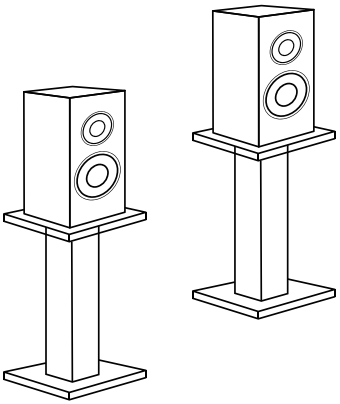
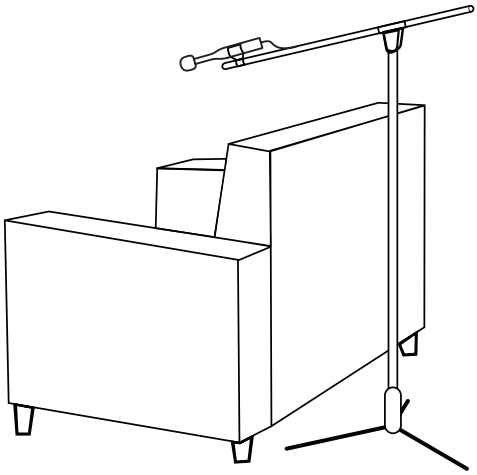
Eversolo DMP Series Room Correction Guide

DMP 系列房间校准教程





Eversolo Audio Technology Co.,Ltd
深圳市艾索洛声学科技有限公司

Room Correction on the Device

1.Preparations

Environmental Requirements:

(1) Keep the room quiet and minimize any external noise.

(2) Make sure the speakers are positioned correctly.

(3) Turn off any unnecessary lights and electronic devices in the room.

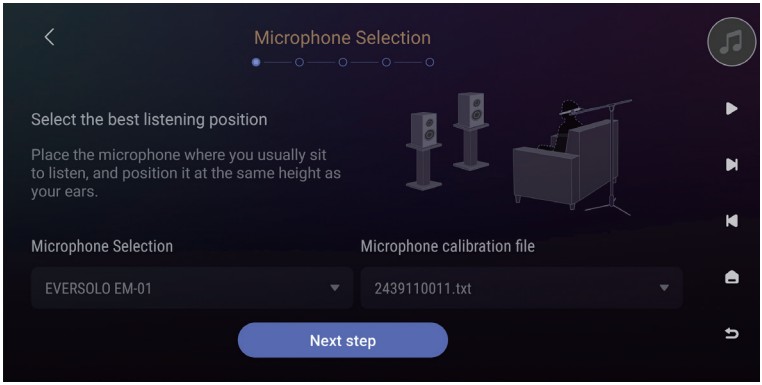
2.Specific Steps

① Microphone Selection:

(1) Choose USB microphone.

(2) Select the microphone calibration file (if available).

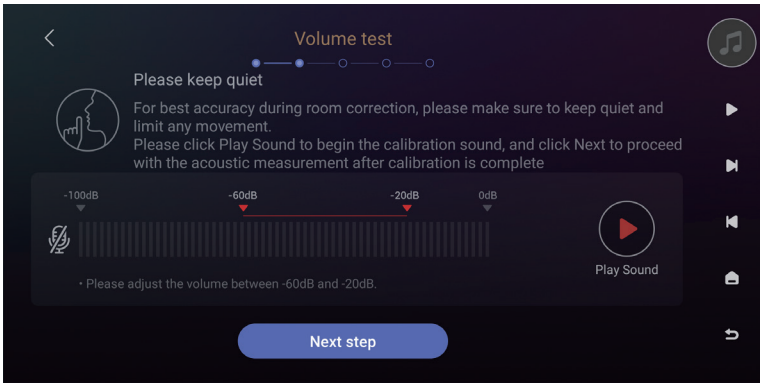
(3) Place the measurement microphone at the best listening position as instructed by the software.



② Volume Test

(1) Click “Play Sound” and make sure the volume to fall between -60dB and -20dB.

(2) Once the the volume test is complete, click “Next step” to proceed.

