DEQX®

Gen4 User Manual

LS200

High Definition Digital Integrated Amplifier

Pre-4

Pre-8

High Definition Preamp Processor

Version 1.0
January 15, 2026

IMPORTANT INFORMATION

DISCLAIMER AND LIMITATION OF LIABILITY

DEQX Pty. Ltd. ('DEQX') assumes no responsibility for loss or damage resulting from the use of any of its products.

Refer to the license on page 4.

Specifications are subject to change without notice.

Contact DEQX Support at http://deqx.com/support.php for installation and operational support. We highly recommend using the DEQXpert™ on-line installation and/or training service.

The exclamation point within a triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the product.

The lightning with arrowhead symbol within a triangle is intended to alert the user to the presence of un-insulated "dangerous voltage" within the products' enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to person.

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture. To avoid electrical shock, do not open the unit. No user-serviceable parts are inside. Refer any servicing to qualified personnel.

ALWAYS TURN THE DEQX UNIT AND ANY ASSOCIATED AUDIO EQUIPMENT OFF BEFORE CONNECTING OR DISCONNECTING AUDIO CABLES.

ANY AUDIO EQUIPMENT REQUIRING GROUNDING MUST BE GROUNDED TO THE SAME POINT (CIRCUIT) AS THE DEQX UNIT.

FAILURE TO OBSERVE THESE WARNINGS CAN RESULT IN DAMAGE TO THE DEQX UNIT AND OTHER AUDIO EQUIPMENT AND MAY NOT BE COVERED BY WARRANTY.

Caution: Damage may result to your speaker drivers and other equipment if your audio system is connected incorrectly or if the unit is used incorrectly. Read this user manual in full before configuring your hardware and refer to your speaker manufacturer's specifications to ensure correct connection. If you are in doubt as to as the connection of your audio equipment, seek assistance from a professional audio installer or contact DEQX at http://deqx.com/support.php.

Important Safety Instructions

Read these instructions entirely before installing or operating this product. Keep these instructions. Heed all warnings. Follow all instructions.

Do not use this product near water. Clean only with a dry cloth.

Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

Do not install near any heat source such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Do not defeat the safety purpose of the grounding-type safety plug. A grounding-type plug has two blades and a third grounding prong or blade. The third prong or blade is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched, particularly at the plug and the point where the cord exits from this product.

Do not use this product with a damaged cord or plug.

Only use attachments and accessories specified by the manufacturer.

Unplug this product during lightning storms or when unused for long periods of time.

Refer all servicing to qualified service personnel. Servicing is required when the product has been damaged in any way, such as when the power cord or plug are damaged, liquid has been spilled or objects have fallen into the product, the product has been exposed to rain or moisture, does not operate normally, or has been dropped.

Cleaning and Maintenance

Always unplug the product from the electrical outlet before cleaning. Do not use abrasive cleaners. Simply wipe the exterior with a clean soft cloth. A small amount of non-abrasive cleaner may be used on the cloth to remove any excessive dirt or fingerprints.

Copyright

LICENSE

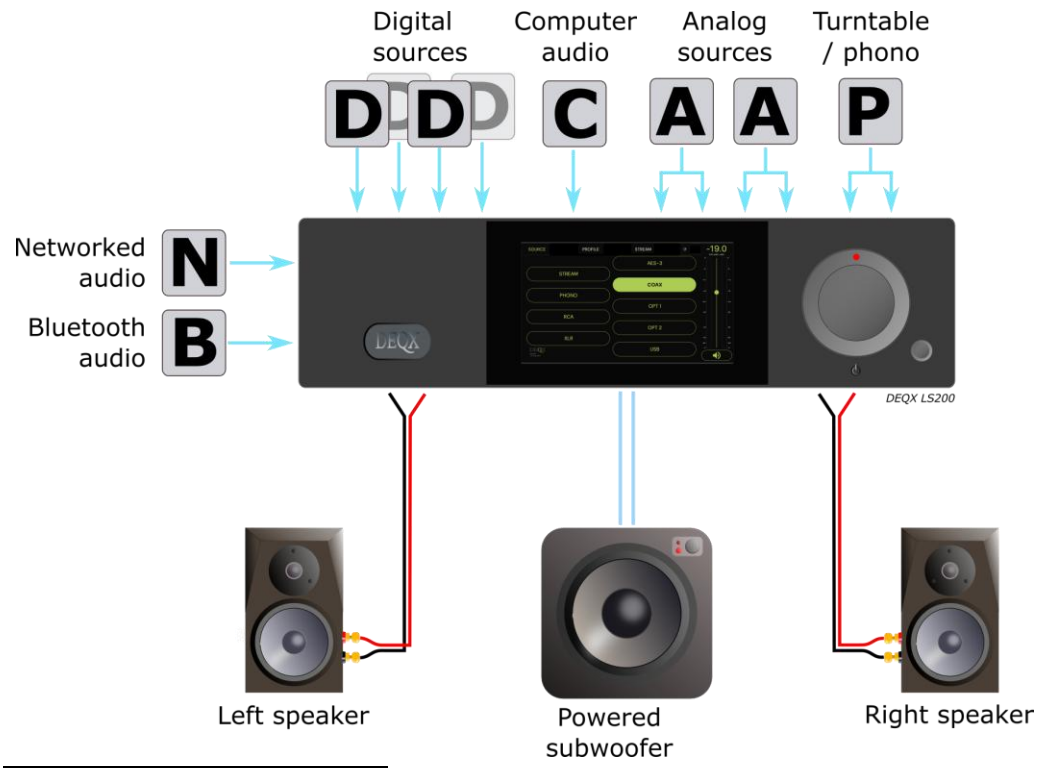
[TBC]

CONTENTS

1 WELCOME TO DEQX

Congratulations on purchasing a DEQX® High Definition Digital Integrated Amplifier or Preamp Processor. Your DEQX is one of the most advanced audio processors in the world, with patented digital audio processing and an impeccable pedigree focused on delivering the best possible performance from a high-end audio system.

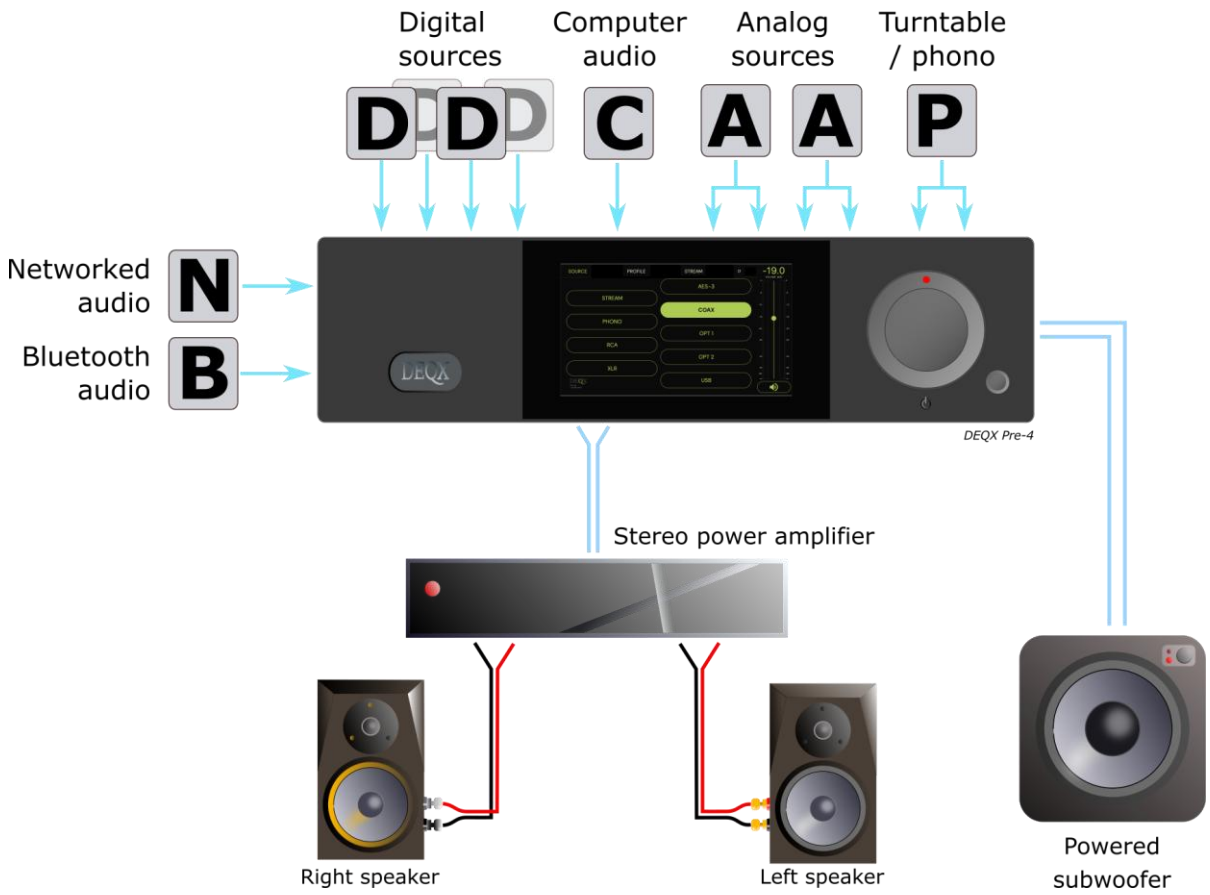
The **DEQX LS200 integrated amplifier** is designed to fit into any space and listening environment. Just add speakers. (And one or two subwoofers if desired.) The LS200 streams music from the network[1] or over Bluetooth while also providing a full suite of more traditional audio inputs: coax and optical digital inputs, asynchronous USB, and line-level analog inputs including a built-in phono stage. Powerful Ncore™ amplifiers handle any speaker with finesse.



