

KHARMA

EXQUISITE COLLECTION

OWNER'S MANUAL

EXQUISITE MIDI SUBWOOFER

Dutch Masterpieces
HANDCRAFTED IN THE NETHERLANDS

SAFETY INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS

Warning!

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Important

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

Important

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

SAFETY INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS DSP VERSION

Please read all instructions carefully and completely before operating your active Exquisite subwoofer.

1. Always disconnect AC power before connecting or disconnecting any cables, or when cleaning any component
2. This product uses a three conductor power cord, which includes an earth-ground connection. To prevent shock hazard, always connect it directly to a grounded outlet.
3. Never use any AC extension cord with this product.
4. Never use flammable or combustible chemicals for cleaning audio components.
5. Never operate this product with any covers removed.
6. Never wet the inside of this product with any liquid.
7. Never pour or spill liquids directly onto this unit.
8. Never block air flow through ventilation slots or heat sinks.
9. Never bypass any fuse.
10. Never replace any fuse with a value or type other than specified.
11. Never attempt to repair this product yourself. If a problem occurs, contact your Kharma dealer.
12. Never expose this unit to extremely high or low temperatures.
13. Never operate this product in an explosive atmosphere.
14. Always keep electrical equipment out of the reach of children.
15. Always consider manual and safety instructions in any end use application.

Before connecting this product to an AC power line, verify if the voltage of the amplifier matches the AC line voltage where the unit will be operated. Never attempt to operate or connect this product to an AC line voltage that is different from the one to which the amplifier is set. Using a different setting can damage the unit and will void your warranty!



Awaken your senses

CONGRATULATIONS

You are now a Kharma subwoofer owner. Your new Exquisite subwoofer system, properly installed, will give you all the satisfaction and enjoyment you expect from Kharma. Technically at the fore-front of current audio equipment design, the Exquisite subwoofer will reveal the full emotional range of music and will do so with vivid dynamics and detail. As with any high quality product, special care must be taken to install and operate your new subwoofer system.

Please read this manual carefully and totally prior to installation.

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INTRODUCTION TO THE EXQUISITE SUBWOOFER

Carbon cone.

The 15 inch woofer used in this subwoofer system is built with our in house developed carbon honeycomb sandwich cone. We have created a very stiff but still lightweight cone, making it a quick and direct responding driver. This results in a very natural sounding bass.

Cabinet

The cabinet of the Exquisite Subwoofer is constructed of thick high pressure laminate.

DSP and amplifier technique

This refined high-end subwoofer comes with an app for the iPad. With this app you can control the volume of the subwoofer and tune the sound with a parametric equalizer. The same controls are also made available in the software for the PC and Mac.

Stand

Mechanical residual vibrations of the cabinet are terminated by the Spike Disk Suspension System (SDSS) by minimizing the contact area between the cabinet and the floor. The SDSS stand also provides a fixed and levelled orientation for the cabinet drivers, because each spike can be adjusted individually in the vertical direction

PART LIST

The box will contain

- Exquisite subwoofer
- 1x power cord
- 4x spike disc
- 4x felt pad

In addition you have received

- Manual
- Burn-in CD
- Registration form
- Quality certificate
- Certificate of Authenticity

Important

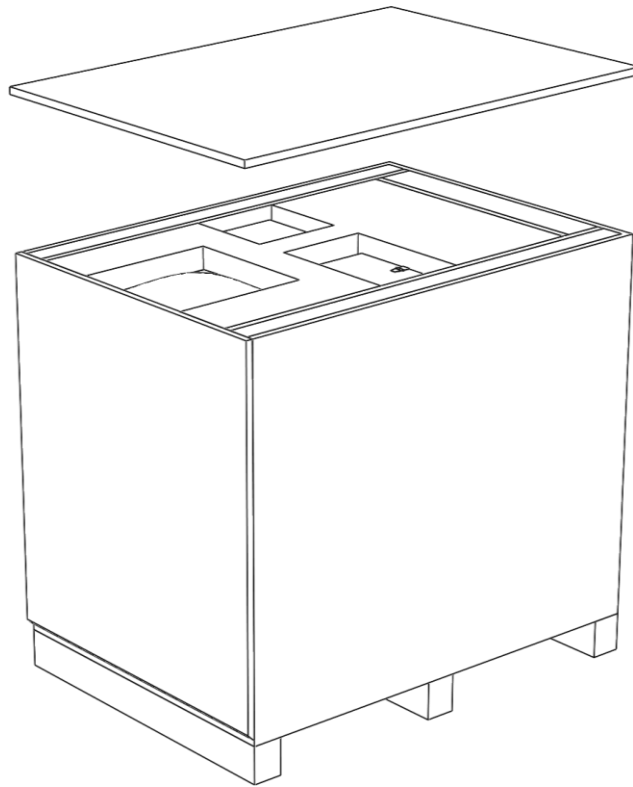
Please read the manual thoroughly before taking further steps.

