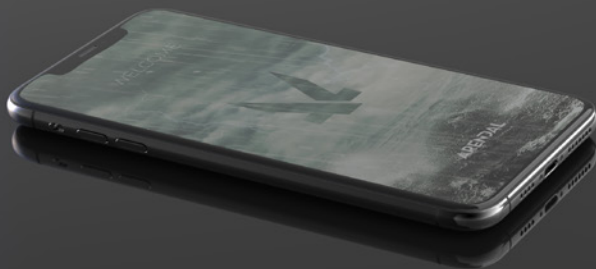


# ARENDA<sup>®</sup>

# 1723

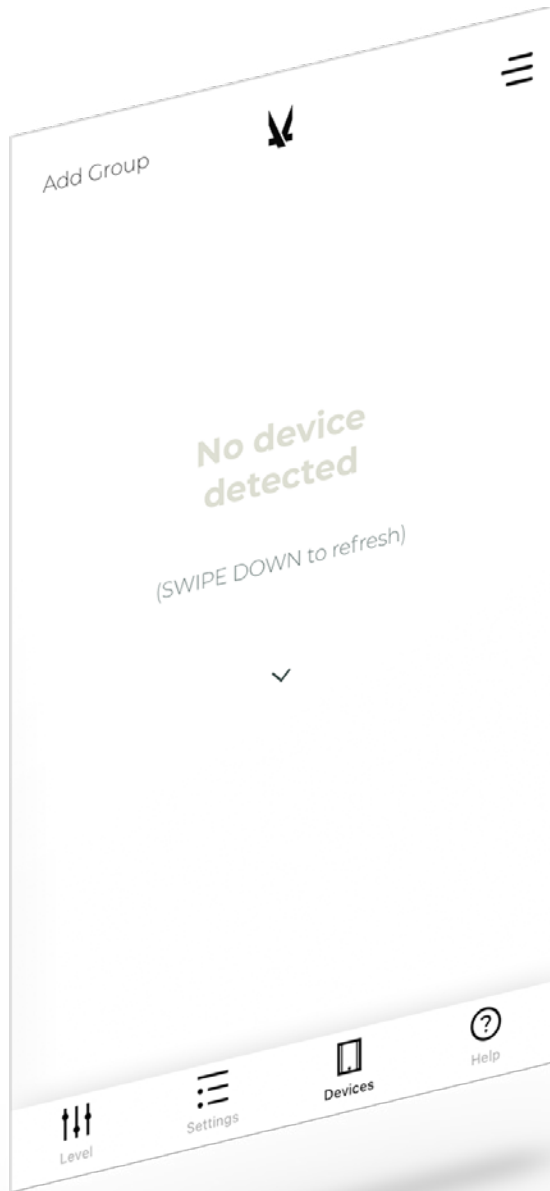
SUBWOOFER

A P P H A N D B O O K





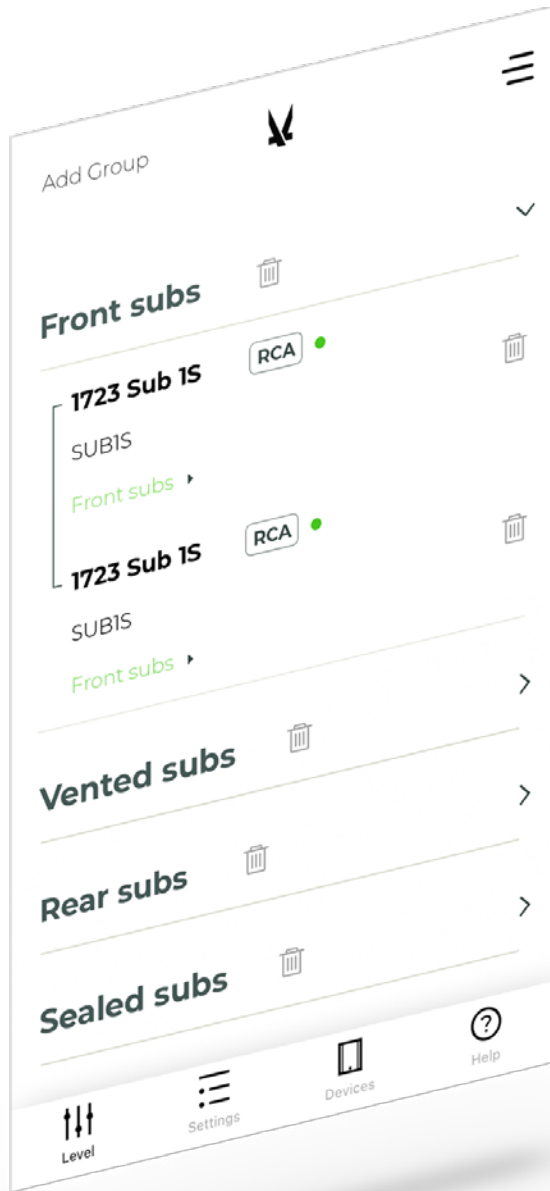




# DEVICE PAGE

Drag screen down to refresh page. All subwoofers will be visible in this view.