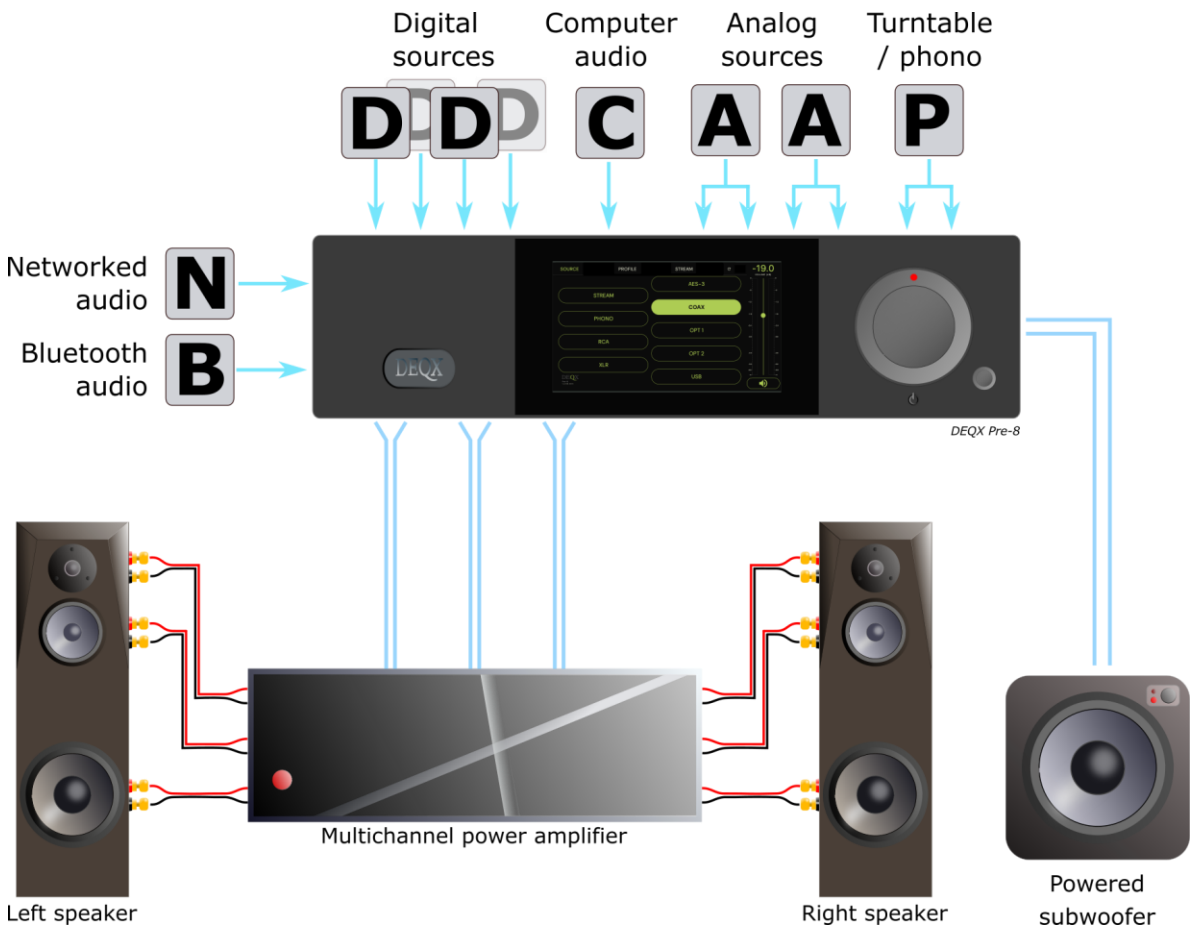
[1] Internet streaming support includes Tidal and Qobuz.

The **DEQX Pre-4 preamp processor** is the ultimate digital "separates" preamp for the audiophile. Forming the centerpiece of the most sophisticated high-end systems, the Pre-4 includes a full range of digital inputs, balanced and single-ended analog inputs and outputs and, of course, DEQX's renowned speaker and room calibration. An upgrade to a Dynavector phono stage is available from the factory.

Typical system configurations for the Pre-4 are very similar to that shown for the LS200 on the previous page, but with the addition of an external amplifier. The Pre-4 has single-ended, balanced and digital outputs, providing a great deal of flexibility in connecting to external equipment.



The **DEQX Pre-8 HD-Active preamp processor** is the final word in digitally-controlled speaker and room accuracy. With eight world-class analog outputs, four digital outputs[2] and full support for DEQX HD-Active processing, the Pre-8 handles up to 4-way active speakers. HD-Active processing, via the DEQX Cloud, provides near-perfect integration between the individual speaker drivers while minimizing errors in group delay.



[2] The digital outputs are a factory-fitted option, configured when placing your order.

1.1 DEQX® CALIBRATION BUILT-IN

Right out of the box, DEQX Gen4 offers impeccable analog audio quality fine-tuned for the best objective and subjective audio quality. Add the patented speaker calibration and room correction algorithms that made DEQX famous, and the performance of your audio system will be unmatched, at any price.

Why? Compared to every other component in the audio recording, production, media and playback chain, the mechanical nature of *speakers* makes them extraordinarily prone to errors and distortion that detract from realism. These include timing or phase errors where some frequencies lag behind others to varying degrees, as well as amplitude (volume) errors that result in inaccurate tonal characteristics.

The advanced algorithms used in DEQX calibration analyze real measurements of your actual speakers. Each speaker is measured and analyzed individually for the utmost in reproduction accuracy. The results of this sophisticated analysis are used by the DEQX Gen4 processor to correct your speakers in minute detail, resulting in unparalleled accuracy in the acoustic signal that you hear as music in your listening room.

1.2 DEQXPERT CONSULTATION

Your purchase of a new Gen4 DEQX includes an initial DEQXpert™ consultation. This consultation gets you setup and running with an audio system calibrated by an expert. For more information, see:

https://www.deqx.com/products/#deqxpert

1.3 WARRANTY REGISTRATION

To register your DEQX, fill in the warranty registration form on our website:

https://www.deqx.com/support/register-your-deqx/

After registering, you will receive a return email with information and a password to obtain software updates, microphone calibration files, and documentation downloads. In addition, by registering, DEQX will be able to keep you informed of any important updates.

1.4 OBTAINING SUPPORT

To obtain support, fill in the support form on our website:

https://www.deqx.com/support/request-support/

If you provide as much information as you can in the form, it will help us to troubleshoot your issue more effectively. It is important to be as complete as possible.

2 INSTALLATION AND CONNECTIVITY

This chapter guides you through the hardware setup of the Gen4 DEQX.

2.1 UNPACKING THE UNIT

Carefully remove the unit and the accessory kit from the shipping carton. Visually check for shipping damage. Contact both the shipper and DEQX immediately if the unit or any of the accessories bear any sign of damage from mishandling. All DEQX equipment is carefully inspected before leaving our factory.

Keep the shipping carton and packing materials for future use or in the unlikely event that the product needs servicing. If the product is shipped without the original packaging, damage could occur and void the warranty.

Accessory kit contents

You should find the following in the accessory kit:

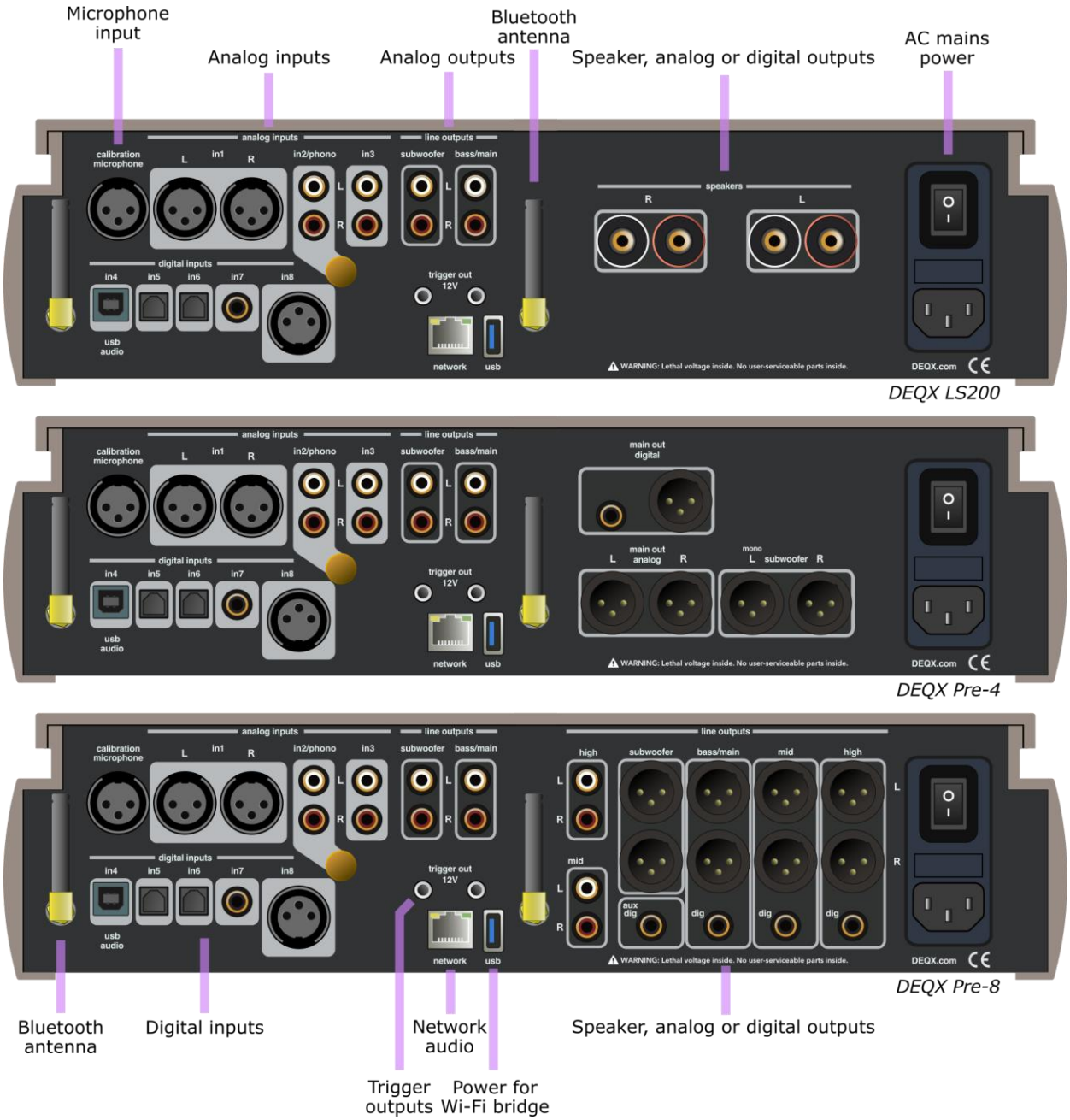
- Two (2) Bluetooth antennas
- One (1) infrared remote control with two AAA batteries
- One (1) small pair of pliers
- One (1) set of hex keys
- One (1) pre-flashed micro-SD card for system recovery
- One (1) Wi-Fi to Ethernet bridge
- Pre-8 only: two (2) film capacitors for tweeters

Physical installation

The DEQX amplifier or processor must be placed on a sturdy level surface, such as a shelf or in a suitable rack or cabinet. Allow a minimum of 5 cm (2 inches) on both sides for ventilation.

2.2 REAR PANEL OVERVIEW

The DEQX Gen4 amplifier and processors are variations on a theme, each designed to provide a high degree of flexibility in connecting your new DEQX into your audio system. Each features a full complement of digital and analog inputs as well as Bluetooth and network streaming. Each unit differs in output connectivity with different analog and digital output configurations according to intended use.



2.3 ANALOG INPUTS

There are three stereo analog inputs.

Analog XLR (in1)

This is a stereo input pair for connecting to balanced equipment. Use a suitable pair of high quality balanced XLR cables to connect an analog source. Alternatively, this input can be connected to an analog preamp.

Phono (in2)

This input is for moving magnet phono cartridges.[3] Connect your turntable's ground wire to the ground screw lug below the RCA input jacks.