UNPACKING

Opening the box

Upon opening the box, inspect the box carefully for any sign of transport damage. If there is damage, immediately call your dealer or the trucking firm that made the delivery. Do not delay in reporting the damage. Please store the crates for future use

Step 1: remove the screws from the top panel of the box and remove the top panel



When the top panel of the crate is removed, you will find a small leather box with spike discs and gold plated logo pieces for the stand of the speaker.

A leather book with the manual, the complementary Burn-in CD, the registration form, the quality certificate and the Certificate of Authenticity

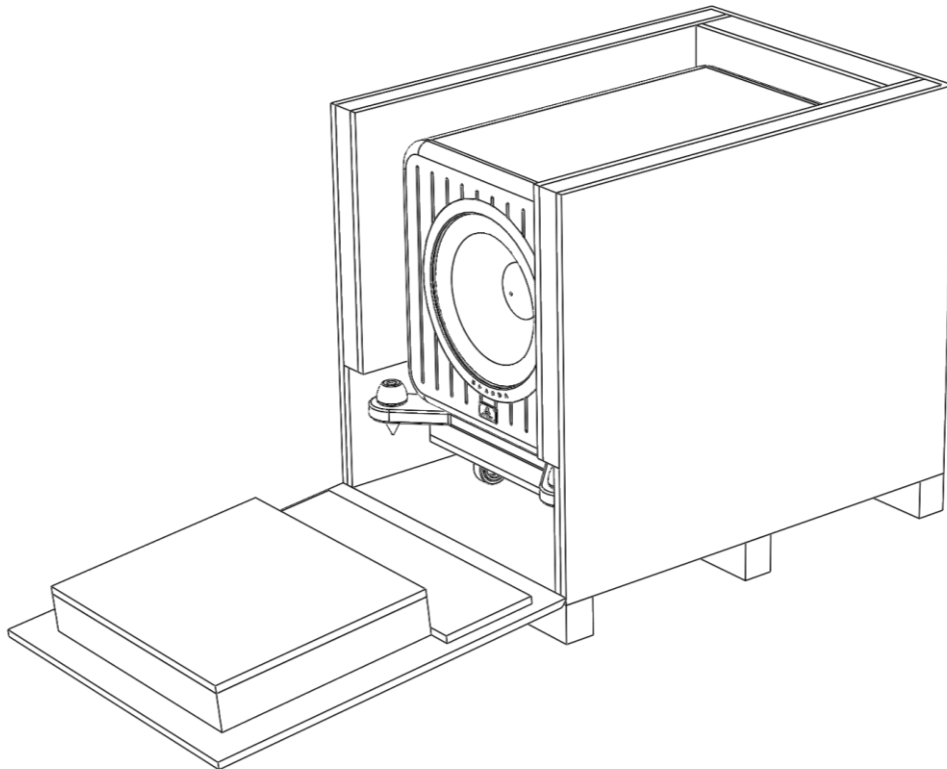
And latest there is a velvet bag with a power cord for the subwoofer.

Step 2: remove the screws from the front panel of the box.

The front panel will hinge down and this way turns into a ramp to roll out the speaker.

Remove the protective foam from the ramp.

Be careful when rolling out the loudspeaker, it is quite heavy.



Step 3: Maneuver the subwoofer in place

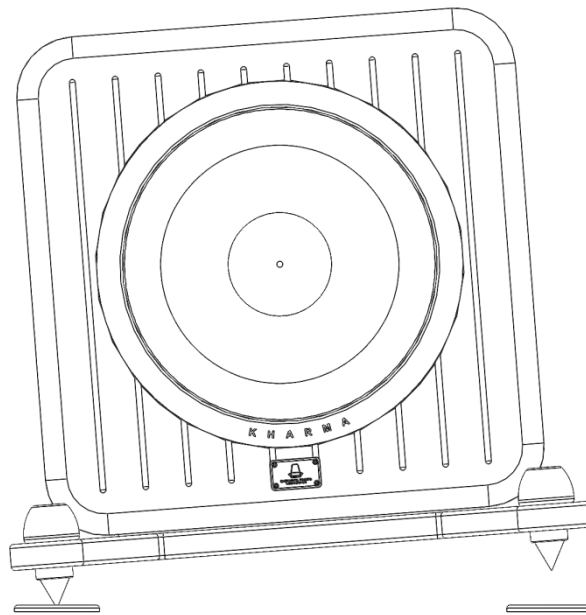
You can now push the subwoofer in place. To lift it off the cart, we advise to have four people lifting one corner of the speaker and a fifth person to remove the cart.