The top right hamburger menu shows information about us, and the APP version.



### ***Groups***

The subwoofers can be grouped together, for example if you have multiple subwoofers in the front of your room, and multiple subwoofers in the back of your room it could make sense to create one group for the front subwoofers and one for the rear subwoofers. This way they can be adjusted together for all settings on group level.

After you have added one or several groups, you can click on the “Not grouped” text under the subwoofer name to add it to one of the groups you created.

By clicking the subwoofer name you can rename the subwoofer.

By clicking the group name you can rename the group name.

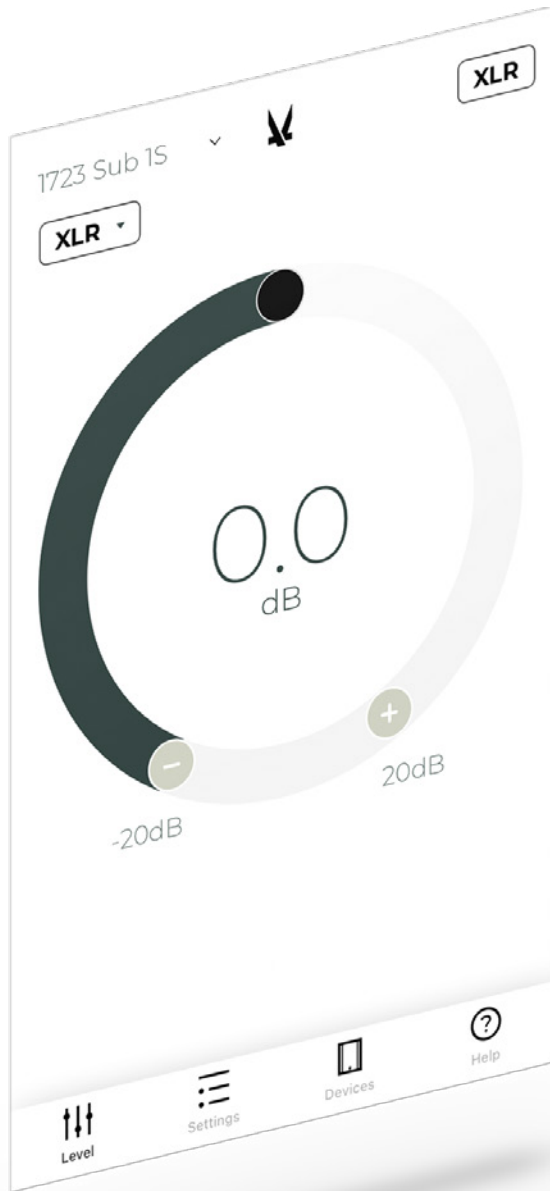


# LEVEL SCREEN

## *Primary & Secondary subwoofers/groups*

Clicking on the subwoofer type will select the subwoofer and you will be sent to the Level screen. If you choose a subwoofer that is in a group, this will be the primary subwoofer and all other subs in the group, or other selected groups, or if “select all” is toggled on, will be secondary subwoofers, meaning they will get any of the new settings that you apply to the primary subwoofer.