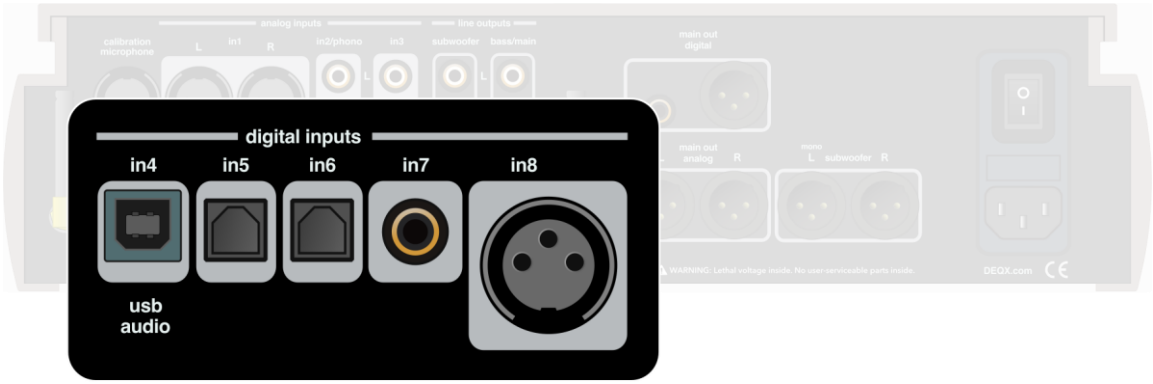
Analog RCA (in3)

This is a stereo input pair on standard RCA connectors. Use a suitable pair of RCA line-level interconnect cables to connect an analog source. Alternatively, this input can be connected to an analog preamp.

NOTES ON MAKING AND BREAKING CONNECTIONS

1. Power off the DEQX with the rear panel switch before changing any input or output audio connections. All connected equipment should also be powered off.
2. When connecting to the rear panel, double-check that the connections are made correctly. If the DEQX is installed in a rack or cabinet, use good light so that the labeling is clearly visible.
3. Push RCA connectors straight on and pull them straight off – avoid twisting to get them on and off.

[3] A DEQX-designed phono stage is standard. It can be upgraded to a factory-fitted Dynavector-designed phono stage.



2.4 DIGITAL INPUTS

The DEQX Gen4 units have a full complement of digital inputs.

USB Audio (in4)[4]

This is an asynchronous USB Audio Class 2 input for connection to a computer or high-end music server/streamer. It accepts PCM audio at all standard sample rates up to 192 kHz. For Windows, a driver will need to be installed.

TOSLINK optical (in5 and in6)

These are standard digital audio optical connectors that accept standard sample rates up to 192 kHz.

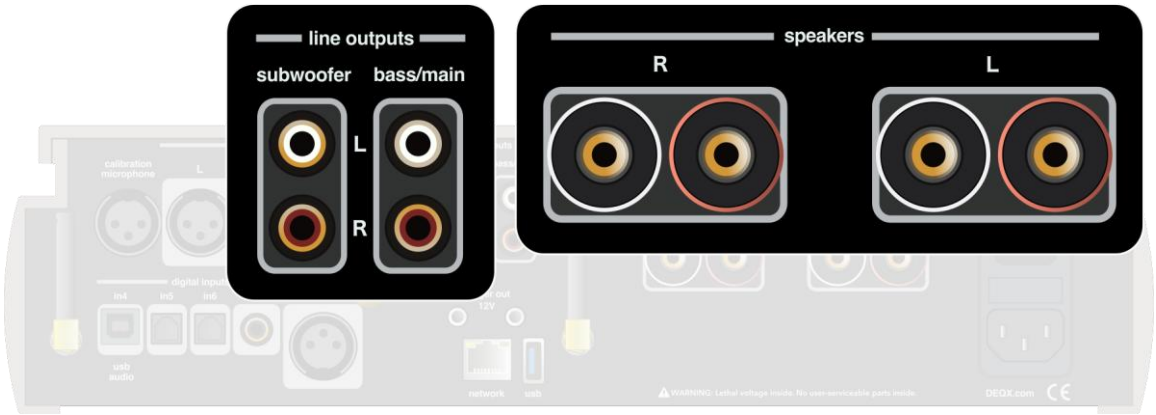
S/PDIF on RCA (in7)

This is an S/PDIF digital input via RCA connector. It accepts all standard sample rates up to 192 kHz.

AES/EBU (in8)

This is an AES/EBU digital input via XLR connector. It accepts all standard sample rates up to 192 kHz.

[4] The USB Audio port is standard on the LS200 and Pre-4. On the Pre-8, it is a factory-fitted option.



2.5 LINE AND SPEAKER OUTPUTS: LS200

The primary outputs of the LS200 are the speaker outputs, driven by the internal NCore amplifier. Line-level outputs are also provided for the subwoofer(s) and main channels.

subwoofer

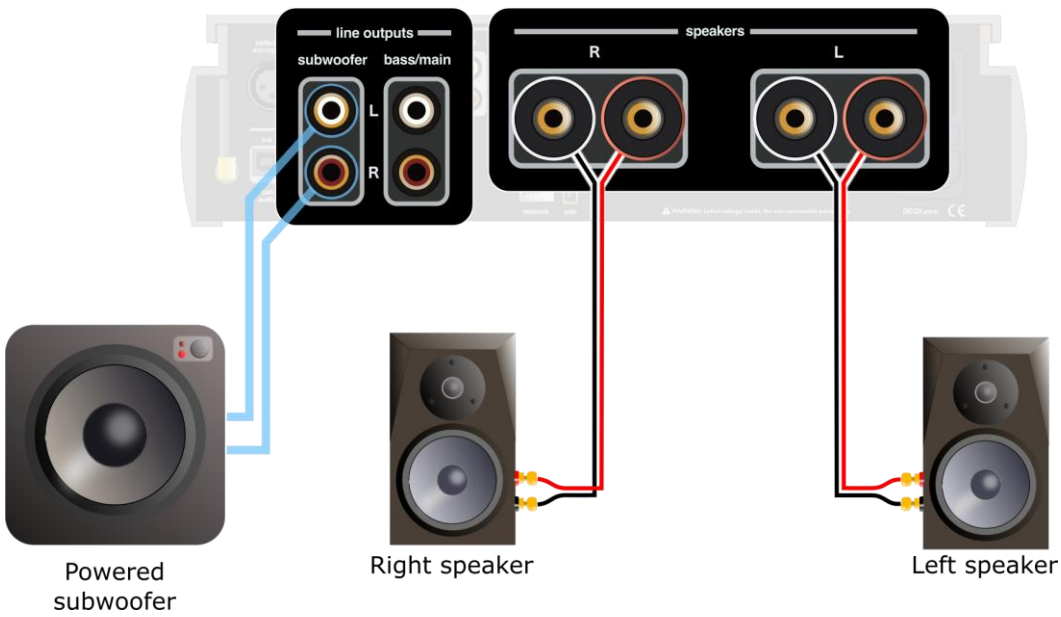
These are line-level outputs to connect one or two subwoofers. The subwoofer outputs are configured with the web-based DEQX Control application. Note that, if using a single subwoofer, left and right outputs should both be connected to it.

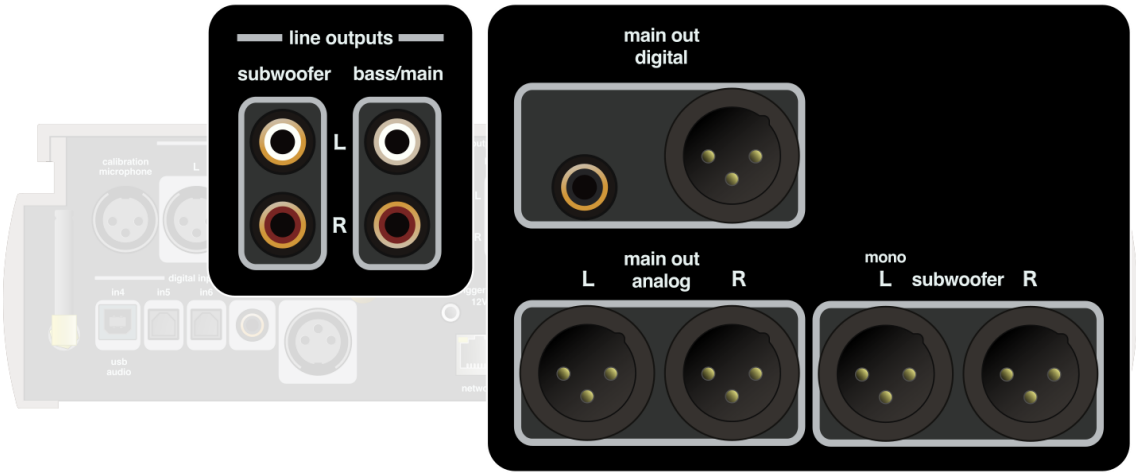
bass/main

These outputs carry the line-level version of the speaker outputs. They can be connected to external amplifiers to use instead of the internal amplifier.

speakers

These are standard binding posts for connecting the left and right speakers.

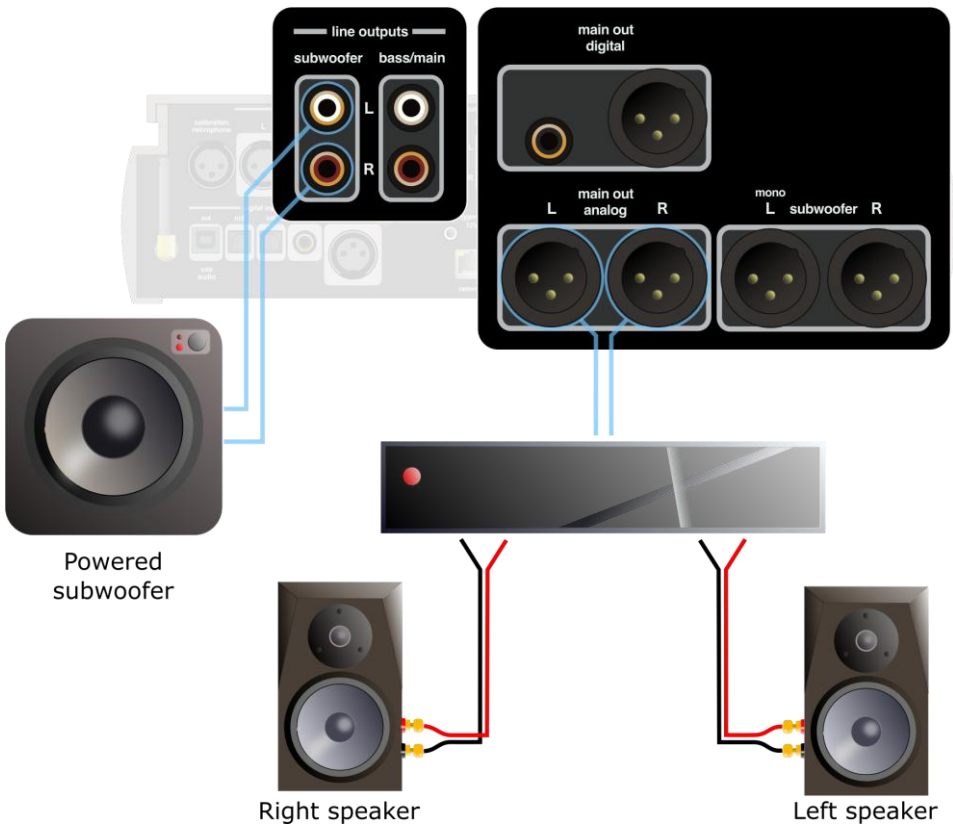




2.6 LINE OUTPUTS: PRE-4

The Pre-4 has both single-ended and balanced outputs for the main output and the subwoofer(s). The subwoofer outputs and crossover are configured with the web-based DEQX Control application. The main output is also available digitally for connection to an external DAC.

The diagram below illustrates an example connection with a pair of speakers and a single subwoofer. Note: connect left and right subwoofer outputs from the Pre-4.