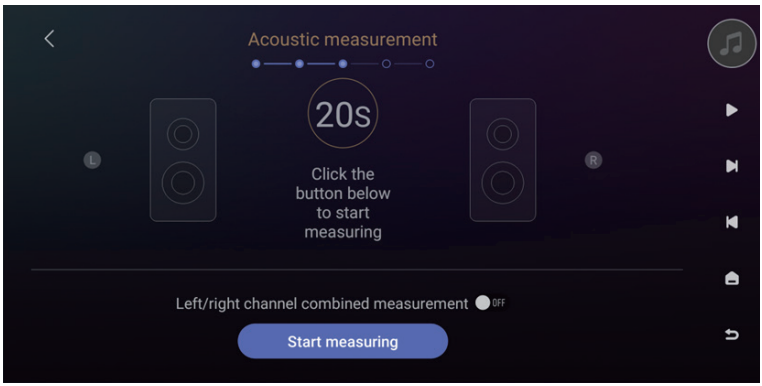


③ Acoustic Measurement

(1) Select whether to combine left and right channels for measurement.

(2) Click “Start Measuring”， and DMP will begin playing the frequency response sound.

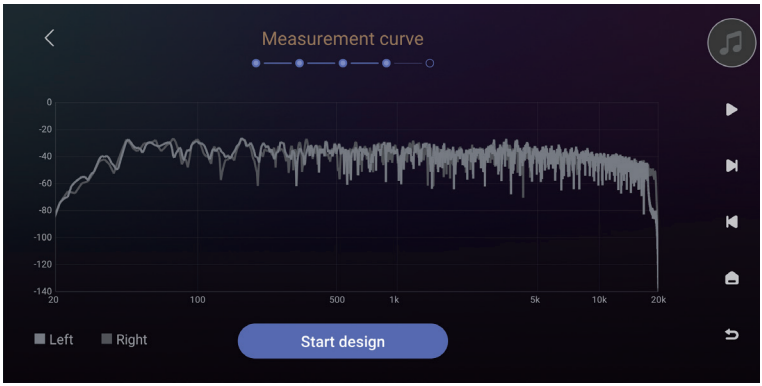
(3) Once playback is complete, the audio curve will be automatically analyzed.



④ Measurement Curvet

(1)The captured audio curve will be displayed. If you are not satisfied with this recording result, you can go back and retake the measurement.

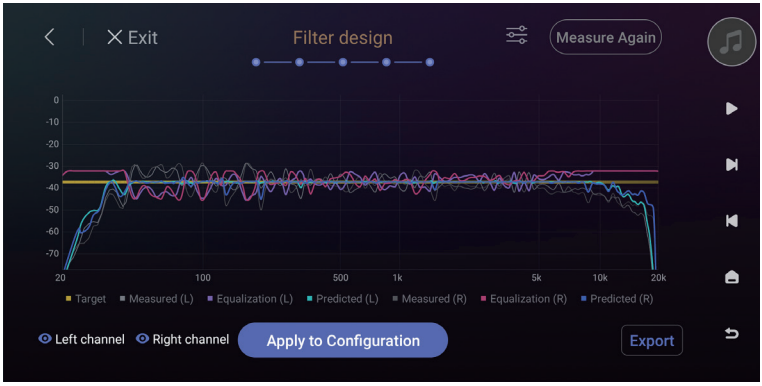
(2)Click “Start design” to generate the filter.



⑤ Filter Design

(1) DMP will automatically generate filters by analyzing the curve.

(2) Review the curve to understand the acoustic issues in the room.



⑥ Filter Settings(Adjust based on your room's characteristics)

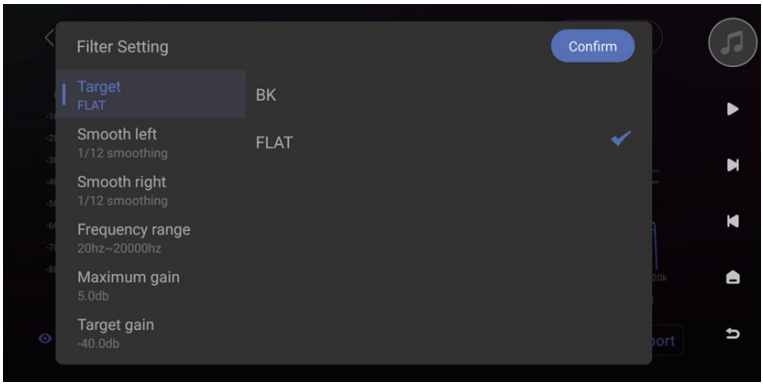
(1) Target Curve: The standard for your room’ s acoustic properties, ensuring the calibrated sound meets this benchmark.