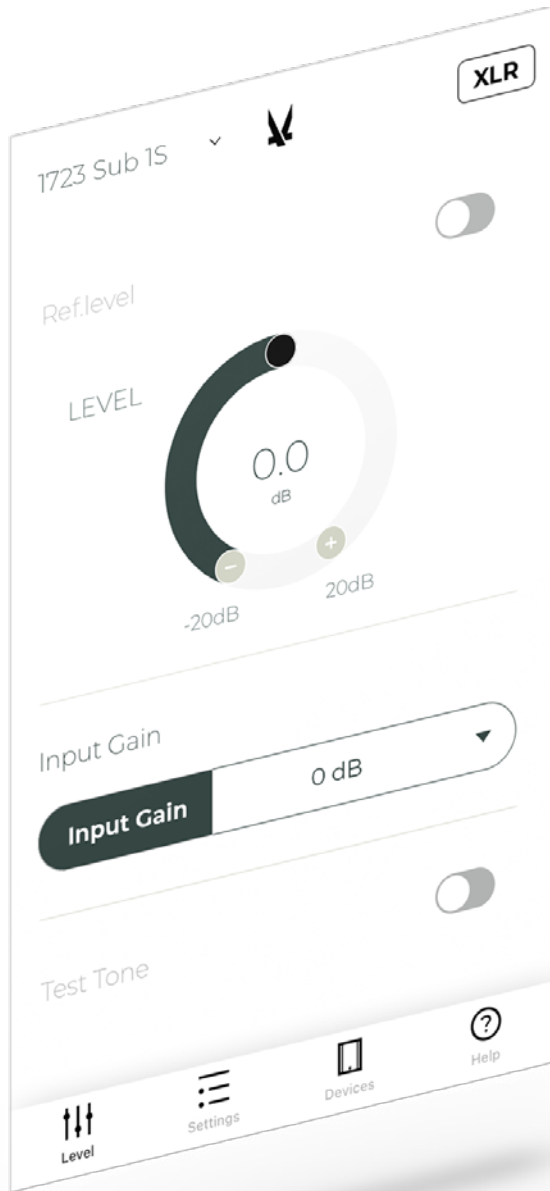
Old settings stored on the primary subwoofer are not automatically transferred to the other subwoofers.



Upper left corner you can choose the subwoofer(s) or group you want to make adjustments on.

The RCA/XLR selector below indicates for which input you are making changes.

Selectable Master Level in the middle of the screen from -20dB to +20dB.



# LEVEL MENU

## ***1. Ref. Levels***

On/off, this sets the subwoofer level to reference position, which is typically the standard for most AV equipment standard calibration levels. We recommend using this setting for anyone with home cinema processors or receivers.

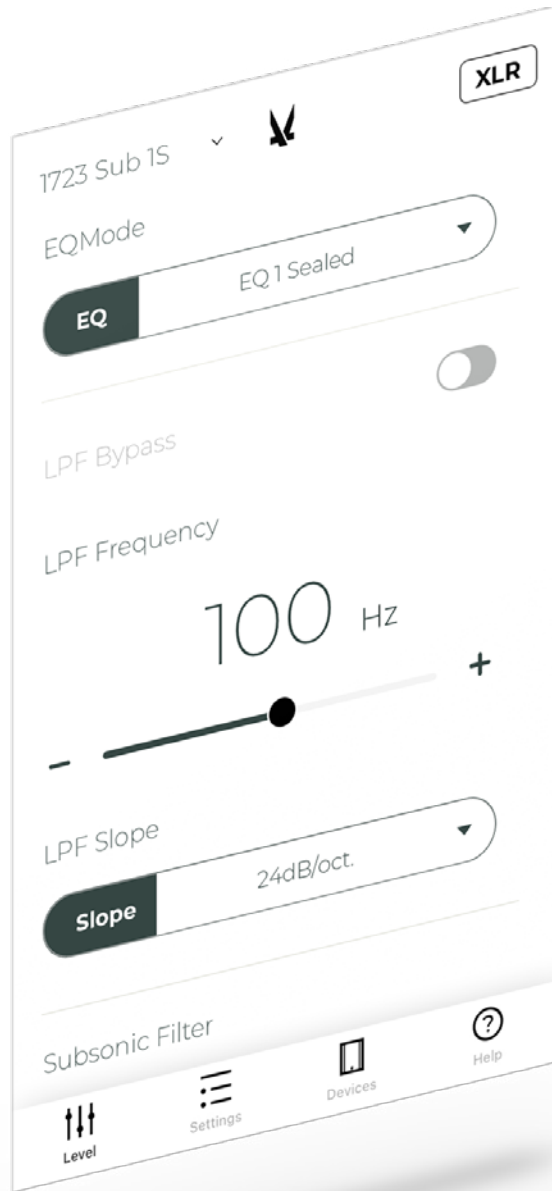
## ***2. Master Level***

Adjustable output volume from -20dB to +20dB in 0.5dB increments. Only available if Ref. Level is set to off.

## ***3. Input Gain***

The input gain will correctly adjust the subwoofer amplifier input gain according to how high the output is from your source. If you know how high the output gain is from your source, here is how to adjust it properly; 1V output set to +6dB, 2V output set to 0dB, 4V output set to -6dB, or 8V output set to -12dB. The -6dB setting works well with most modern AV equipment as their output levels generally are around 4-8V. Analog preamps typically has a lower output voltage.