Note that due to the weight the spikes can damage your floor. To protect your floor please put some protective material underneath the spike when you place the subwoofer, e.g. some small pieces of plywood.

Step 4: placing the spike discs

Lift the subwoofer to one side to place the spike discs underneath the spikes.

Be careful, when not positioned right the spike discs can be damaged by the spikes.



Step 5: placing the logo pieces

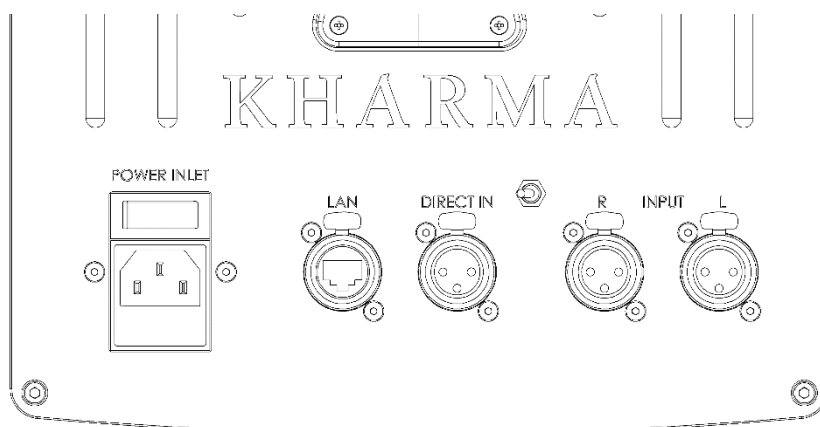
You can now place the logo pieces in the top of the cones of the spike disc suspension system.

CONNECTION

At the rear of the Exquisite subwoofer all connectors can be found: power, network, direct input and R (right)+L (left) input.

When choosing direct input, the internal DSP will be bypassed. For this option make sure the switch is set to the left.

When you connect to the R, L or both R and L inputs, the signal will go through the internal DSP. Both left and right input signal will be summed up. For this option make sure the switch is set to the right.



BE CAREFUL to connect your power cord to a 115V or 230V power source depending on the configuration of the DSP! If you are not sure about the voltage to which your DSP is configured please contact your dealer. DO NOT switch on the power until all wiring is connected correctly!

The DSP power inlet is supplied with a gold plated copper isolator. For the best sound quality it is preferred to leave this isolator on the DSP. However some power cords are too big and make it impossible to use the isolator.

Powering the Subwoofer module

Connect a power-cord to the power inlet on the back of the subwoofer. Switch on the subwoofer using the red button. The subwoofer is on when the red button is lit. Always turn off the power of your entire system before making connections to the subwoofer. It is advised to turn off the subwoofer when not used for a long time e.g. during holidays.

When the power switch at the back of the subwoofer is turned on, the LED indicator at the back will turn blue. This means the DSP and the amplifier are in operation mode.

With the app you can switch between operating mode and standby mode. In standby mode the LED indicator will be off.

LAN Connection

The Exquisite subwoofer can be controlled wireless with the iPad app: Kharma Control. Therefore the iPad must be on the same network as the subwoofer.

Hence the LAN connector should be connected to the same router / switch that provides the Wi-Fi signal used on the iPad. If this is not the case, the app will not recognize the subwoofer.

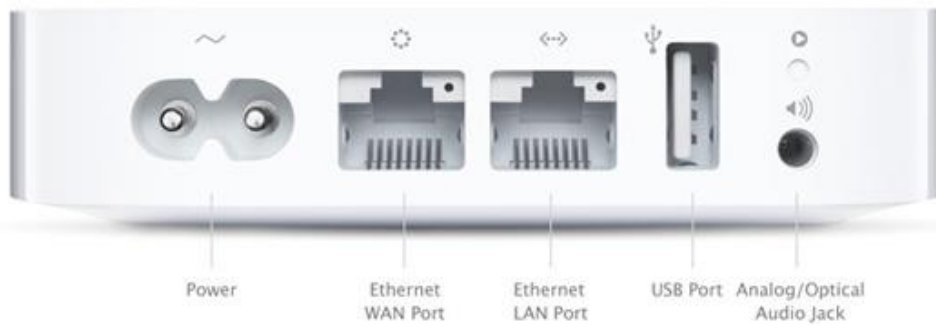
When you have problems with the network configuration, it is also an option to set-up a standalone network especially intended to control the subwoofer module with the iPad. The easiest set-up is illustrated on the next page.