(2) Smoothing: Adjust the smoothness of the EQ curve to reduce noise and create a softer sound.

(3) Frequency Range: Set the correction frequency range according to specific needs.

(4) Maximum Gain: The maximum volume increase allowed by the EQ curve to prevent distortion and clipping.

(5) Target Gain: The gain applied to the target curve, used for room acoustic correction.



⑦ Apply to Configuration

Directly apply to current FIR configuration.

⑧ Export

Select a folder to export to. The exported file can be applied to various configurations.

Room Correction by Using Eversolo Control AppScreen

1.Preparations

① Environmental Requirements:

(1)Keep the room quiet and minimize any external noise.

(2)Make sure the speakers are positioned correctly.

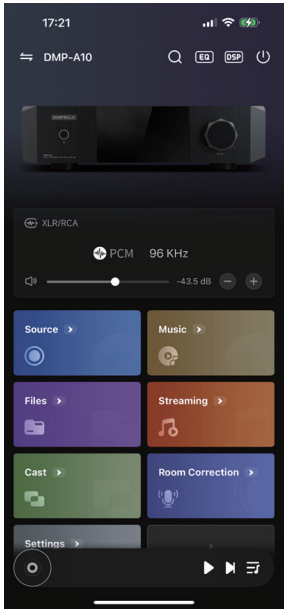
(3)Turn off any unnecessary lights and electronic devices in the room.

② Install Eversolo Control App on your phone.

2.Before Testing

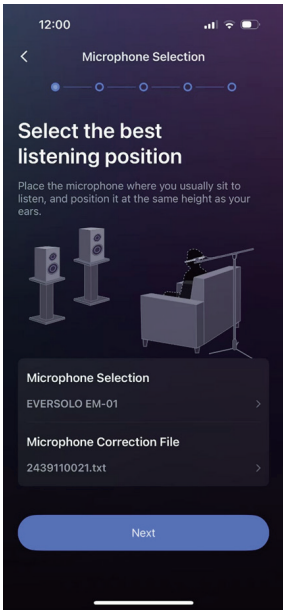
① Pairing with Eversolo Control App

Launch the Eversolo Control App, add the DMP, and then select the device to enter the main interface



② Enter Room Correction Module

Click “Room Correction” on the main interface to enter it.



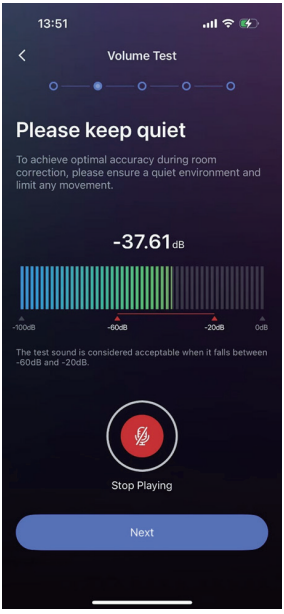
③ Microphone Selection

(1)Choose external USB microphone or phone's microphone.

(2)Select the microphone correction file (if available).

(3)Place the USB measurement microphone or the phone at the best listening position as instructed by the software.

3.Start Testing



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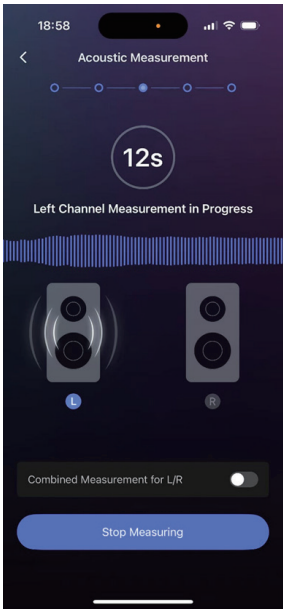

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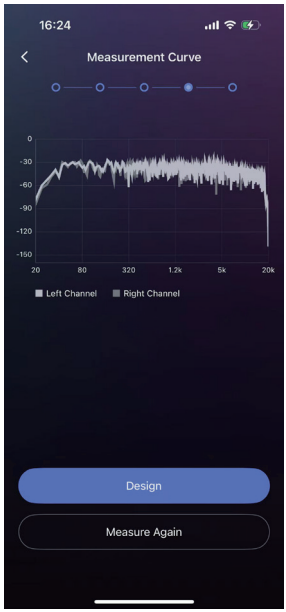