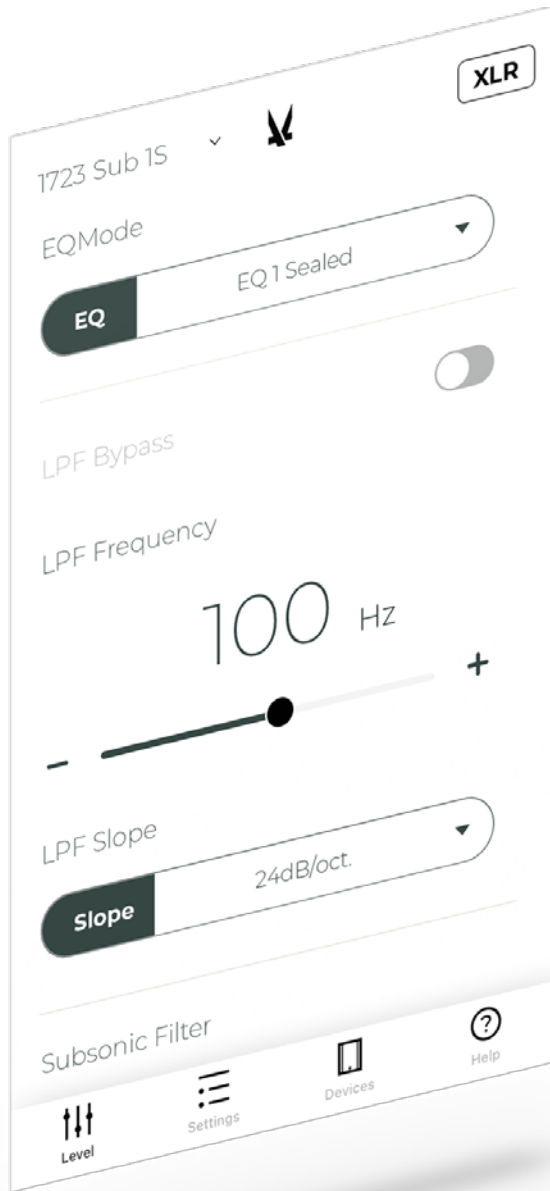


# CROSSOVER MENU

## 1. EQ Mode – EQ1, EQ2 & EQ3

3 modes for sealed subwoofers, 6 modes for vented subwoofers as they can be used in vented or sealed mode.

- EQ1 - gives a flat ground plane response to under 20 Hz, which will give great emphasis on the deepest bass in-room. For movies this can be especially appealing. We recommend this setting for larger rooms.
- EQ2 – Half an octave above the EQ1 setting, so for example if on EQ1 the subwoofer has a  $+3\text{dB}$  point of 16Hz, the EQ2 setting will have a  $+3\text{dB}$  point of 24Hz. For medium large rooms and/or to suit your personal listening style, the EQ2 setting can be beneficial. Typically, EQ2 setting will sound “faster” than EQ1 as it has a lack of output in the deepest bass which will give the bass a heavier sound to it.
- EQ3 – One octave above the EQ1 setting, so for example if on EQ1 the subwoofer has a  $+3\text{dB}$  point of 16Hz, the EQ3 setting will have a  $+3\text{dB}$  point of 32Hz. We recommend this setting for smaller rooms and/or to get a “faster”, more musical and punchy sounding bass.



