

Elegance collection user guide

S10SB-A

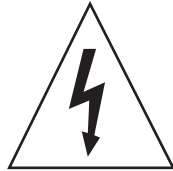
Safety instructions

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 – ELEGANCE ACTIVE VERSION

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

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!

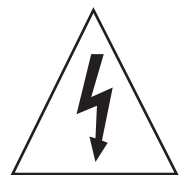


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Preface

Congratulations,

You are now a Kharma Loudspeaker Owner. Your new Elegance subwoofer, properly installed, will give you all the satisfaction and enjoyment you expect from Kharma.

Technically at the fore-front of current loudspeaker design, the Elegance 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 speakers.

Please read this manual carefully and totally prior to installation.

Introduction to the Elegance Collection

The Elegance collection is succeeding the very successful Ceramique line of high-end loudspeakers from Kharma. The Ceramique loudspeaker line was introduced in 1998 and the use of ceramique-based drivers was the reason for naming this series like we did.

During the past years Kharma has been researching new technologies as how to improve and set a new standard again to the high-end audio world. We are very proud now to offer the very latest high-tech technologies again in the new Elegance series. The shape of the cabinets has been unchanged because the shape is fully functional to the way the sound develops from the loudspeakers. But the beauty of the design has been improved upon, by redesigning the stand and bottom, the redesign of the front cover and many other small design details.

The technology of the drivers however has been significantly improved and totally renewed. We developed a pure beryllium tweeter which at this moment is the next best material to create the stiffness that we want for a tweeter, for now diamond being still the first choice. The pure-Beryllium tweeter takes the frequency range to well above 30.000 Hz with very low distortion. This can easily be heard in the ultra fine detail of the high frequency output. There is incredible transparency, but also dynamics, ultra high resolution, increased dispersion allowing the building of a huge stage. The heart of the speaker is formed by the 7-inch Kharma Composite driver which is equipped with a new cone technology developed by Kharma. It consists of ultra high-tech rocket science/formula 1 based fibres created into a setting with optimised behaviour for the purpose. Finite element analysis with

advanced computer systems have led to optimised cone-shapes with a near perfect behaviour for a 7-inch driver.

All of these innovations are very clearly audible in even a short listening session. Better detailed bass, incredible detail base actually. Ultra high resolution in the midrange depicting many layers and sound colours like in excellent wines where the complexity of the whole history of making the wine can be tasted in a moment. It is like the music is coming from an inner space with an infinite number of layering. No mp3 allowed please, give full credit to these wonders.

The new Elegance collection is as powerful as can be imagined with very large linear excursions for extended bass and at the same time the new magnet-motor management system is keeping the midrange clear by not getting distorted by the large currents running through the voice coil at high powers. Thus presenting the very state of the art in loudspeaker making. All Elegance models can also be active with built-in amplifiers from our Matrix collection. The Elegance collection is a complete line of products also fulfilling the mostly demanding 7.1 AV-home theater wishes and more. You can create a small elegant 5.1 system with passive Elegance and active subwoofer or a large super powerful mixture of powerful subwoofers, large standing Elegance main loudspeakers and active surround and center speakers.

Part list

Each box contains:

- Elegance Subwoofer
- 4 x Spike disc
- Standard power cord

Besides you have also received:

- 1 x Manual
- 1 x Burn-in CD

Important Please read the manual thoroughly before taking further steps.