When you still have problems with connecting to your Exquisite subwoofer, please consult the Authorized Kharma-dealer from whom you have purchased the system.

Standalone Network

When it is preferred to have a dedicated network for the Exquisite subwoofer, an easy way to control the subwoofer via the iPad is explained below. The Apple Airport Express can setup a dedicated Wi-Fi network for the DSP that needs a cabled LAN connection.

1. Connect the LAN port of the Airport express to the LAN connector on the DSP module



2. Configure the Airport express on the included iPad.
3. Go to Settings > Wi-Fi and select the Airport



4. Create a new network and give the network a name and password



5. The network setup is completed



6. The Exquisite subwoofer can now be detected in the iPad app: Kharma Control.

CONTROL APP

The Exquisite subwoofer module can be controlled via an iPad app. The Kharma Control app is pre-installed on the included Apple iPad, but can also be downloaded from the App store for free. Please update the app if available. This optimizes the performance of the communication with the subwoofer.

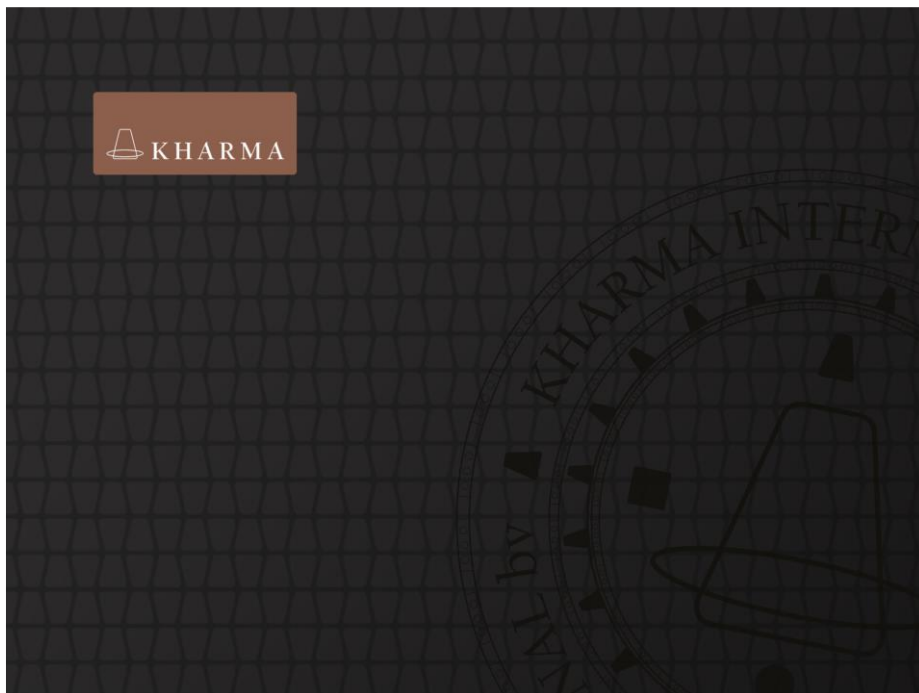


The subwoofer can only be controlled when the network is configured properly. When no device becomes visible in the app, please check the network configurations.

Important

Opening app

The Kharma Control app opens with the below image. This will be visible for a short time, before any device can be controlled.