2.7 LINE OUTPUTS: PRE-8

The Pre-8 has both single-ended and balanced outputs for all four sets of outputs: subwoofer, bass/main, mid and high. Crossovers and correction filters are created on the Setup screen of DEQX Control.

Digital outputs are available as a factory-fitted option.[5] The bass, mid and high digital outputs carry the same signal as the analog outputs, with volume control applied. Note that external DACs, if used, must have a constant, low latency for use in this application.

The **aux dig** output, if fitted, carries the full range signal, without any crossovers, filtering or volume control.

Because of its unique flexibility, further discussion of the output connections from the Pre-8 is deferred to the *DEQX HD-Active Calibration Guide*.

[5] If the digital outputs are not factory-fitted, the digital output connectors are present on the rear panel but are inactive.

2.8 CONTROL AND DATA

The rear panel contains a number of control/data interfaces.

network

The Ethernet port is used for system control and for networked streaming audio.

If Wi-Fi connectivity is required, note that many modern home Wi-Fi networks have Ethernet ports available on mesh router nodes. Otherwise, use the supplied external Ethernet to Wi-Fi bridge.

Note that a network connection is *required* when the DEQX is started. Please ensure that you have network connectivity each time it is powered on.

USB

The USB port provides power for the external Wi-Fi bridge. It cannot be used for music sticks or drives.

Trigger output

There are two 3.5 mm trigger sockets on the rear panel. These outputs provide a 12 V DC trigger shortly after the DEQX is taken out of standby, and can be used to turn on external amplification.

Both sockets are identical. Two sockets are provided for convenience, as the DEQX often drives multiple amplifiers.

2.9 BLUETOOTH

Locate the two Bluetooth antennas in the accessory kit. Fit them to the two connectors on the rear panel.

The antennas should be tightened by hand only. Using a wrench or pliers may damage the connector if excessive force is applied.

Note: the Bluetooth antennas *must* be fitted, even if you do not intend to use Bluetooth audio. Please be sure to fit them securely when first setting up your DEQX.

2.10 MEASUREMENT MICROPHONE

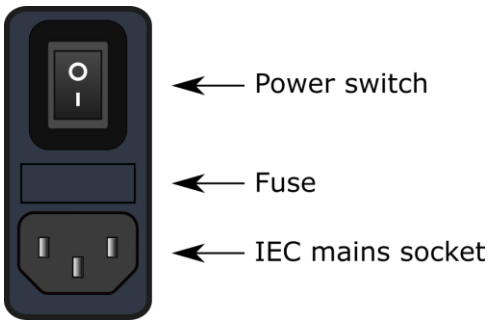
The connector for the measurement microphone used to calibrate speakers and perform room correction is located toward the left of the panel (when looking at the rear panel).

The measurement microphone is needed only when performing measurements.

Note: when connecting the microphone, double-check that the cable is plugged into the microphone connector and not to one of the other XLR connectors.

2.11 POWER

The rear panel contains the AC mains power block:



IEC mains socket

This socket accepts a standard IEC (IEC 60320 C13) mains plug. The specified AC mains voltage is 100–130 V or 200–250 V at 50–60 Hz.

Power switch

The power switch applies power to the unit. This is typically left switched on and the standby mode invoked from the front panel encoder or the infrared remote control.

When connecting or disconnecting cables, use the power switch to physically remove power from the electronics.

Fuse

The fuse holder uses a standard 5x20 mm glass fuse. If the fuse needs to be replaced, it must be rated as follows:

- LS200: 10 A slow-blow for 100–130 V or 5 A slow-blow for 200–250 V.
- Pre-4: 2 A slow-blow for 100–130 V or 1 A slow-blow for 200–250 V.
- Pre-8: 2 A slow-blow for 100–130 V or 1 A slow-blow for 200–250 V.

3 FRONT PANEL / OPERATION

The Gen4 front panel touchscreen provides easy access to the common operations needed during normal usage:

- Volume adjustment
- Mute and standby
- Source selection
- Calibration profile selection

More complex operations are performed with the web-based DEQX Control application, described in the next chapter.

3.1 POWERING ON

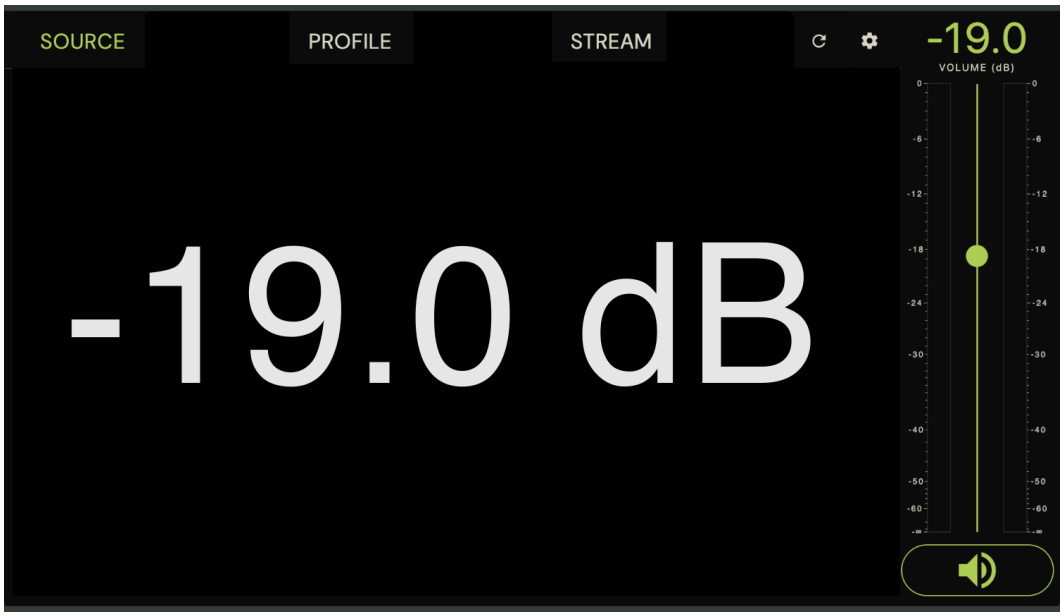
Turn on the power switch on the rear panel.

The volume LED (above the volume control knob) will flash while the DEQX obtains a network address. It will then become a solid color while the various parts of the system initialize.

After 2 to 3 minutes, the touchscreen will display the **Source** page. The DEQX is now ready to use.

3.2 VOLUME

To adjust volume, rotate the volume knob. The volume is indicated by the large overlay on the touchscreen:



Volume can be changed directly on the touchscreen. Tap on the screen to wake it up if it is not on already. Then place a finger on the dot on the vertical bar, hold it there briefly, then slide up or down.

Note: as a safety measure, it is not possible to change volume by just tapping on the slider. This ensures that the volume is not accidentally changed to a high level by an accidental tap.

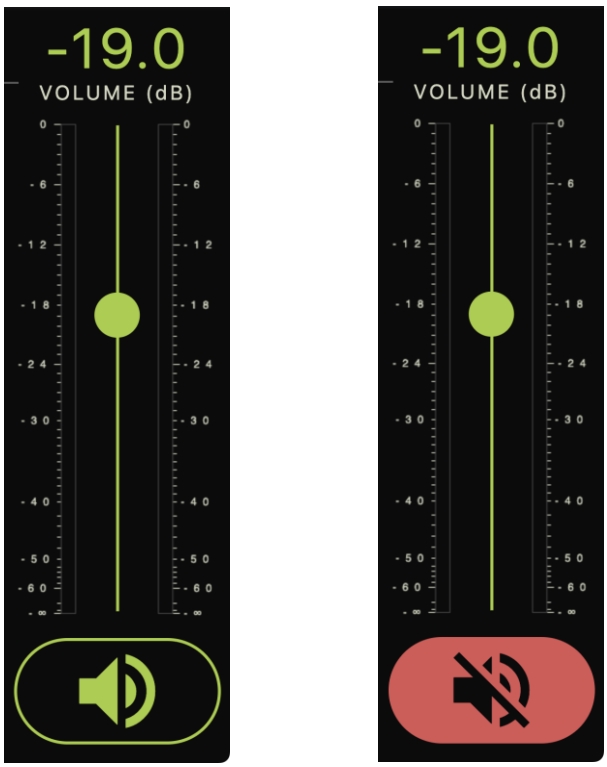
The color of the LED above the volume knob provides an at-a-glance indication of the volume control range while the touchscreen is turned off:

Figure 1. Volume LED

3.3 MUTE

To mute or unmute the DEQX, briefly press on the volume knob. The LED above the volume knob will flash while the DEQX is muted.

The DEQX can also be muted and unmuted using the touchscreen: tap on the icon underneath the volume slider. It will be red while the DEQX is muted.



3.4 STANDBY

To put the DEQX into standby, press and hold the volume knob for several seconds. Or, use the power button on the infrared remote. The volume LED will flash for a few seconds, then turn red. The DEQX is now in standby.

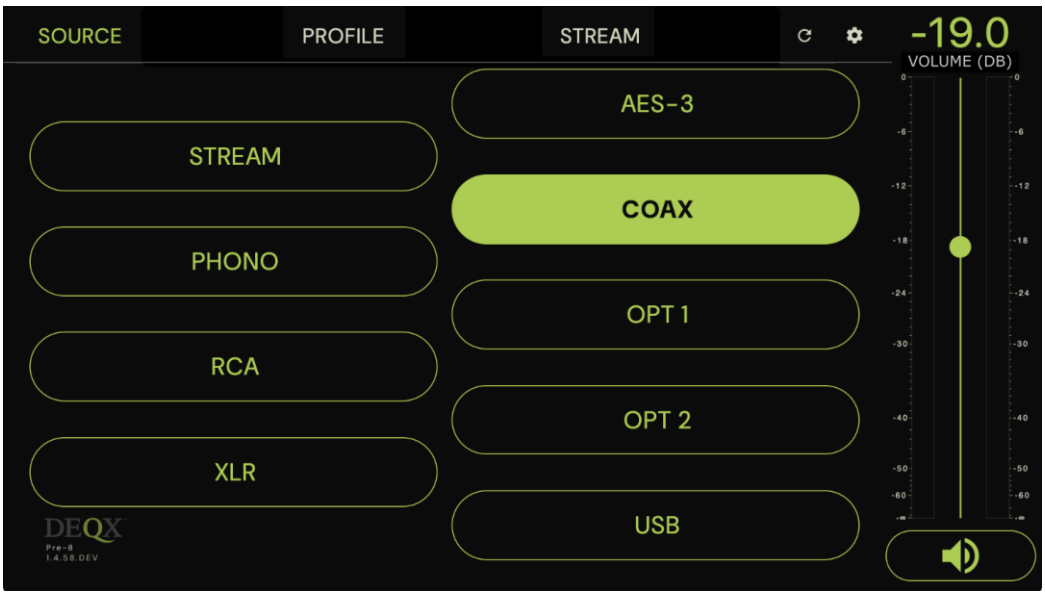
To take the DEQX out of standby, press the volume knob or press the power button on the infrared remote. The volume LED will flash while the DEQX obtains a network address. It will then become a solid color while the system re-initializes. The process takes about a minute, after which the touchscreen will display the **Source** page.

