't appear to have installed on my tablet?

- Check the iPad has been synced with iTunes, if the app was downloaded on a computer.

- The iPad app icon will sometimes appear on a page other than the one you were expecting. Check any other pages that you may have in use or search for app to locate it.

Can a computer be used at the same time as using the iPad app?

- This is possible, but not recommended; as any changes made using the iPad app will not be reflected on the computer (and vice-versa) until the software is taken offline and then put back online, to retrieve any changes.

Is it possible to load or save files on the iPad app?

- This feature is not included in the app; the app is designed to be a live tool. Saving or loading files (including preset libraries and current settings files) must be done on a computer.

Why does the iPad app go offline when another app is used or the app is open in the background?

- This is done on purpose and the way the app is designed. Apple recommends this as running the app in the background would consume a lot of power, due to continuous communication, particularly if it was still running in the background by mistake.

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:

www.nstaudio.com

support@nstaudio.com

www.facebook.com/nstaudio

@nstaudio

Thank you!

The NST Audio team