Device selection

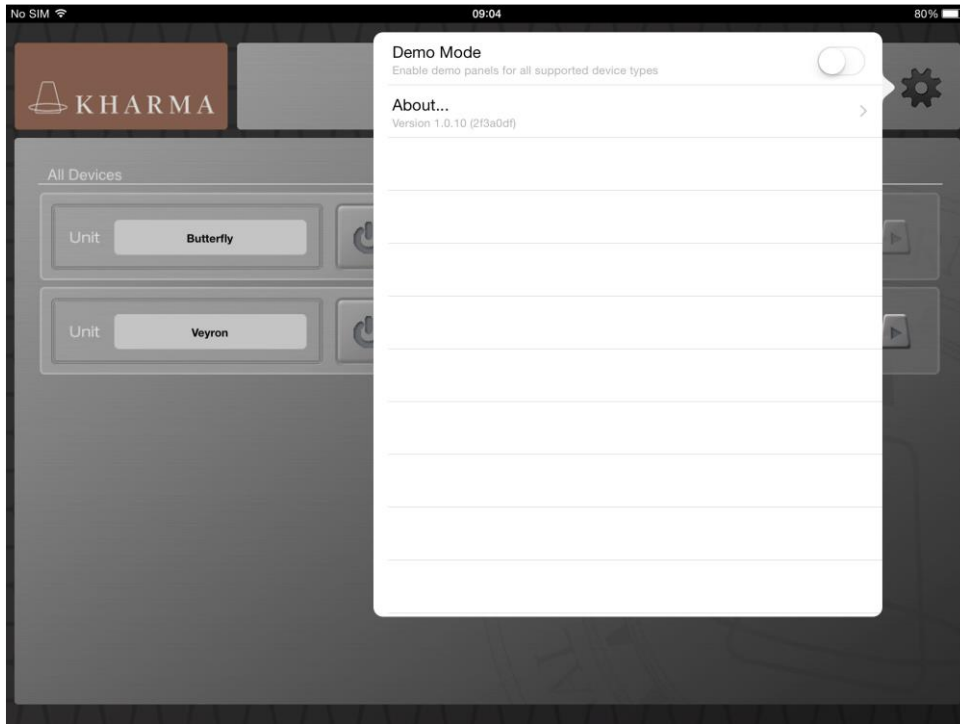
The Device Selection shows which unit is detected in the network. Hence the DSP module must be connected to the same network as the iPad. When the module is detected in the network, the following functions are available:

- **Unit name:** A personal name can be given to each device
- **Standby:** The subwoofer can be set to standby (grey power indicator) or to active (green power indicator).
- **VU meter:** Indication of the left and right volume received at the input of the subwoofer.
- **Mute:** When the mute function is enabled, the button turns brown.
- **Control:** The control center will be opened, which gives access to more control features of the device.



Demo Mode

Under the settings menu in device selection, there is a demo mode available. The demo mode gives the option to interact with three different devices without having a real device available.



Control Center

The control center opens when the “control” button is used during Device selection. The Control Center consist of two main buttons on the left frame:

- Presets: load factory or custom presets
- Sub: configure equalizer

The Control Center always opens in Preset mode (button is brown).

The Control Center can be closed in the right upper corner. The app will return to Device Selection to be able to switch to another device.

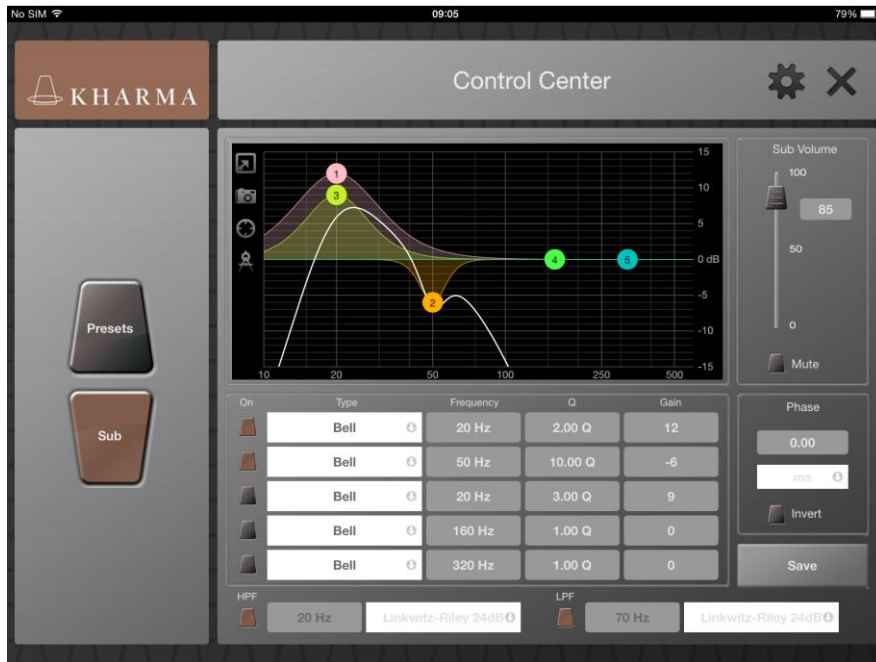
Preset menu

The preset menu is intended to give basic settings during installation and to access custom presets. The basic settings can be found under button Kharma 1 to 5. The “Custom..” button will hold a list of local saved custom presets.



Sub menu

When the “Sub” button in the left frame is used, all subwoofer control parameters become visible. These can be subdivided in the functional blocks illustrated below.