3.5 FRONT PANEL PAGES

There are three pages on the front panel, selected by the top menu bar:

3.5.1 Source

The **Source** page allows selection of any of the nine inputs. Tap to select the desired source.



Note that Bluetooth and network audio are both selected with the STREAM input – the DEQX will auto-select whichever source is currently streaming audio.

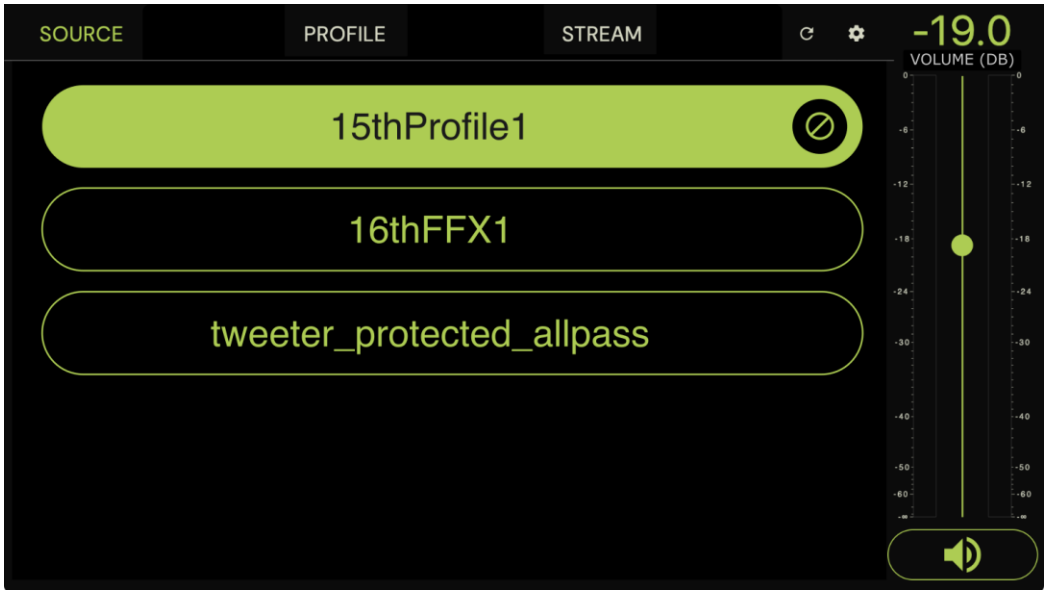
The name displayed for each source can be customized on the **Status** page of DEQX Control. See Appendix B.

3.5.2 Profile

The **Profile** page displays the loaded profiles for ready selection.

Initially, there is a single profile, the "tweeter-protected allpass" profile. This profile passes audio through to all outputs but with a high pass filter on the tweeter channel. When your speakers are calibrated, additional profiles are added to this page.

To select a profile, tap on it. The currently-selected profile is shown in green:



To bypass the selected profile, tap on the circular icon toward its right. The profile will turn red; in this state, the crossovers are active but PEQ filters are disabled.

3.5.3 Stream

The **Stream** page displays the current track being played. Some initial setup is needed – see the DEQX Control chapter.

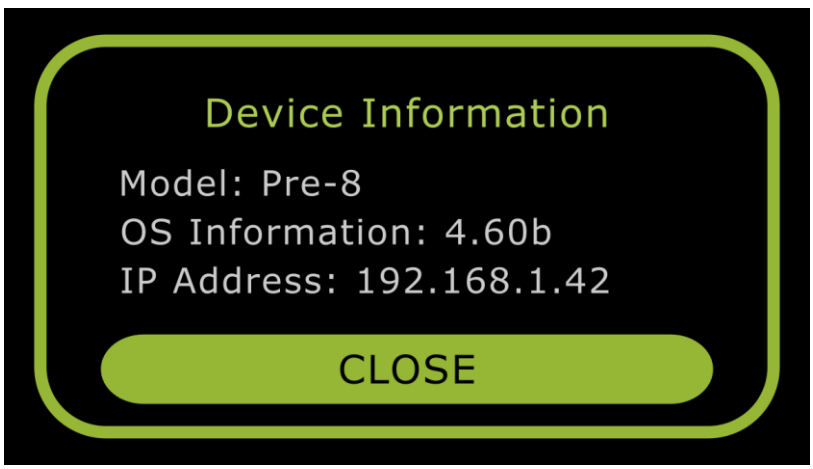
3.6 RELOAD

To reload the touchscreen, tap on the circular icon.

3.7 DEVICE INFORMATION

To view basic device information, tap the gear icon:

The following overlay displays. To close it, tap **Close**.



3.8 SCREENSAVER

The touchscreen's screensaver activates after a set period of time. By default, the screensaver timeout is set to 31 seconds and displays the DEQX logo.

The timeout can be customized on the **Status** page of DEQX Control. The screensaver can also be set to display a blank screen if you prefer. See Appendix B.

3.9 HEADPHONE OUTPUT

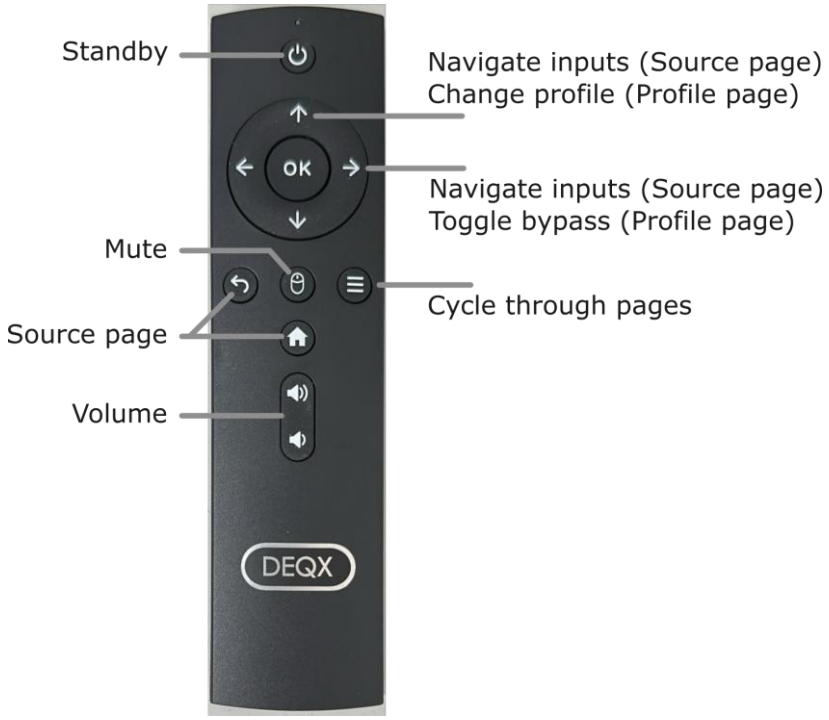
Headphone output is via a 3.5 mm jack on the front panel. When a pair of headphones is plugged in:

1. The speaker outputs are muted.
2. The Profile page switches to a single profile named "headphones engaged."
3. The volume changes to the level previously set for the headphones.
4. The Para EQ page can be used to correct the frequency response of the headphones.

Note that the headphone profile maintains its own independent parametric EQ and volume setting. When the headphones are unplugged, the volume level returns to the level that was set just before the headphones were plugged in. The normal set of profiles is displayed and the speaker outputs are unmuted.

3.10 INFRARED REMOTE CONTROL

The supplied infrared remote control provides control of volume, mute, source selection, profile selection, and standby.

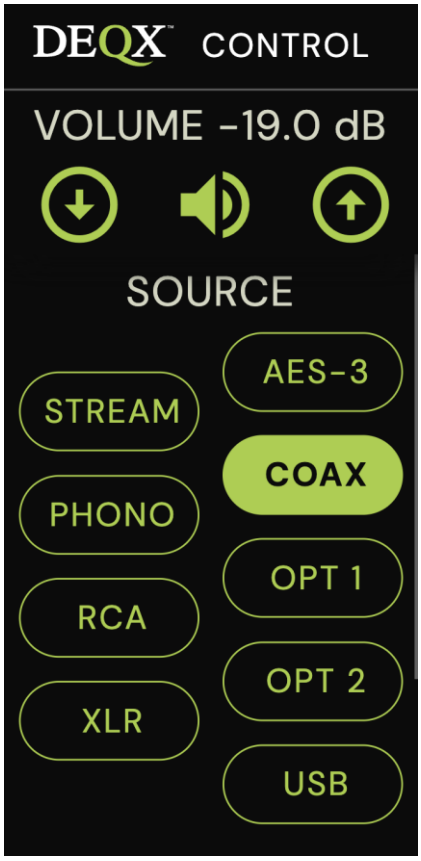


3.11 USING A MOBILE DEVICE AS A REMOTE CONTROL

To use a mobile device as a remote control for the DEQX, first ensure that the mobile device is on the same local network as the Gen4 DEQX. Open Google Chrome and enter the address deqxy3.local in the browser's address bar.

DEQX supports the Google Chrome browser on Android and iOS – other mobile browsers and mobile operating systems may work, but are not within the scope of DEQX support

On a small device (phone), DEQX Control works only in portrait mode. It provides volume control, mute, source selection, and profile selection. Typically, you will need to scroll to access the profiles.



On a tablet, DEQX control works in portrait mode as shown above. In landscape mode, it works like a desktop device but there may be some display limitations due to the small screen size.

4 DEQX CONTROL

The web-based DEQX Control application provides a superset of the functionality accessible from the front panel touchscreen.

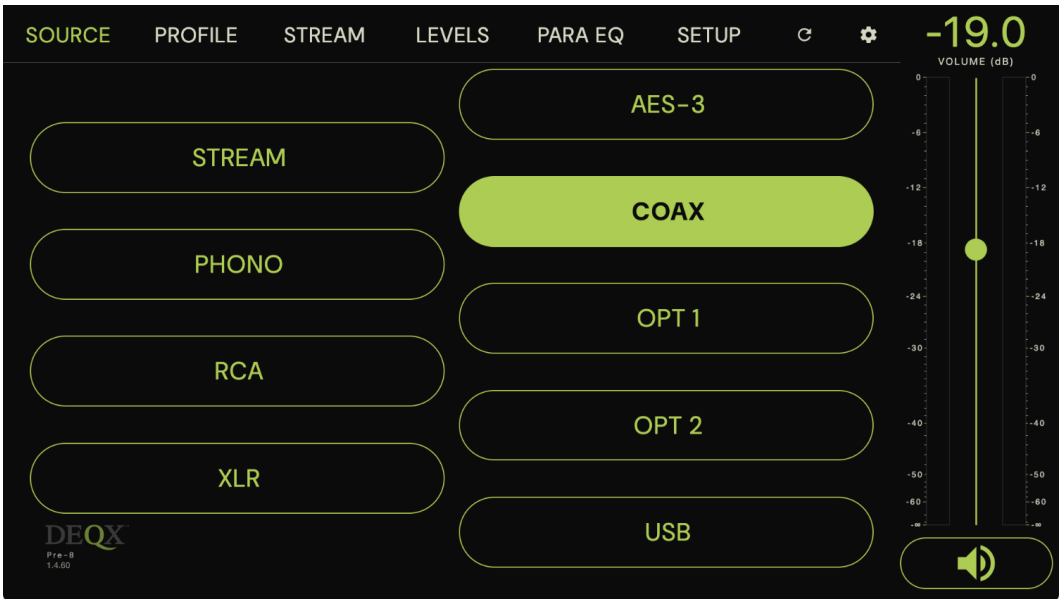
To access DEQX Control, ensure that your DEQX is powered on and connected to your network. Open Google Chrome and enter the address of your DEQX: deqxy3.local.