## 2. *LPF Bypass*

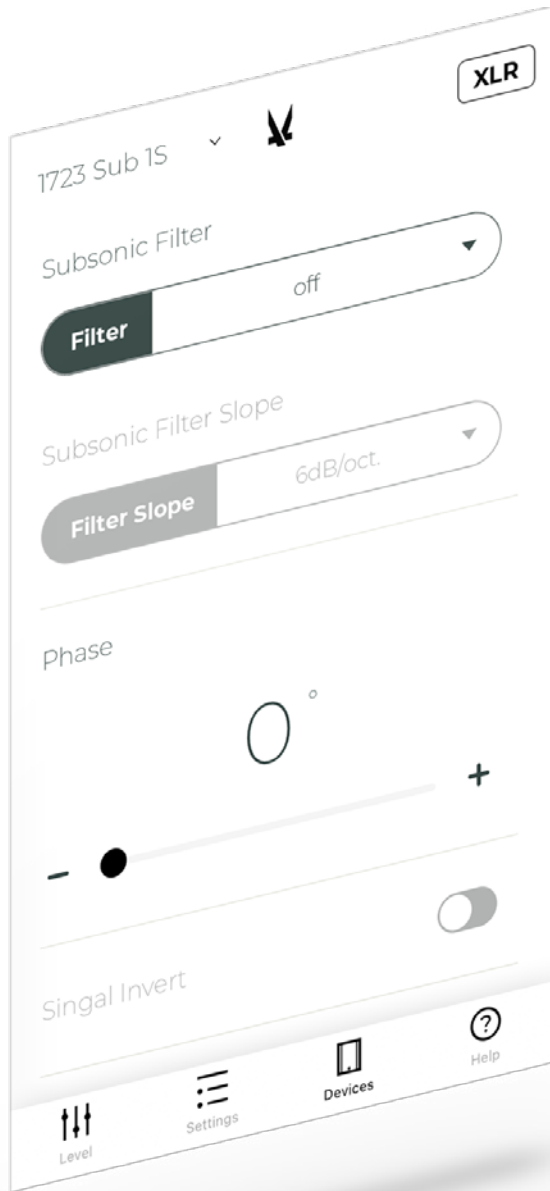
On/Off. If On is selected, then the Low Pass Filter will be disabled. For Home Cinema use, where an AVR is used we recommend LPF Bypass – On. For stereo users you may leave this setting Off, so you can adjust the Low Pass Filter under the next step.

## 3. *LPF Frequency*

The Low Pass Frequency is adjustable from 30 Hz to 160 Hz in 1 Hz increments. The number chosen here means the frequencies above will be filtered away to avoid high tones coming from your subwoofer – nobody wants to hear Diana Krall’s voice through the subwoofer anyways...

## 4. *LPF Slope*

The Low Pass Frequency Slope means at which rate the frequencies should be tapering off, from the LPF Frequency point chosen. It is adjustable from 6dB/Oct to 24dB/Oct with 6dB increments. So, if you already set the LPF frequency to 100Hz, then setting the LPF Slope to 12dB/Oct will ensure that the signal has 12dB lower output at one octave above 100Hz (one octave above 100Hz is 200Hz).



### 5. *Subsonic Filter*

Selectable subsonic filter settings, that will filter away the deepest frequencies. Selectable from 12 Hz to 31 Hz. In off mode the amplifier has an internal subsonic filter at 10 Hz to prevent instabilities in the power supply. Adding the subsonic filter will ensure the subwoofer has less excursion in the deepest bass, and typically when filtering away some of the deepest bass it will sound even “tighter”.

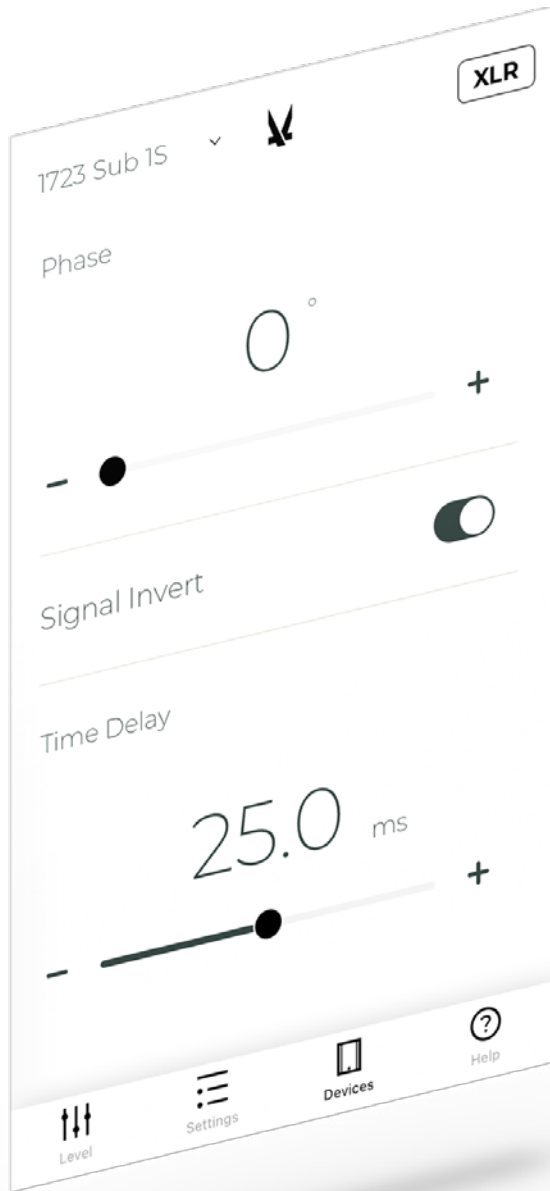
### 6. *Subsonic Filter Slope*

The Subsonic filter slope means at which rate the frequencies should be tapering off, from the frequency point chosen. It is adjustable 6dB/Oct or 12dB/Oct. So, if you already set the subsonic filter frequency to 20Hz, then setting the slope to 12dB/Oct will ensure that the signal has 12dB lower output at one octave under 20Hz (one octave below 20Hz is 10Hz).