Subwoofer volume

The subwoofer volume can be controlled from 0 to 100% by using the slider or the entry field. When using the entry field, please be aware that the volume will jump to the entered value. The mute button can be used to silence the connected subwoofers.

Volume indication versus dB scale

| Volume | dB scale |
|--------|----------|
| 100 | + 12 dB |
| 95 | + 9 dB |
| 90 | + 6 dB |
| 85 | + 3 dB |
| 80 | + 0 dB |
| 75 | - 3 dB |
| 70 | - 6 dB |
| 65 | - 9 dB |
| 60 | - 12 dB |
| 55 | - 15 dB |
| 50 | - 18 dB |
| 45 | - 21 dB |
| 40 | - 24 dB |
| 35 | - 27 dB |
| 30 | - 30 dB |
| 25 | - 33 dB |
| 20 | - 36 dB |
| 15 | - 39 dB |
| 10 | - 42 dB |
| 5 | - 45 dB |
| 0 | - Inf. |

High-pass filter

A high-pass filter (HPF) can be set by enabling or disabling the filter with the trapezium button. The filter is enabled when the button is brown. An entry field can be used to set the cut-off frequency. There are three different filter types to choose from: Bessel, Butterworth and Linkwitz-Riley. The filter order can vary from 6 dB/Oct to 24 dB/Oct.



Low-pass filter

For the low-pass filter (LPF) the same principles hold as for the high-pass filter.

Phase settings

The phase behavior of the subwoofer can be adjusted by filling the entry field and selecting the right unity (feet, inch, meters, milliseconds). The phase can also directly be inverted with the trapezium button.

PEQ points

Besides the LPF and HPF, also 5 parametric equalizer (PEQ) points can be used to filter the subwoofer. These 5 individual PEQ points can be set by using the entry fields indicated below or making use of the interactive graph of the filter. The first row of the PEQ points is PEQ 1, which is corresponding to the pink dot with number 1 in the graph. The second row corresponds to the orange dot with number two and so on.

| On | Type | Frequency | Q | Gain |
|---|------|-----------|---------|------|
|  | Bell | 20 Hz | 2.00 Q | 12 |
|  | Bell | 50 Hz | 10.00 Q | -6 |
|  | Bell | 20 Hz | 3.00 Q | 9 |
|  | Bell | 160 Hz | 1.00 Q | 0 |
|  | Bell | 320 Hz | 1.00 Q | 0 |

The PEQ point is enabled when the trapezium button is brown. The type of PEQ can be set to: Bell, Notch, All pass, Low Shelf, High Shelf, Bandpass, High Pass or Low Pass.

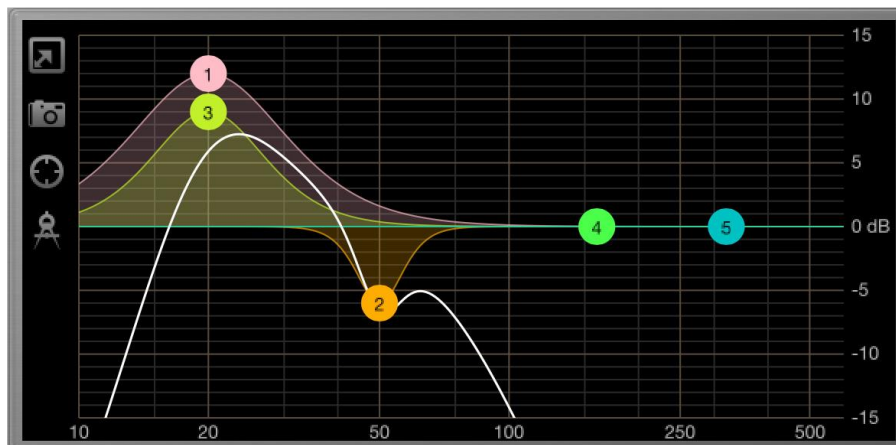
Three parameters can be set to influence the PEQ:

- Frequency: The frequency can be set from 10 Hz to 20 kHz. For the Enigma Veyron Subwoofer it only makes sense to use frequencies up to 200Hz.
- Q-factor: The Q-value can be set from 0.2 to 25
- Gain: The gain can be set from -12 to 12 dB