Browsers other than Google Chrome are not supported. You can download Google Chrome from https://www.google.com/chrome/.

Individual pages in DEQX Control are accessed by clicking on the top menu bar.

4.1 SOURCE

The Source page displays all nine input sources. Click to select the desired source.



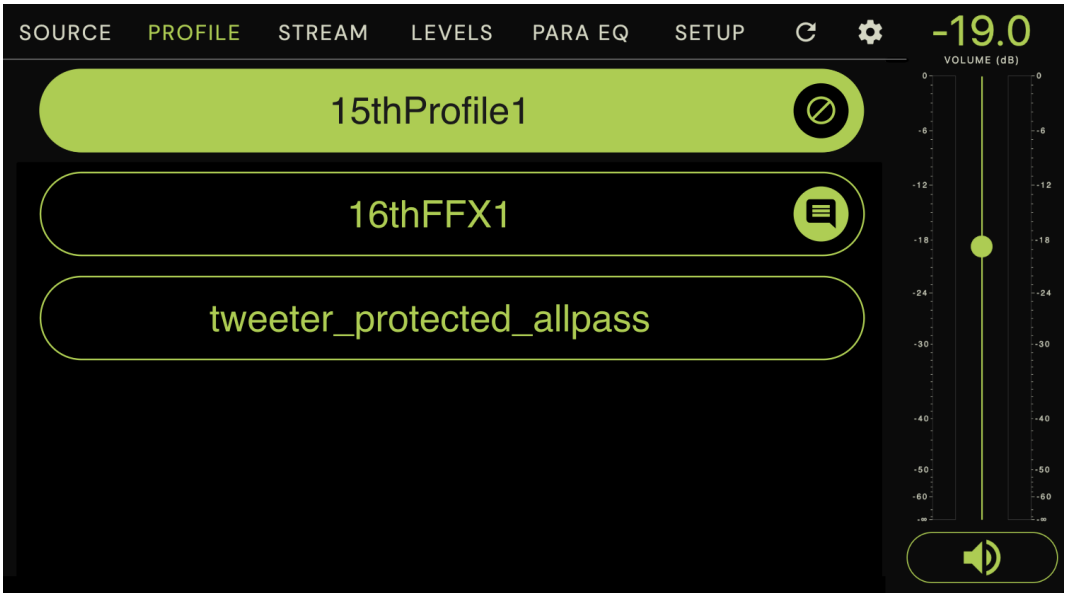
The slider at the right controls the output volume, while the button underneath mutes or unmutes the output.

4.2 PROFILE

The **Profile** page is an enhanced version of the Profile page on the touchscreen.

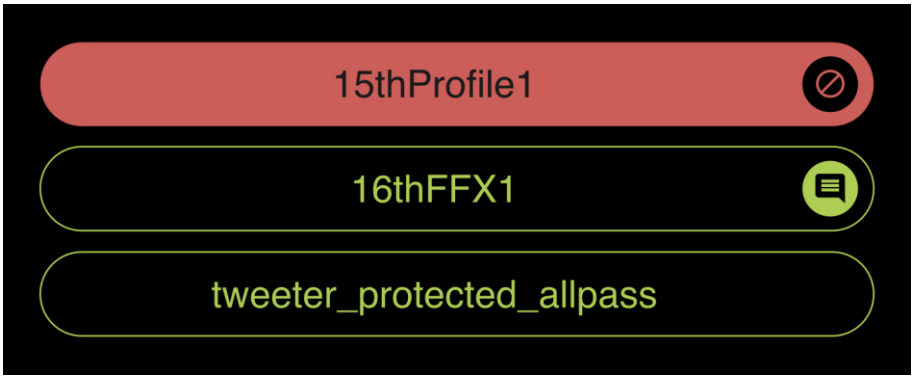
Initially, there is a single profile, the "tweeter-protected all pass" profile. This profile passes audio through to all outputs, so can be used for initial confidence checks and when playing music to a pair of fullrange (passive) speakers. It has an 800 Hz high pass filter on the tweeter channel to provide protection for the tweeter if one is connected. This profile cannot be edited or deleted.

Once you have performed one or more calibrations with your DEQX, additional profiles will appear on this page for easy selection – simply click on a profile name to select it. The active profile is highlighted, as shown here:



4.2.1 Bypassing a profile

To bypass the active profile, click on the icon to its right. The profile will turn red; in this state, the crossovers in that profile are active but PEQ filters are disabled.

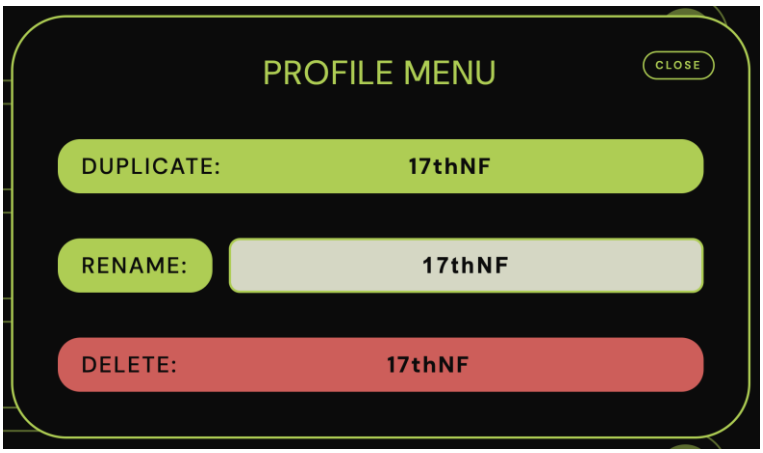


4.2.2 Duplicating a profile

Profiles can be duplicated. This enables you to set up multiple profiles with the same set of correction filters but different parametric EQ – for listening comparison or to tailor your listening for different situations. For example, movies vs music, late-night listening, or to adjust for particular types of music.

To duplicate and rename a profile:

1. Ensure that the profile that you want to duplicate is not active. (In other words, select a different profile, as the active profile cannot be edited or duplicated.)
2. Click on the "three bars" icon to the right of the profile name. The profile menu appears:



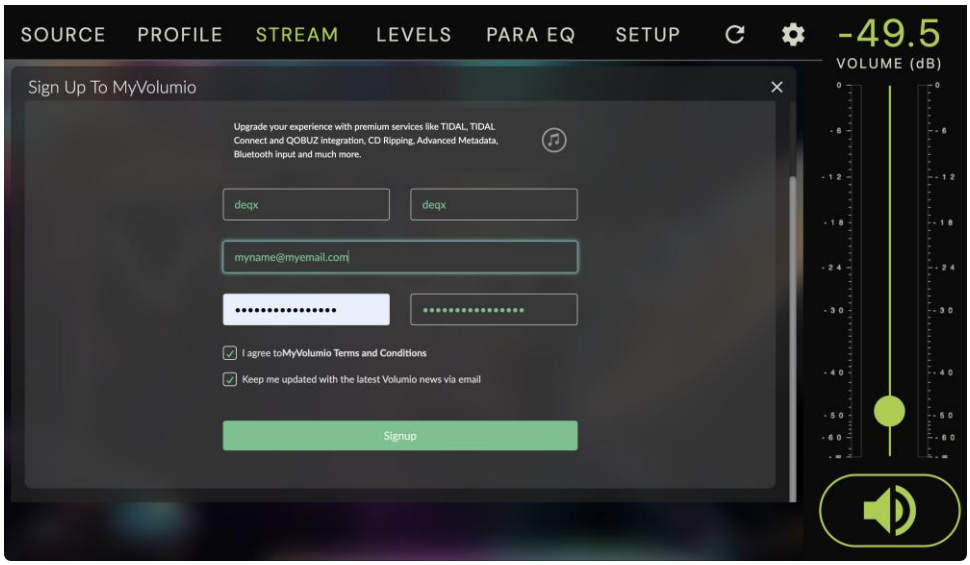
3. Click on **Duplicate**. The menu will close and a new profile will appear in the list with "-copy" appended to its name:

4. Click on the three-bars icon next to the new profile. Edit the name with your keyboard, then click on **Rename**. The menu will close and display the profile with its new name:

Select the new profile (click on it) and then go to the **Para EQ** screen. The parametric filters are initially the same as the profile that you duplicated. You can now change the new profile's parametric EQ as you wish.

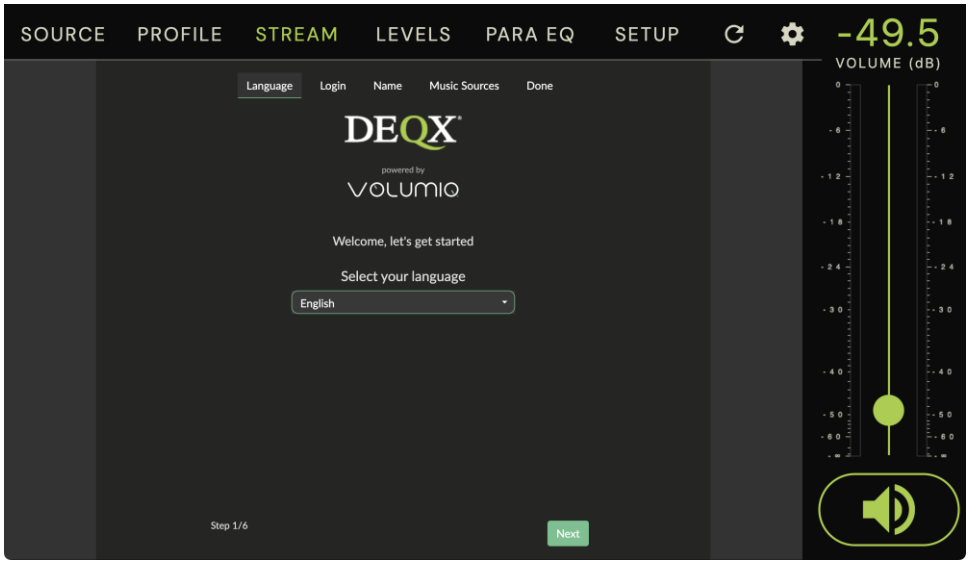
4.3 STREAM

To get started with streaming, you will first need to create a MyVolumio account. Or, if you already have a MyVolumio account, you can just log in on this page.



Note: you will not need to pay a subscription fee. The MyVolumio subscription is included with the DEQX.

Once logged in, there is a short setup wizard to work through:



You can now proceed to set up Volumio for your desired method of streaming. For Bluetooth streaming, use the settings in your mobile device (phone or tablet) to pair with the device "DEQX Gen 4."

4.4 LEVELS

The Levels page show current signal levels on the inputs and on all eight output channels.

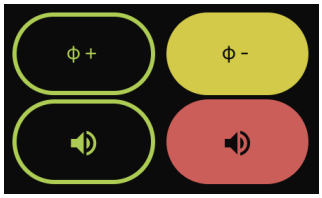
The pair of meters to the right represents the input signal level.

Each pair of meters for SUB, BASS, MID and HIGH represents the level of the two channels after crossovers and filtering but before the main volume control.