### 7. *Phase*

Adjustable from 0-180 degrees. We recommend leaving the phase at 0 degrees when using an AV-Receiver/Processor with time alignment (speaker distance) feature. For music setups the phase needs to be adjusted so the subwoofer blends with the front speakers.

Pro tip; Have a friend/wife/mom help adjusting the phase while you sit in your listening position. Play some music with a steady bass beat, and when you hear the most amount of bass, the phase is correctly adjusted.



### 8. *Signal Invert*

This feature inverts the signal, which means the same as 180 degrees phase, however this is “true” 180 degrees at all frequencies. Phase adjusting above will shift somewhat with frequency.

### 9. *Time Delay*

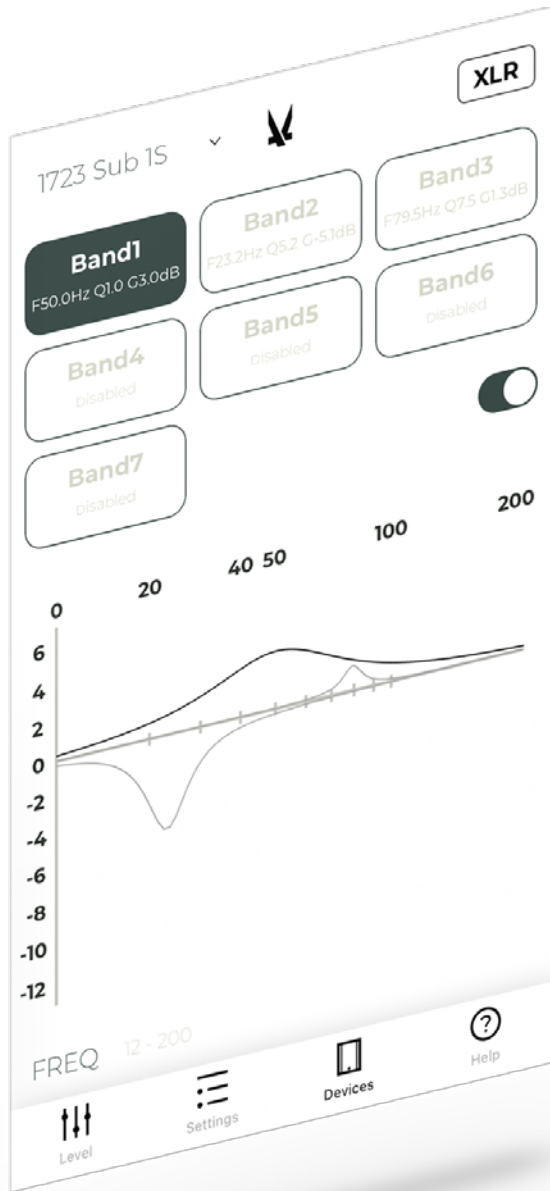
Adjustable from 0 to 50ms in 0.25ms increments. This feature comes in handy when you have several subwoofers in the setup and want to combine them on a single output from your source, so that they have the same delay. We recommend measuring the distance to the subwoofer furthest away and adding delay to the remaining subwoofer(s) so that their delay is equal to the difference in distance between it and the furthest away subwoofer.

Example: 2 subwoofers in the same room, one subwoofer is placed 4 meters away from the listening position, and the other is placed 3 meters away. The difference in distance in this example is 1 meter. So you want to delay the signal to the closest subwoofer by 1 meter ( $1 / 343 * 1000 = 2,915$  ms). So in this case the closest setting will be 3ms.

#### ***Formula:***

Meters / Speed of sound (343 m/s in room temperature) \* 1000 = time in ms.

Feet / Speed of sound (1125 f/s in room temperature) \* 1000 = time in ms.



# PARAMETRIC EQ

## 1. *Band*

7 selectable EQ bands, to optimize frequency response in your room.

## 2. *On/off toggle*

On/Off selectable to choose whether the EQ band should be enabled or not.

## 3. *Freq.*

Adjustable frequency from 12 to 200 Hz, in 1 Hz increments. This enables a pinpointed adjustment of any irregularities in the room response.