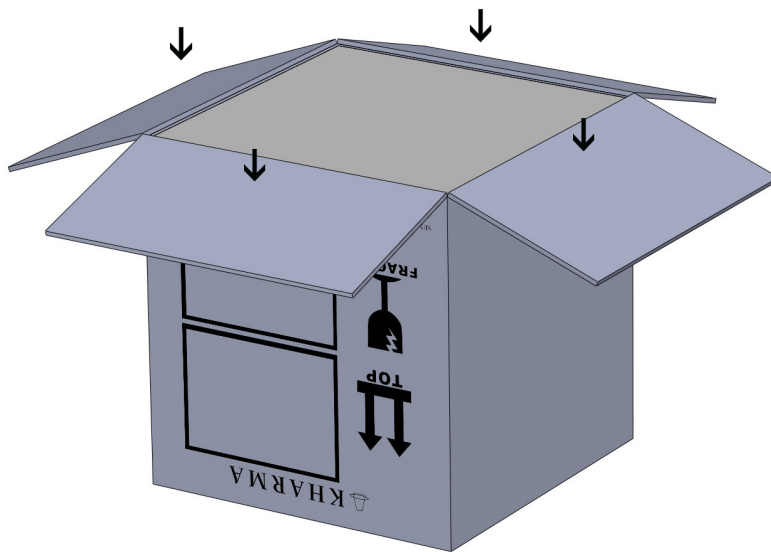
Unpacking

Opening the box

Upon opening the box, inspect the speakers carefully for any sign of transit-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 box for future use.

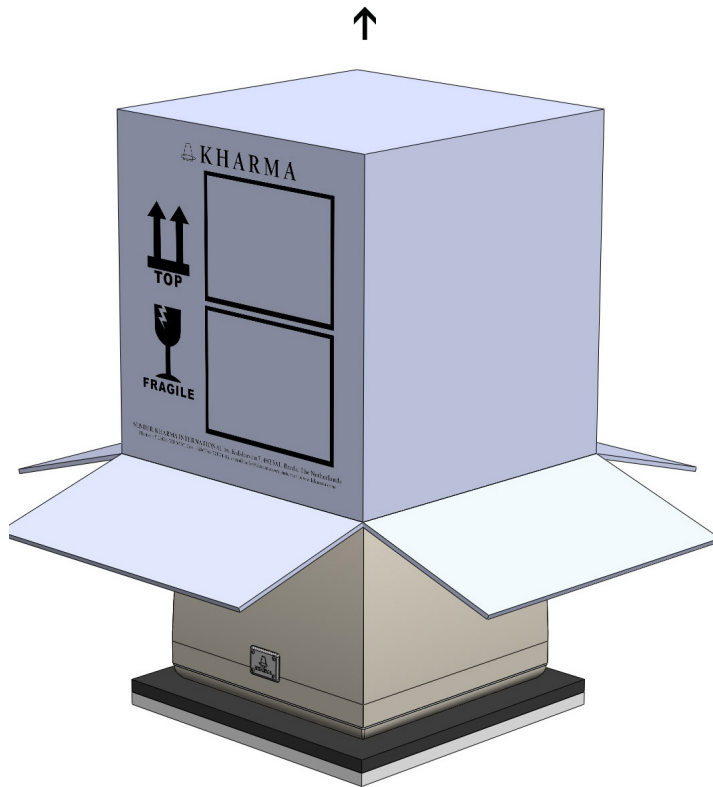
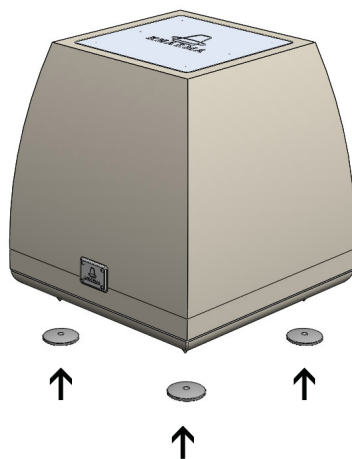
Step 1: Opening the box

Put the box upside down and carefully cut it open.