The sliders next to each meter can be used to adjust the gain trim of that channel by up to +/- 12 dB.

Additional controls are located on this page. Below each pair of meters:

- The ϕ+ and ϕ- buttons invert the phase of that channel. If the button says ϕ+, phase is normal. If the button says ϕ- and is colored yellow, the phase on that channel is inverted.
- The buttons with the speaker icon mute that channel when colored red.



The +/- buttons under **All Levels** increment or decrement the gain trim of all eight channels in 0.5 dB steps. The trim can range from -12 to +12 dB.

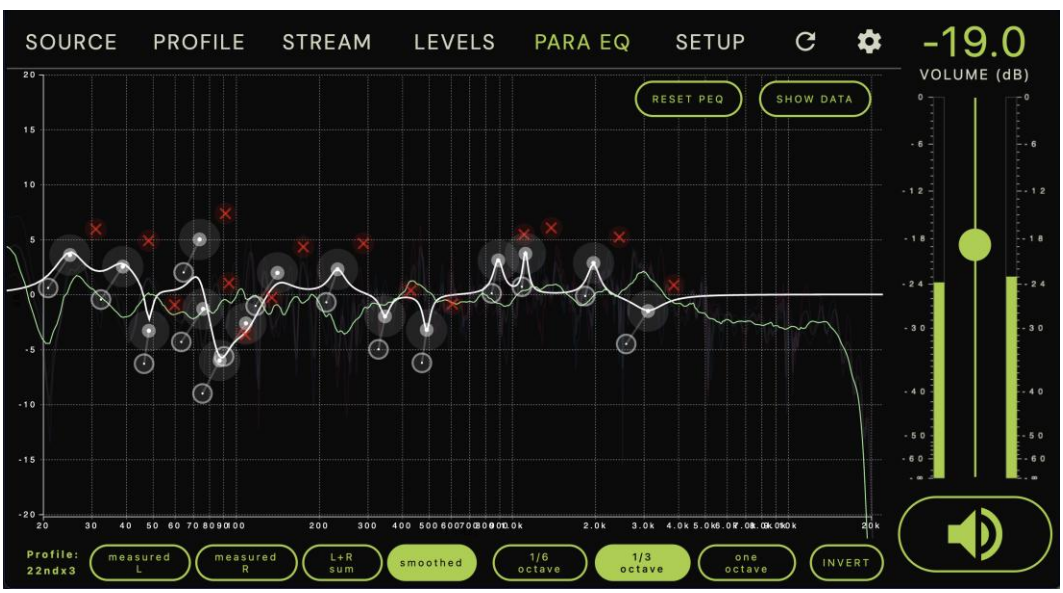
To the right, the ϕ and speaker-icon buttons under **RESET** reset the phase and mute settings for all eight channels.

4.5 PARA EQ

Parametric EQ filter sets are saved per-profile. With no profile selected, or a bypassed profile, no graph is displayed:

To add a filter band, click on the graph. The filter frequency and gain are adjusted by moving the EQ point, and its Q (sharpness) by adjusting the auxiliary handle.

Once a profile has been loaded and is active, the in-room measurement from that profile is displayed as a guide for setting up your EQ. The name of the current profile is displayed at the lower left.



4.5.1 Graph display

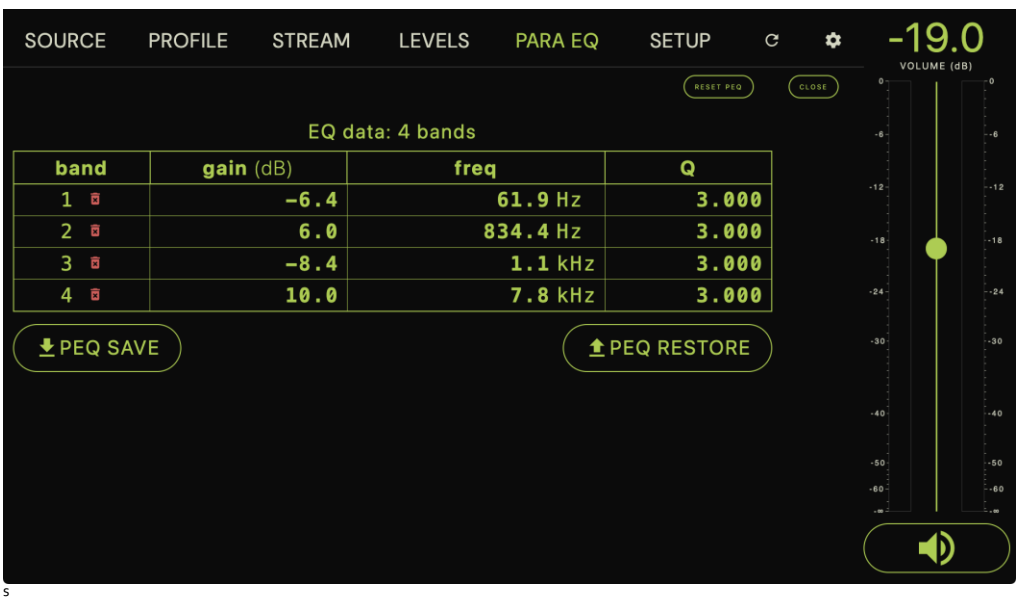
The buttons along the bottom control the graph display. The raw measurement can be displayed for the left channel, the right channel, or the sum of both channels. Or, the **Smoothed** button displays the smoothed version of the sum of both channels:

Smoothing can be set to 1/6th octave, 1/3 octave, or octave smoothing:

Finally, the graph can be inverted with the Invert button. In this case, the shape of the EQ curve typically "follows" the measurement:

4.5.2 Data view

To view the detailed data of all EQ points, click on **Show Data**.



s

To delete a filter, click on the red trashcan icon next to its name. To delete all filters, click on the **Reset PEQ** button towards the top right.

Use **PEQ Save** to save the data to a file, and **PEQ Restore** to load PEQ data from a previously-saved file.

4.6 SETUP

The **Setup** page is where speaker measurement and calibration is performed.

4.6.1 LS200 and Pre-4

The DEQX LS200 and Pre-4 measure and calibrate a single pair of passive speakers. Optionally, one or two subwoofers can be added.

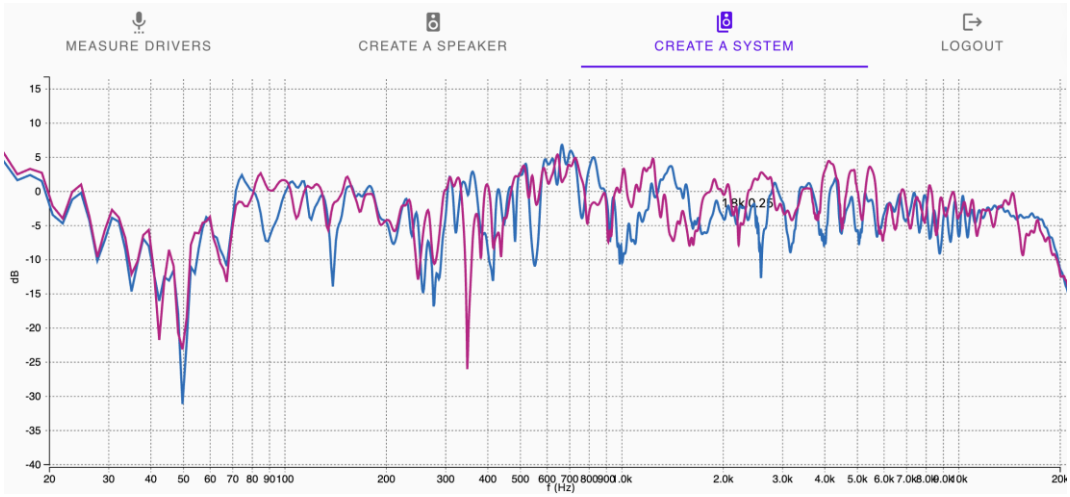
Step 1. Measure one speaker from a close distance. The close distance helps to minimize the effect of the room, so that the speaker itself can be corrected.

Step 2. Optionally, measure the other speaker, also from a close distance.

Step 3. Measure both speakers with the microphone in the listening position.

The system created in step 3 appears on the Profile page on the touchscreen and in DEQX Control.

At each step, measurements are saved to the DEQX cloud. The measurements from step 3 appear on the Para EQ page in DEQX Control.



Adding a subwoofer

To add a subwoofer, connect both left and right subwoofer outputs to the left and right inputs of the subwoofer.

Steps 1 and 2 are extended to measure the subwoofer(s. An intermediate step between steps 2 and 3 creates the crossover between the speakers and the subwoofer.

For more information

Refer to the *DEQX Speaker Calibration Guide* and our online video tutorials.

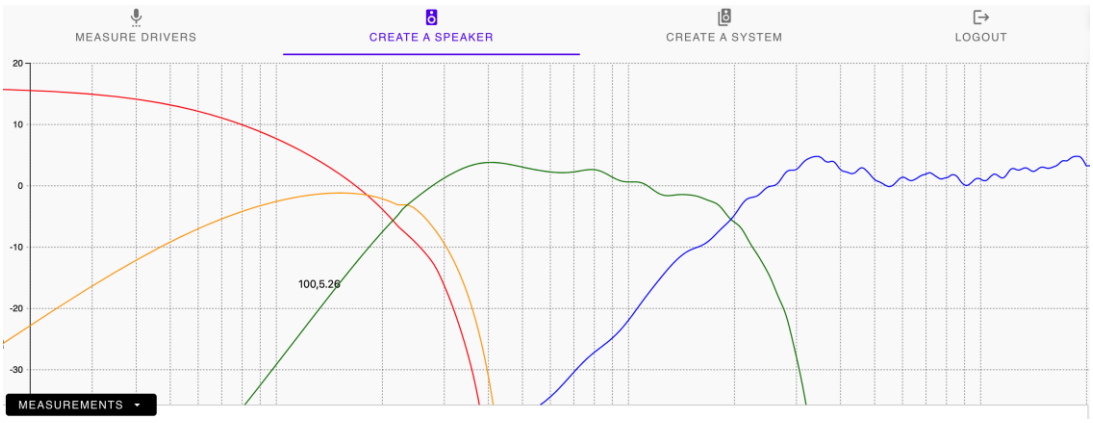
4.6.2 Pre-8

The DEQX Pre-8 measures and calibrates multiple drivers (transducers) and implements a highly accurate crossover between them, correcting for amplitude variations and group delay errors. Up to a four-way pair of speakers can be set up this way.

Step 1. Measure all drivers (transducers) in one speaker from a close distance. The close distance helps to minimize the effect of the room.

Step 2. Create the crossover points between the drivers.

Step 3. Measure the drivers with the microphone part-way into the room, to capture the time-of-flight of each driver to the microphone. The DEQX cloud will then create correction and crossover filters for each individual driver:



Optional. Repeats steps 1 to 3 for the other speaker.

Step 4. Measure both speakers (all drivers) with the microphone in the listening position.

The system created in step 4 appears on the Profile page of the touchscreen and in DEQX Control.

At each step, measurements are saved to the DEQX cloud. The measurements from step 4 appear on the Para EQ page in DEQX Control.