Filter graph

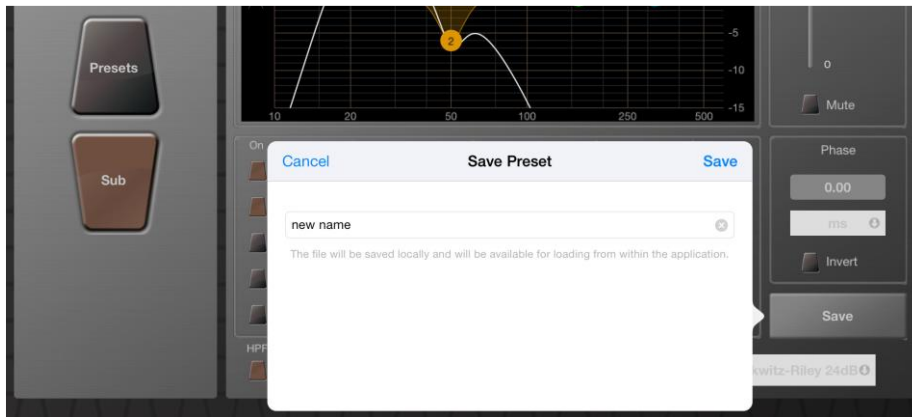
The filter graph shows as well the individual PEQ points as the effective filter that is applied to the audio signal. The effective filter is shown by the white line and is a summation of the LPF, HPF and PEQ points that are enabled.

The individual PEQ's can be changed by dragging the dots to another area. Because the dots are corresponding to a PEQ point, also the entry fields below the graph will change along with the movement.



Save custom preset

With the “Save” button, a custom preset can be stored under a particular name. The preset will save all current parameters: PEQ points, LPF, HPF, volume and phase. The saved preset can be found by switching to the preset menu and use the “Custom..” button. The preset will only be stored locally on the iPad with which it is created.



POSITIONING YOUR SUBWOOFER

Room Acoustics

A good listening room has just the right amount of reflection and absorption. The performance of any loudspeaker depends upon the speaker's location in the room and the acoustical conditions in that part of the room. Furnishing, size and proportions all effect tonal balance, imaging and bass characteristics.

In order to test the sonic balance of your room, stand in the location where the speaker will be installed and clap your hands two or three times. If the room is reverberant, you will hear a sharpness or echo. If the room is dull, the sound of the clap will decay rapidly and there will be little or no echo. Large areas of glass, mirrors and wood-paneling will reflect sound waves and often result in brittleness and extreme brightness.

You can correct this by breaking these sound-waves with softer surfaces; for instance, draperies or wall hangings. In general try to create random reflections. We advise you to take your time positioning the speakers.

Positioning

We recommend experimenting with the subwoofer placement to obtain the best spectral balance, openness and perception of depth. For good results, the speakers should be no closer than 20cm from the rear wall and at least 20cm from the side walls.

Stereo setup

In case of one subwoofer, ideally the subwoofer should be placed in the middle between the main loudspeakers. In case of two subwoofers, the subwoofers should be placed near the main speakers on a symmetrical basis. Using the phase shift function on the remote one can set the coherency between the main speakers and the subwoofer(s).

Surround setup

A little more freedom is allowed in placing the subwoofer for home theatre applications. Placing the subwoofer near a corner or back wall of your room will yield the most bass and with the parametric equalizer function the bass can be flattened out and matched with the main speakers.

USING YOUR SUBWOOFER

Advice on cabling

All products in the Exquisite range are known for their uncompromised design to the finest detail. For this reason there can only be put justice to the quality of the Exquisite subwoofer, when the used external cable is also uncompromised to the highest level. Therefore the use of the Exquisite cable series - which was especially designed to match the Exquisite subwoofer – is strongly recommended to complement the sound of the Exquisite subwoofer.

First of all we use in our external cables the same quality conductors and isolators as internal. So you get a sonic match. Furthermore an important reason for using these cables is that you will get exactly the sound that the Kharma team had in mind during the development of both the loudspeaker and the cables.

For the true connoisseurs of musical art, Kharma offers the possibility to even go one step further by complementing their Exquisite Subwoofer with the Enigma Veyron cable series.

Burn-In

The Exquisite subwoofer needs quite a bit of playing time to reach maximum result. The use of a Burn-in test-CD is recommended to speed up this process. With a “burn-in” test CD like the XLO or Sheffield-lab CD, burn-in time is reduced to approximately 50 hours. After burning-in your system, you can play demagnetizing tracks for maximum clarity. Your system will then be optimized and sound more open, more detailed and will display a more natural musical warmth.

Taking care of your subwoofer

Use a soft cloth and a spray-cleaner to clean the surface and wood-sides. No further care is necessary.