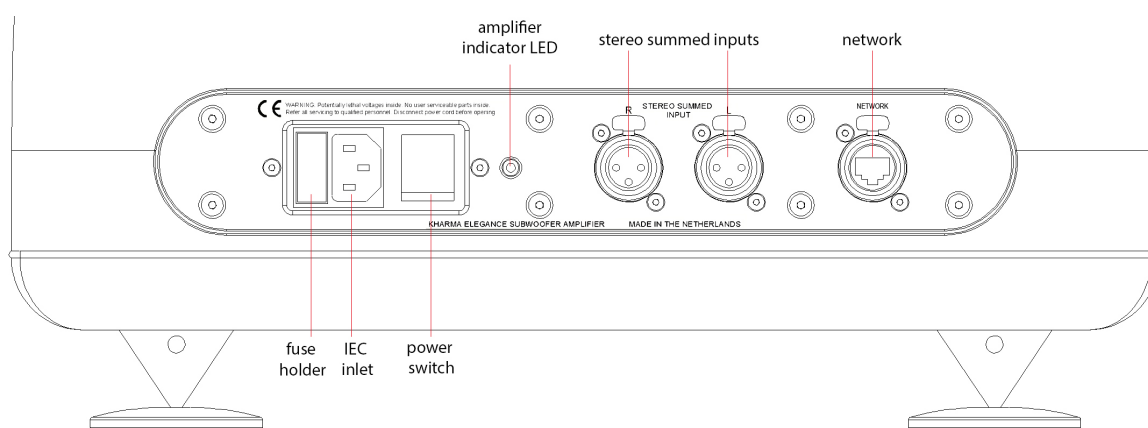
Step 2: Turn box upside down

Carefully turn the box upside down and lift up the cardboard box.

**Step 3: Remove bag, foam and place spike discs**

Connect your subwoofer

At the rear of your Elegance subwoofer you will find the connection terminals (as shown below). Be sure you use the same brand, type and length of interlink cable on each channel.



Mixing different types and/or lengths of speaker cable can upset the precise timing and balance of your speaker. We recommend use of our own Kharma (KIC) pure silver-gold interlink cable for maximum result.

Important

Always turn off the power of your entire system before making connections to your speakers.

Connect your interlink cables to the inputs marked “stereo summed input”. You can attach one cable in stead of two but these means less information (only from the left or right channel) and less power.

Connect the supplied power cable to the IEC inlet.

Once you power up the subwoofer using the power switch the indicator LED will light up blue. If it lights up in another colour, turn of the system and contact your supplier.

LAN Connection

The Elegance 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 on the back of the subwoofer should be connected to the same router / switch that provides the Wifi signal used on the iPad. If this is not the case, the app will not recognize the subwoofer.

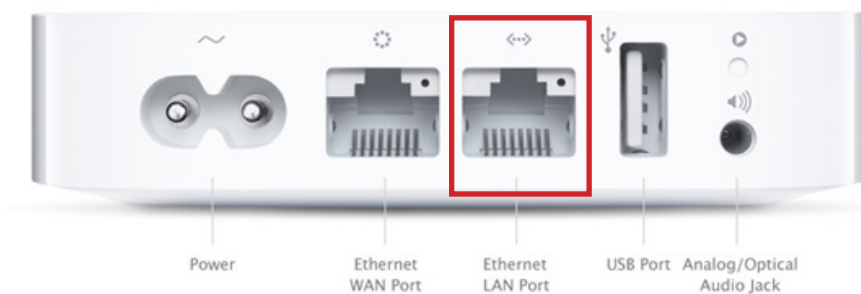
When you have problems with the network configuration, it is also an option to set-up a standalone network especially intended to control the subwoofer with the iPad. The easiest set-up is illustrated on the next page.

When you still have problems with connecting to your 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 Elegance 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 subwoofer that needs a cabled LAN connection.

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



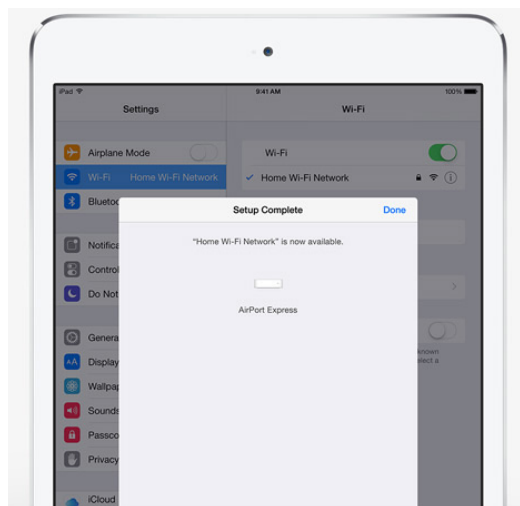
2. Configure the Airport express on the included iPad.
3. Go to Settings > Wi-Fi and select the Airport



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



2. The network setup is completed



3. The Elegance subwoofer can now be detected in the iPad app: Kharma Control.

Control Subwoofer

The Elegance Subwoofer can be controlled via an iPad app. The Kharma Control app can be downloaded from the App store for free.