## 4. *Q*

The Q of a frequency adjustment means how wide or small area surrounding the selected frequency you want to affect. A very high Q will target a very small surrounding area of the selected frequency, whereas a very low Q will select a very wide area surrounding the selected frequency.

## 5. *Gain*

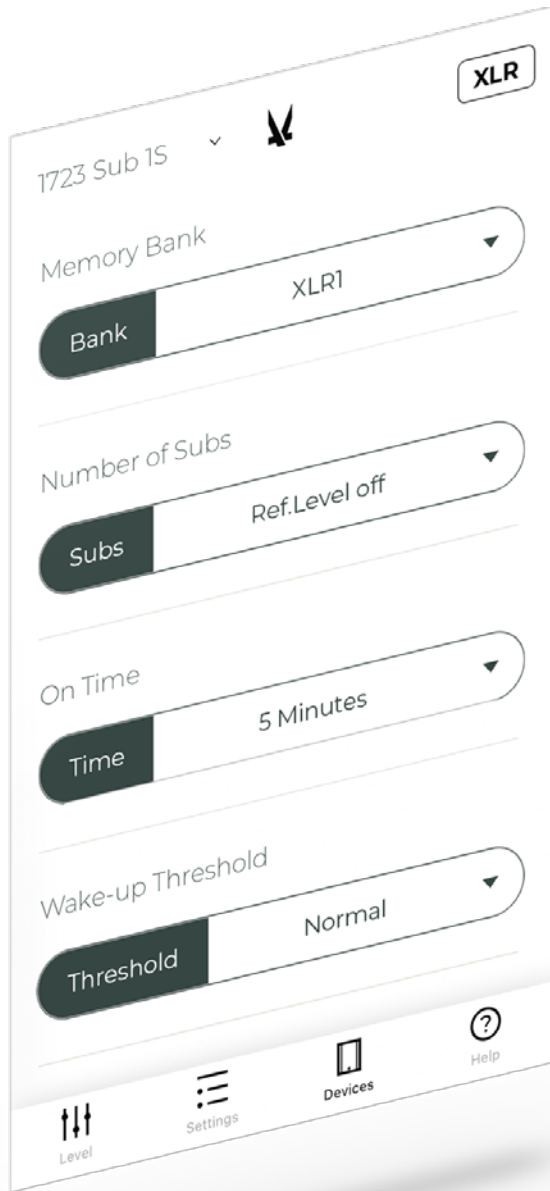
Adjust how much you want to increase or decrease the levels at the selected frequency. Selectable from -10 dB to +3dB.



# INPUT / TURN-ON

Selectable input turn on process, choose from 4 different Auto-on modes, 4 different 12V trigger modes and 8 different Dual Source modes.

The Dual Source turn-on control is created for customers that use the same subwoofer in two systems, one typically being stereo and the other being home cinema. This setting enables one input to be triggered and locked by 12V signal, and when the 12V signal is turned off, the other input will be active for auto-on function.



# SETUP

## 1. *Memory bank*

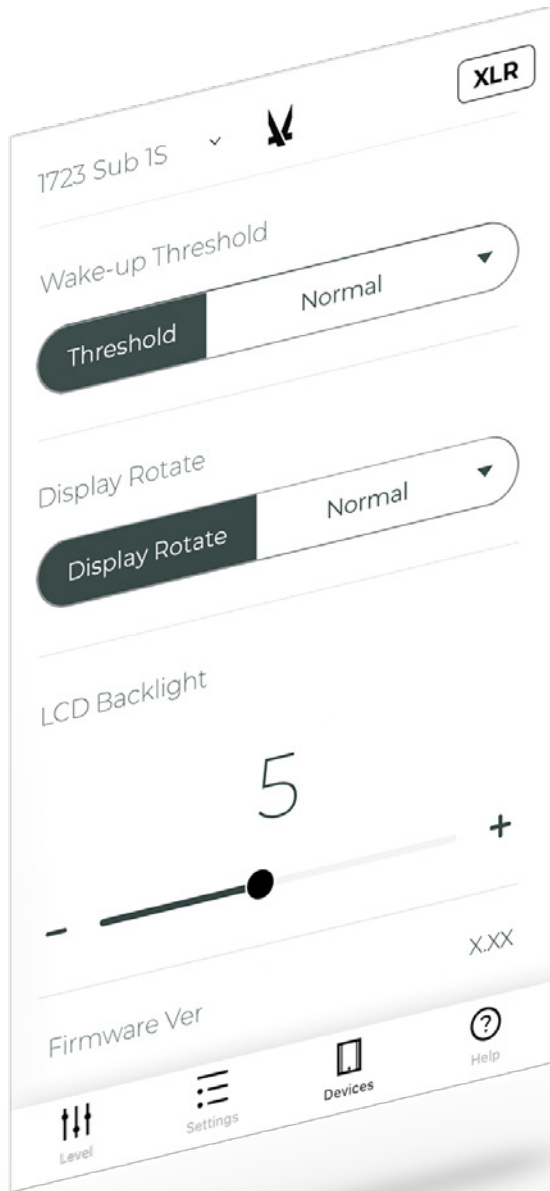
RCA 1 / RCA 2 or XLR 1 / XLR 2. You can choose between these 4 memory settings. When you enter the menu, you have to choose either RCA or XLR settings, and thus you are only able to select RCA memory if you chose RCA inputs when entering the menu, and the same applies to XLR.