In event of trouble

If the Exquisite subwoofer produces distorted sound, no sound at all or seems to be malfunctioning otherwise, first determine if the problem is in the DSP module or one of your other components:

- All subwoofers do not produce sound. Please verify if accidentally a mute function is used in the Kharma Control app.
- Try to replace the interlink cable between the subwoofer and the pre amplifier. If this eliminates the problem, the cause of the problem is in the interlink cable.
- Replace the subwoofer for another one if possible. If the problem remains, the malfunction will be either in the interlink cable or the pre amplifier.

When the problem seems to be in the Exquisite subwoofer, turn of the system, disconnect the subwoofer and consult the Authorized Kharma-dealer from whom you have purchased the system. Kharma Dealers are audio specialists and can be of great assistance.

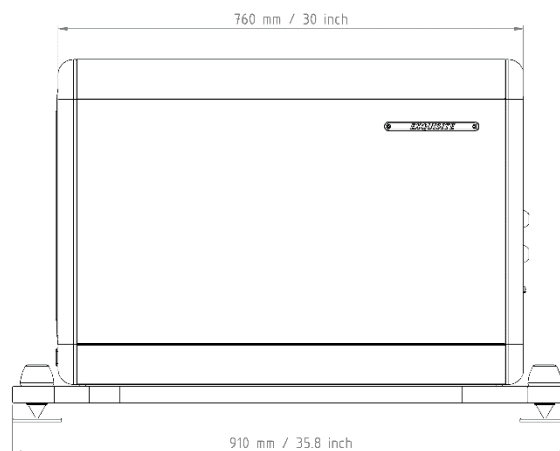
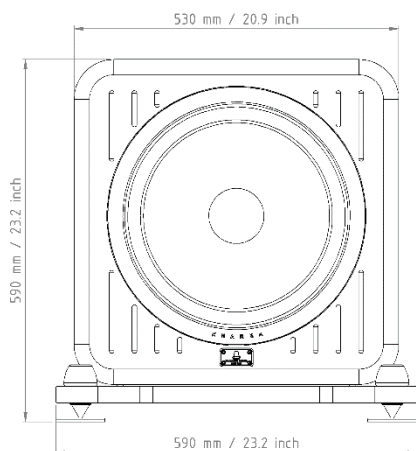
Important

Do not attempt to repair the Exquisite subwoofer yourself. This will void the warranty on the product

SPECIFICATIONS

EXQ-MD-SB-2.0-A

| | |
|------------------------|--|
| System Features | Active 15" subwoofer High pass and low pass filtering 5 Parametric equalizer points Phase control Latency 600 microseconds only Mixed-mode 64 bits digital processing 5 Factory presets Up to 40 custom presets |
| Driver | 15" Carbon sandwich subwoofer |
| Freq. Range | 20 Hz - 200 Hz |
| Maximum SPL | 119 dB |
| RMS power | 400 W |
| Input impedance | 10k Ohm (L + R input) 110k Ohm (direct input) |
| Connections | 1 balanced (female XLR) direct input 2 balanced (female XLR) stereo input Ethernet connector |
| Fuse | 4A slow blow |
| User interface | iPad app: Kharma Control (min. requirement: iOS 8.2) |
| Dimensions | |
| Height | 590 mm / 23.2 inch |
| Width | 590 mm / 23.2 inch |
| Depth | 910 mm / 35.8 inch |



WARRANTY

Warranty coverage

The Kharma distributor guarantees the proper mechanical and electrical functioning of its products for a period of 5 years. Provided the warranty request card is properly filled out and sent to the address on the warranty form, including a copy of the original bill of sales. Should the customer fail to meet the three requirements mentioned above, the warranty will be limited to a period as required by national law only.

In case of malfunction the customer has to present the Kharma product in its original packing to an authorized dealer. If qualified service appears inevitable, the dealer will ship the product to an appointed service station or to the factory, depending on the required service. This warranty includes parts and labor. This warranty is not automatically transferable; subsequent owners can request a warranty at the factory.

Warranty exclusion

1. Transportation damage, visible or hidden. Damage should be reported immediately to the transport company. Registration of the complaint should be sent to the Kharma distributor previously mentioned.
2. Scratches in painted and metal surfaces. Complaints should be registered at the dealer within three days after the sale.
3. Damage due to illicit handling and inappropriate use.
4. Transportation costs to service station or factory.
5. Damage through unauthorized repair and or modification.
6. Subsequent damage to other appliances.
7. Refund of costs in case of unauthorized repair.
8. Malfunctions caused by use for commercial of professional purposes.
9. All claims on Kharma products obtained through unauthorized sources, with or without correct serial numbers.