Important

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

Opening app

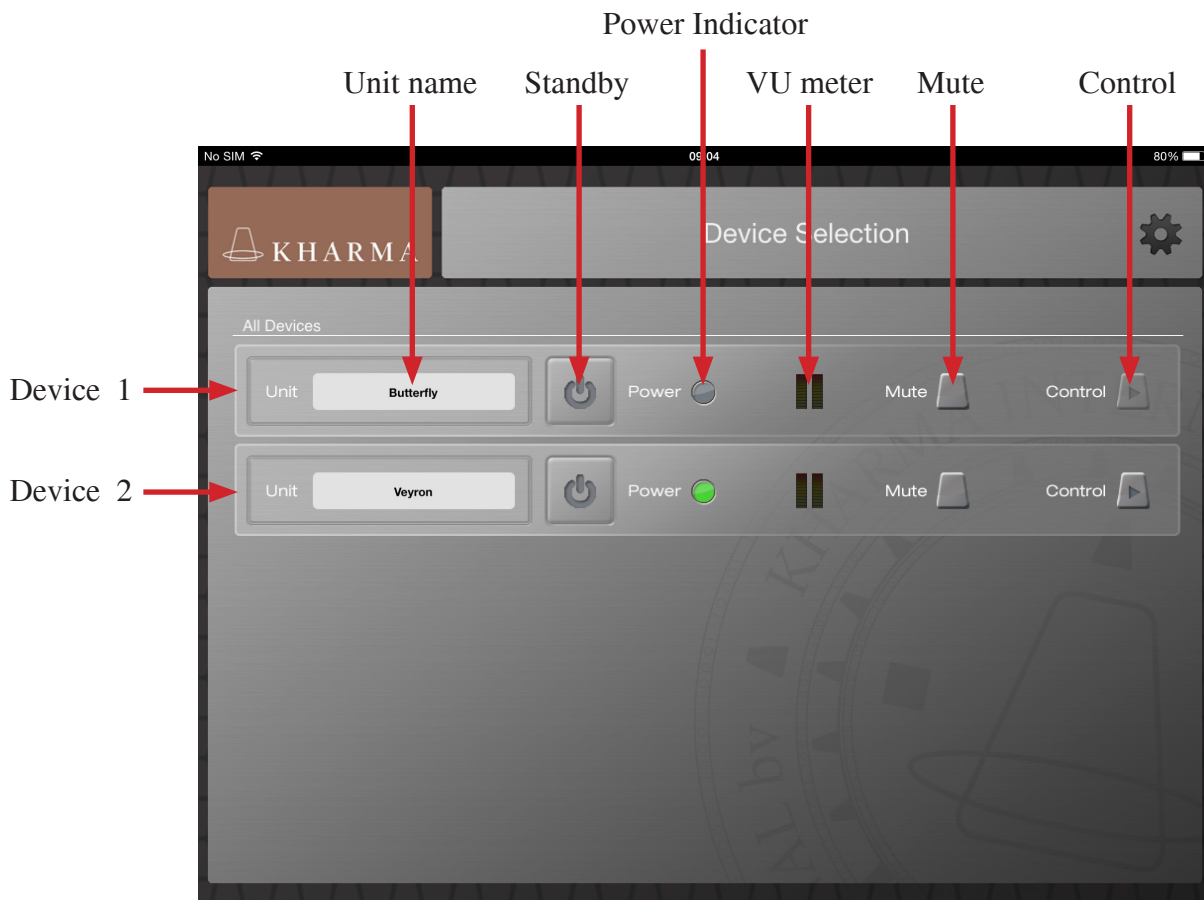
The Kharma Control app opens with the below image. This will be visible for a short time, before any device can be controlled.