## 2. *Number of subs*

This setting is only enabled if you have chosen Reference level On, in the level menu. This setting will enable 1, 2, or 4 subwoofers to have reference level in room, for ease of adjustment from an AVR or similar source. It will decrease the output sensitivity of each subwoofer to come as close as possible for the sum of all subwoofers to reference level for a single subwoofer used alone

## 3. *On Time*

Selectable on time from 5 to 60 minutes, in 5-minute increments. This setting adjusts how long after the amplifier will stay active after it has received a signal on the input(s) (Auto-on mode only).



#### **4. *Wake-up Sens.***

The wake-up sensitivity when the amplifier is in Auto-on mode, High sensitivity means it reacts very easily to any input signal, Normal is what typically works well with modern AV receivers and similar sources, and Low is for environments that require a slower wake-up sensitivity. The input gain under “level” menu will also impact the subwoofer’s sensitivity to turn on.

#### **5. *Display Rotate***

This neat feature rotates the display upside down, so that it is easier to make adjustments when the subwoofer’s amplifier is facing the wall and you are standing above it to do any final adjustments. When the 180 degree setting is entered you will have to go one step back in the menu before it actually flips upside down.

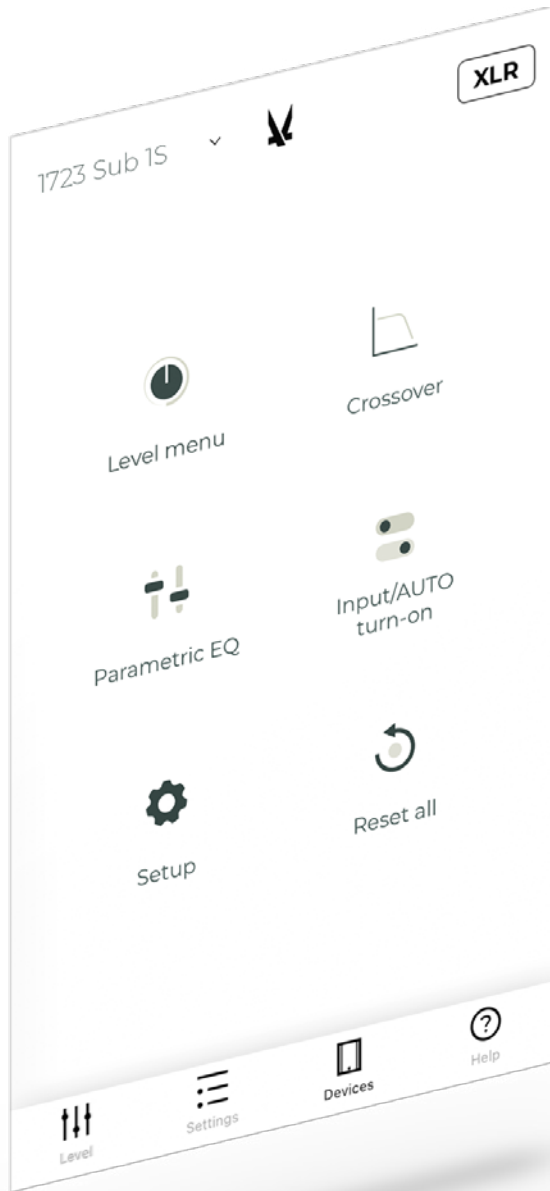
#### **6. *LCD Backlight***

Adjustable backlight on the LCD display from dim to bright.

#### **7. *Firmware Ver.***

States the firmware version of the amplifier.





# RESET ALL

Reverts all changes back to default settings. This will erase all memory bank settings as well.



P R E P A R E D F O R M A Y H E M