Note

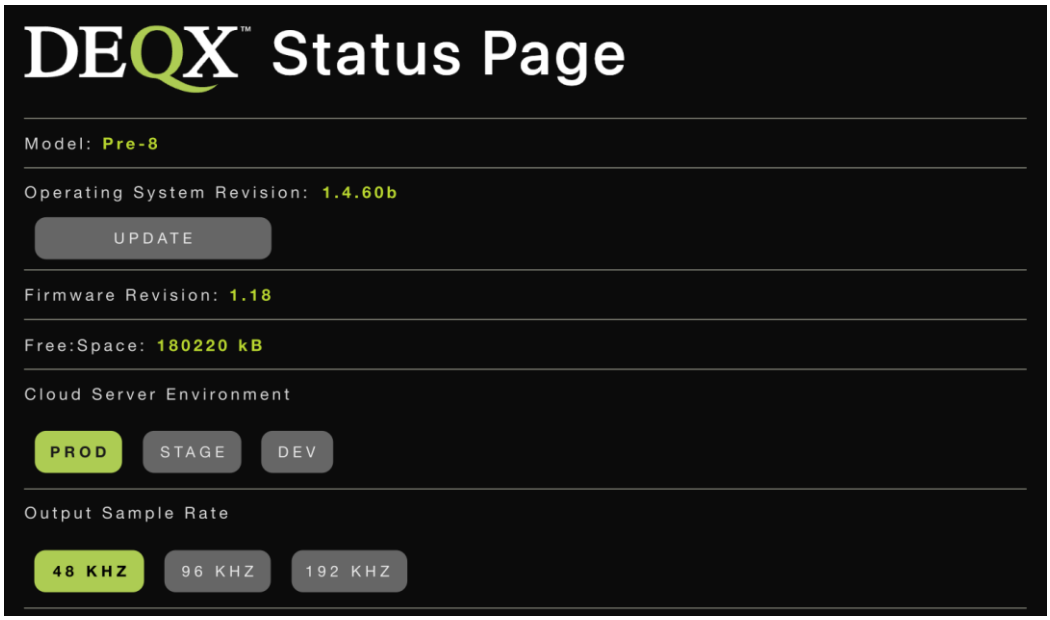
The Pre-8 can also be used for passive speakers, in the same manner as the Pre-4.

For more information

Refer to the *DEQX HD-Active Calibration Guide* and our online video tutorials.

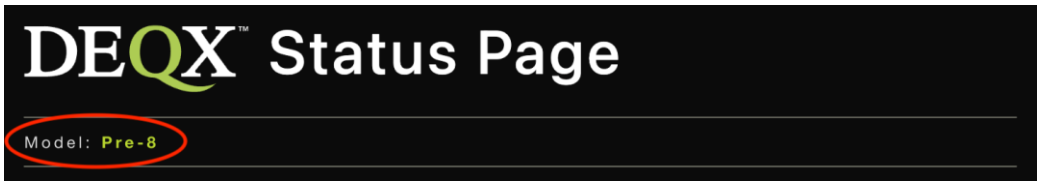
A THE STATUS PAGE

Clicking on the gear icon in DEQX Control opens the DEQX Status page in a separate window:



A.1 MODEL

Your DEQX will have its model preselected. If not, contact DEQX Support.



A.2 SELECT CLOUD SERVER

Select the cloud server that you wish to use. All customers should use the production server ("Prod"). Use Stage or Dev only if you have a specific reason to, as instructed by DEQX Support.

Prod. This is the production server that all customers should use.

Stage. This is the staging server that contains new functionality that has been partially but not completely tested.

Dev. This is the development server that contains new features. It is unstable and you can expect that some things may not work properly if you use this server.

A.2.1 If you have previously used the Staging or Dev servers

If you have previously used the Stage or Dev servers, you can still access your previous calibrations:

1. Switch to Stage or Dev.
2. Open the Setup page.
3. Select your desired profile. It will be downloaded into your DEQX.
4. Change the server back to Prod.
5. From the Profile page, you can select any profile that you downloaded from the Staging or Dev servers.

Note: you cannot use measurements stored in Staging or Dev while you are connected to the production server.

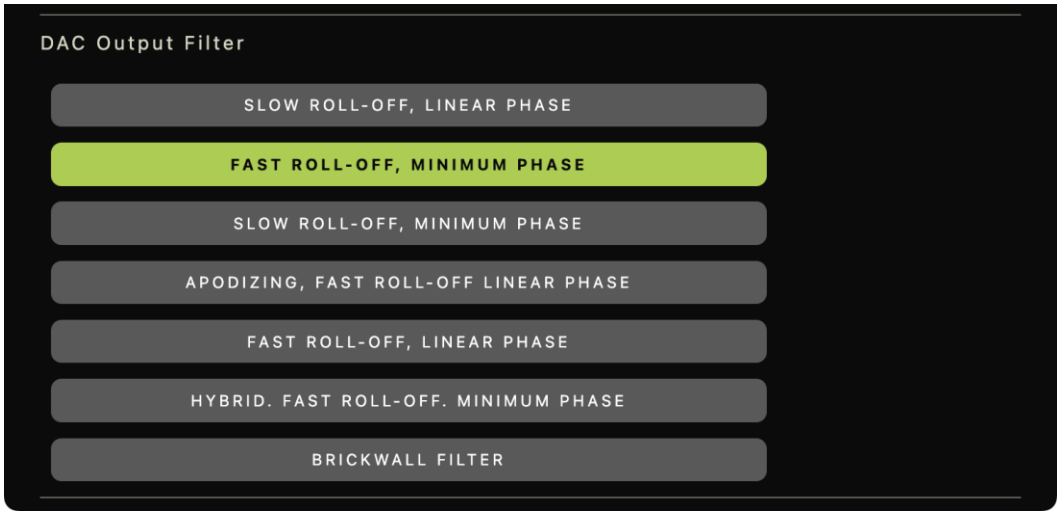
A.3 OTHER SETTINGS

A.3.1 Output sample rate

Select the sample rate of the digital outputs here. This setting affects the digital outputs only – it does not change the internal processing of the DEQX.

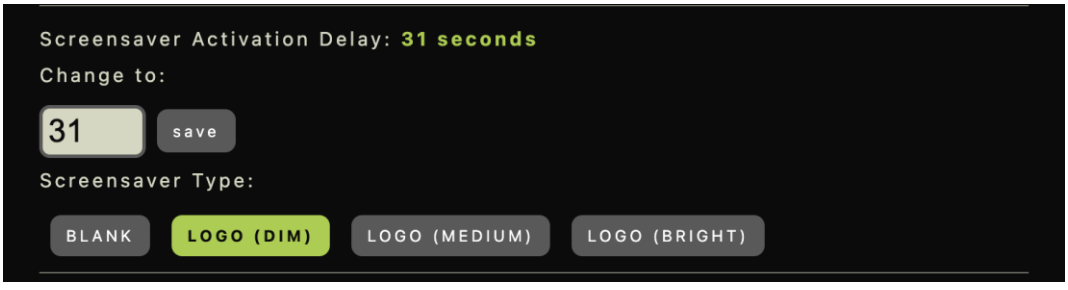
A.3.2 DAC output filter

Select the DAC output filter. These filters are internal to the ESS DAC chips. The default is "Fast roll-off, minimum phase". You can simply change these while listening to decide on which you prefer.

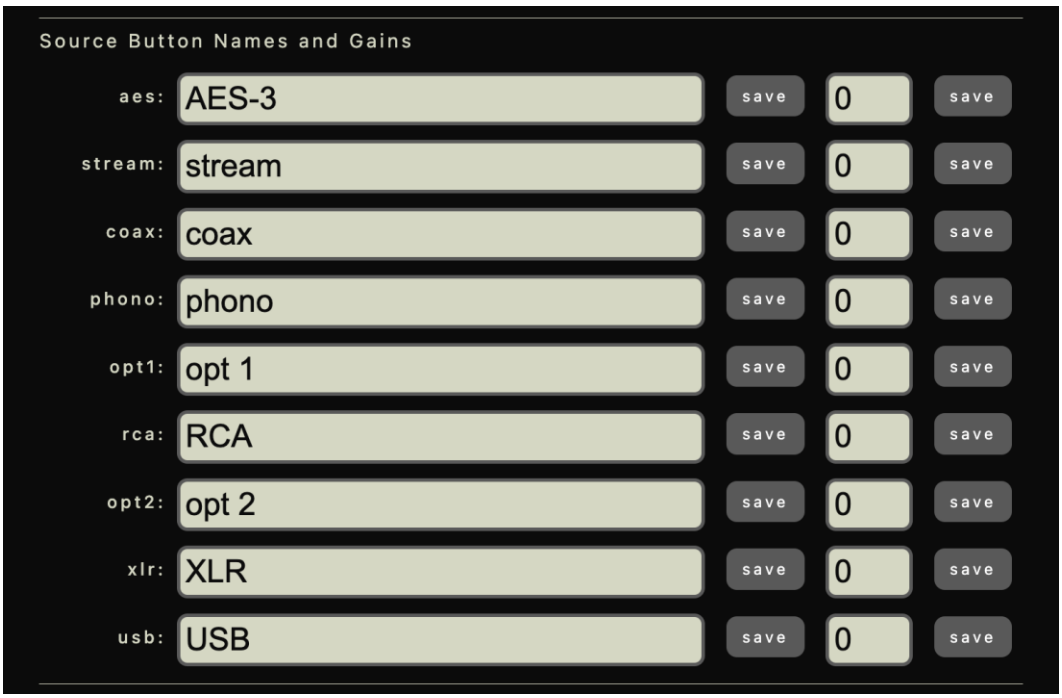


A.3.3 Screensaver activation time

The screensaver activation time for the front panel touchscreen can be set between 10 and 600 seconds (ten minutes). Enter the desired time and press **save**. You can also set the brightness of the screensaver, or have the screen go blank after the specified time.



A.3.4 Custom names for input sources



To set a custom name for an input source, enter the new name in the text field and press the **save** button to its right. (Note: you must press **save** after changing each name, you cannot change all of them at once.)

The custom name will appear in the Source page on the touchscreen and in DEQX Control.

You can attenuate an input by entering the attenuation amount and pressing the **save** button to its right. The value is in dB and can be between -12 and zero.

A.3.5 Log download

The button to download a log file is for use when instructed by DEQX Support. Log files are used for diagnosing specific targeted issues. There is no need to download a log file unless asked by DEQX Support.

A.3.6 Diagnostic information

The remaining items on the page are for diagnostics by DEQX Support. DEQX Support may view them in the event a remote debugging session is required.

B TROUBLESHOOTING

This page provides solutions to the most common technical support questions that we receive. If you have an issue, review the list below. If no solution is found, contact DEQX Support.

The DEQX doesn't boot

Ensure that you have a network connection. The DEQX must be connected with the Ethernet cable to a network that supports DHCP and mDNS.

The touchscreen is not behaving as expected

Tap on the reload icon in the menu bar.

Audio starts early when powering on or coming out of standby

This is expected behavior. The boot process includes both the audio processor and the streaming processor. The audio processor starts operating while the streaming processor is still booting, so if the previously-selected (non-streaming) source is playing audio during boot, its audio will be processed and sent to the outputs before the touchscreen is fully initialized.

There's no signal from the measurement microphone

Check that the microphone cable is plugged into the correct connector on the rear panel.

If you are not using the DEQX-supplied microphone, be aware that some types of microphone will not work properly in this application, or at all. Switch back to the DEQX-supplied microphone.