Device selection

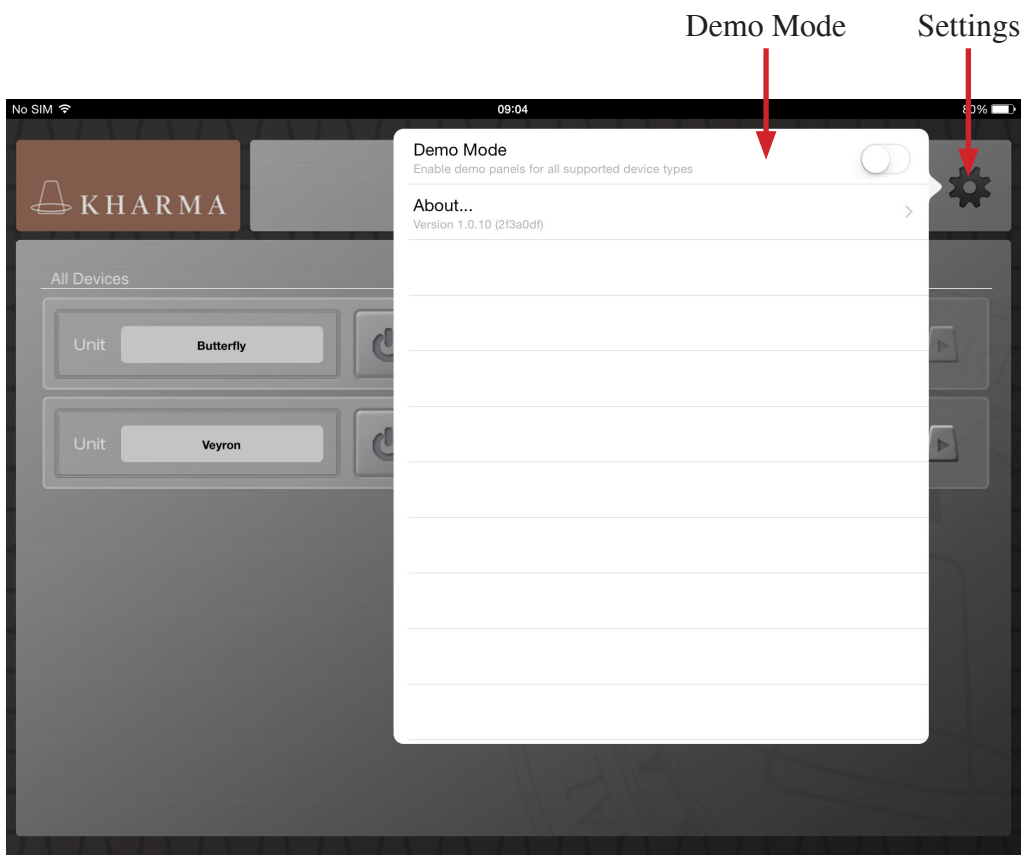
The Device Selection shows which unit is detected in the network. Hence the subwoofer must be connected to the same network as the iPad. When the module is detected in the network, the following functions are available:

- **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:

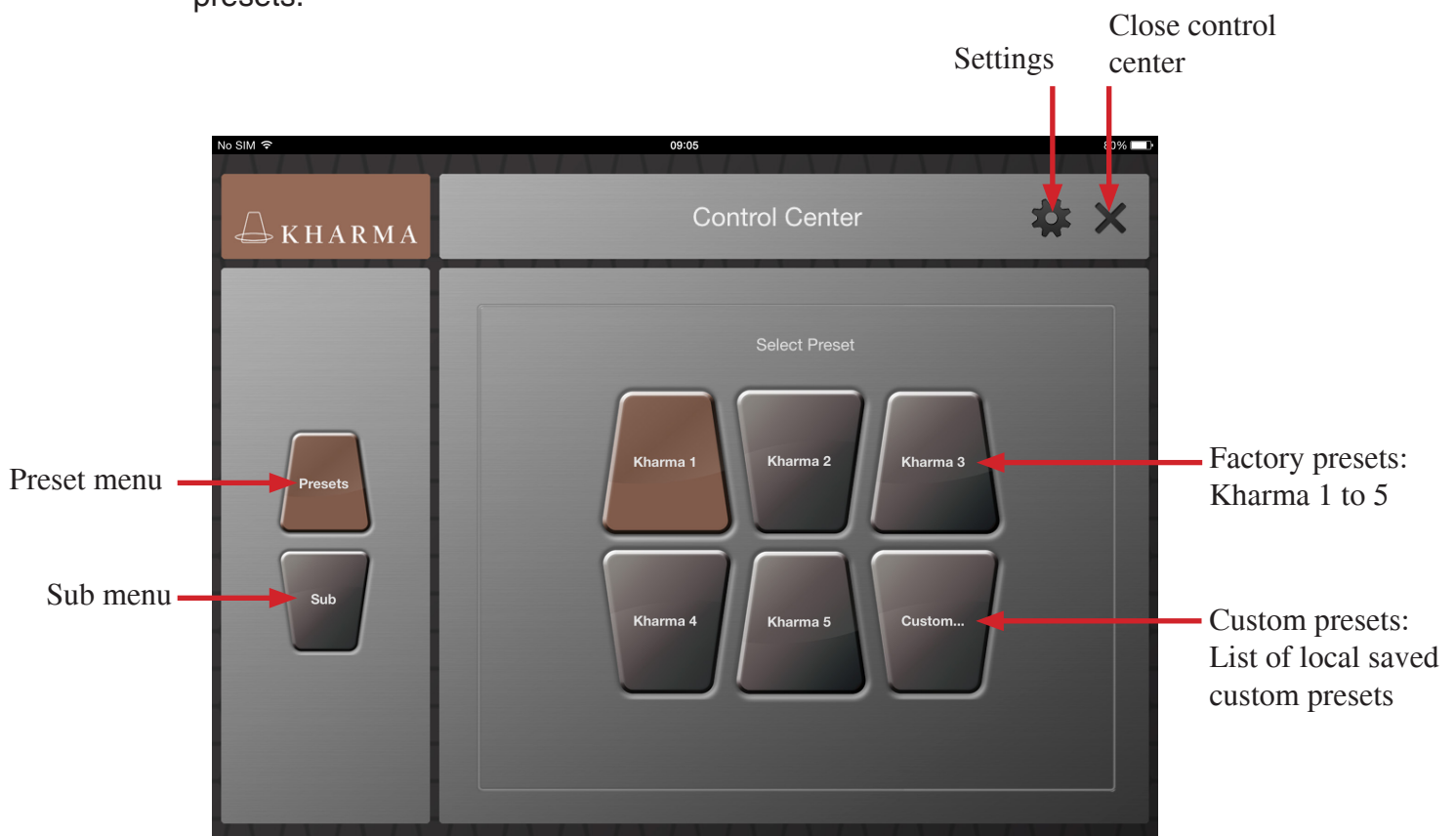
- Presets: load factory or custom presets
- Sub: configure equalizer

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.

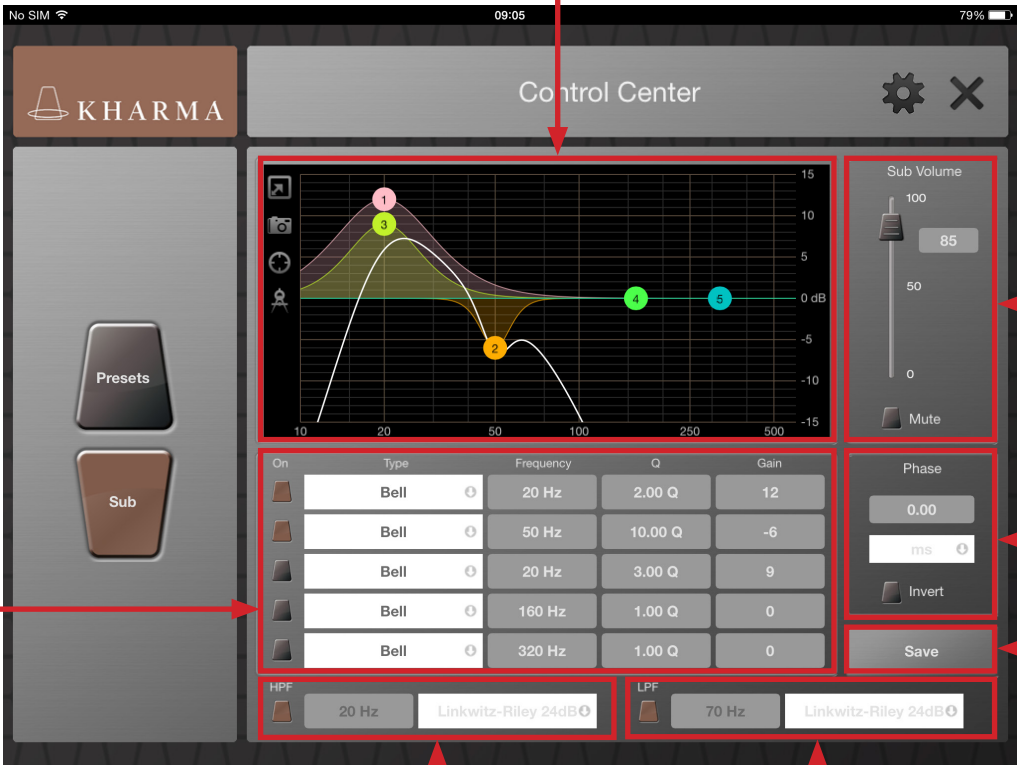
Preset menu

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.



Filter graph

Subwoofer volume

Phase settings

Save custom preset

PEQ points 1 to 5

On	Type	Frequency	Q	Gain
<input checked="" type="checkbox"/>	Bell	20 Hz	2.00 Q	12
<input checked="" type="checkbox"/>	Bell	50 Hz	10.00 Q	-6
<input checked="" type="checkbox"/>	Bell	20 Hz	3.00 Q	9
<input checked="" type="checkbox"/>	Bell	160 Hz	1.00 Q	0
<input checked="" type="checkbox"/>	Bell	320 Hz	1.00 Q	0

High-pass filter

Low-pass filter

Subwoofer volume

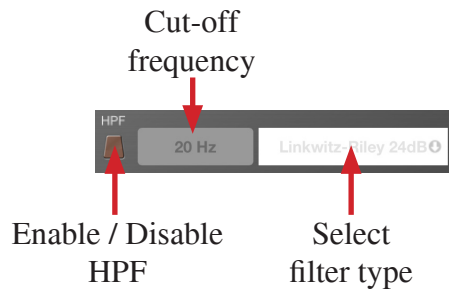
The subwoofer volume can be controlled from 0 to 100% by using the slider or the entry field. When using the entry field, please be aware that the volume will jump to the entered value. The mute button can be used to silence the connected subwoofers.

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 behaviour 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 subwoofers. 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.

PEQ 1 →

On	Type	Frequency	Q	Gain
<input checked="" type="checkbox"/>	Bell	20 Hz	2.00 Q	12
<input type="checkbox"/>	Bell	50 Hz	10.00 Q	-6
<input type="checkbox"/>	Bell	20 Hz	3.00 Q	9
<input type="checkbox"/>	Bell	160 Hz	1.00 Q	0
<input type="checkbox"/>	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, Allpass, 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.



Graph tools

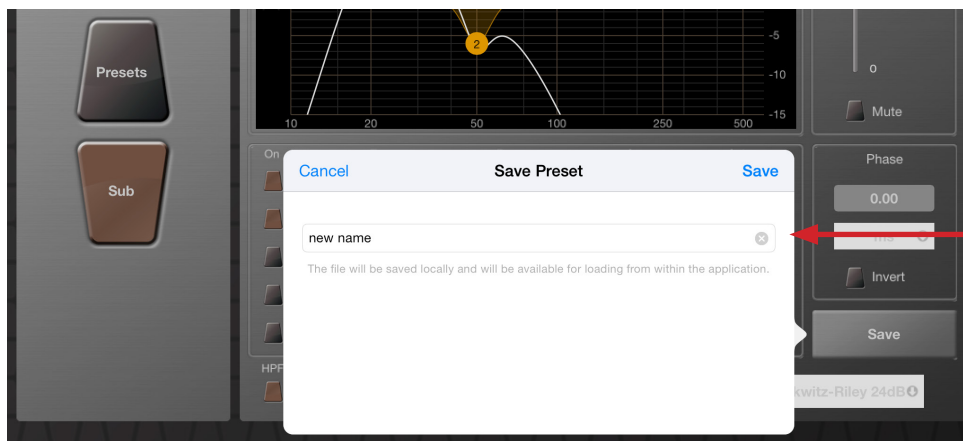
PEQ 3

PEQ 2

Effective filter

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.



Give a name to the custom preset you want to save



Preset menu

List of local saved custom presets will appear.

Important

Please be aware that the volume settings will also be saved. When switching to other factory or custom presets, the volume difference could be significant.

Subwoofer placement

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 speakers 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-panelling 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. Experimenting will be well worth the effort.

Positioning subwoofer

As mentioned above we recommend experimenting with the Elegance subwoofer placement in order 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 Kharma Subwoofer

Use common sense

If you hear distortion or loud “cracking” sounds, the amplifier or loudspeaker is being overdriven, turn the volume down immediately.

Burn-in

Your Elegance loudspeaker system 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 demagnetising tracks for maximum clarity. Your system will then be optimised and sound more open, more detailed and display more natural musical warmth.

Just think of a brand new car which also has to be driven before reaching standard specifications.

Taking care of your speaker

Use a soft cloth and a spray-cleaner to clean the surface. Use a slightly wetted piece of foam to gently rub the cloth of the front panel. No further care is necessary.

In event of trouble

When you have problems with controlling the subwoofer, please first verify if the subwoofer is connected to the same network as the control device.

When no music is playing, please first check if one of the mute function is used in the control software. Otherwise it could also help to let the subwoofer cool down by turning the power off for 10 minutes.

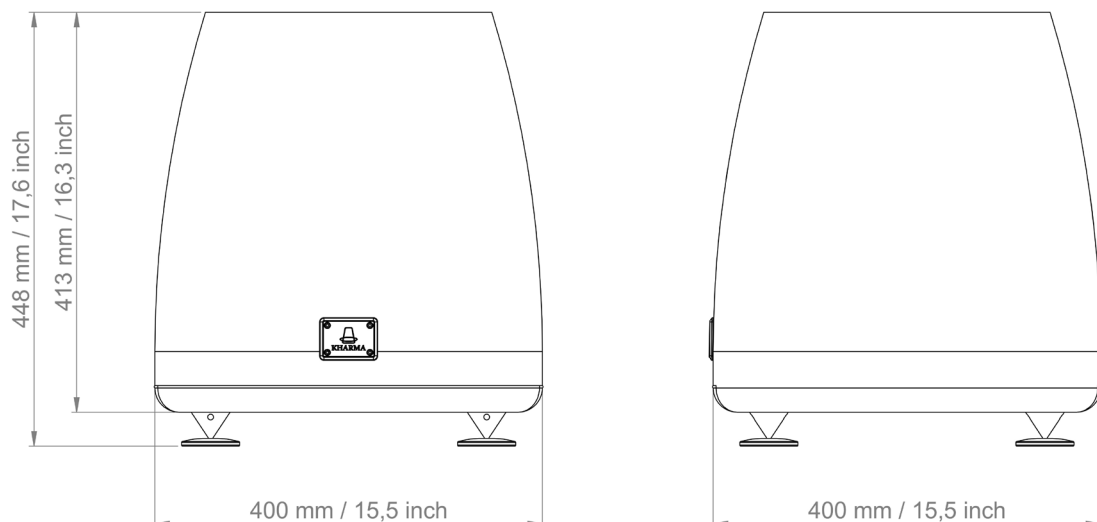
If you have been unsuccessful in locating the specific source of trouble or if you have located it, but have been unable to correct it, please consult the Authorized Kharma-dealer from whom you purchased the system. Kharma Dealers are audio specialists and can be of great assistance.

Specifications S10SB-A

System	10" active subwoofer
Features	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
RMS Power	180 Watt
Frequency range	22 Hz - 200 Hz
Maximum SPL	111 dB
Input impedance	50K Ohm
Fuse	3,15A (5mm x 20mm) slow blow

Dimensions

Height	448 mm / 17.6 inch
Width	400 mm / 15.5 inch
Depth	400 mm / 15.5 inch
Weight	22 kg / 49 lbs



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 labour. 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 or professional purposes.
9. All claims on Kharma products obtained through unauthorized sources, with or without correct serial numbers.