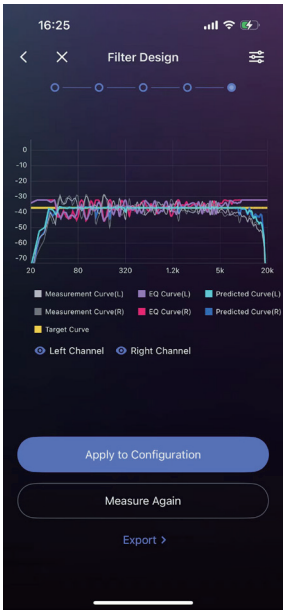

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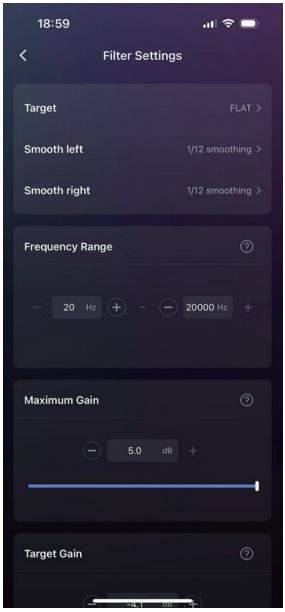


⑥ Apply to Configuration

Directly apply to current FIR configuration.

⑦ Export

Select a folder to export the file. The exported file can be directly useed in various configurations.

Note: After importing the FIR filter, room correction will only take effect if the corresponding DSP configuration interface is enabled.

数播前置屏房间校准

1. 准备工作

环境要求：

(1) 保持房间安静，避免外部噪音干扰

(2) 确保音箱已正确摆放

(3) 关闭房间内的所有不必要的灯光和电器

2. 校准步骤

①麦克风选择：

(1) 选择 USB 麦克风

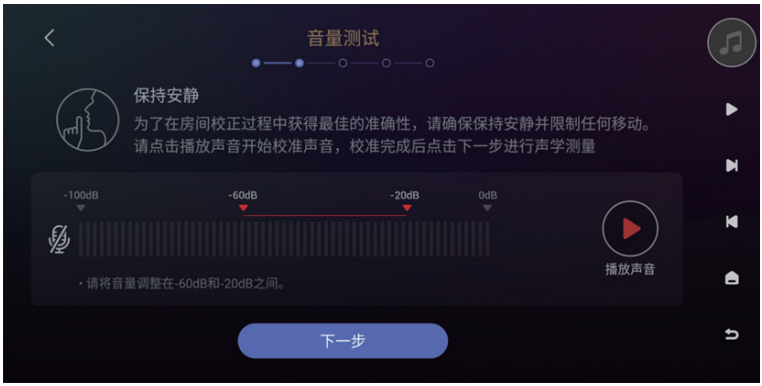
(2) 选择麦克风校正文件（如果有的话）

(3) 按照软件提示，将测量麦克风放置在聆听位置

②音量校准

(1) 播放声音，将音量调整在 -60dB 到 -20dB 之间

(2) 调整完毕点击下一步



③声学测量

(1) 选择是否要左 / 右声道合并测量

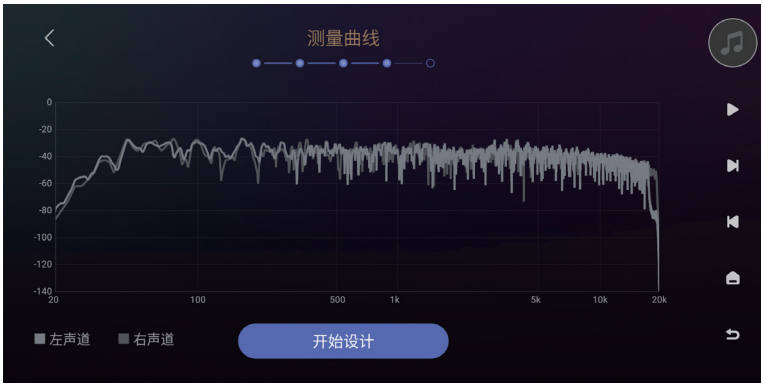
(2) 点击开始测量，DMP 将开始播放频响声音

(3) 播放完成将自动解析音频曲线

④测量曲线

(1) 显示录取到的音频曲线，感觉录制的有问题可以返回上一步重新测量

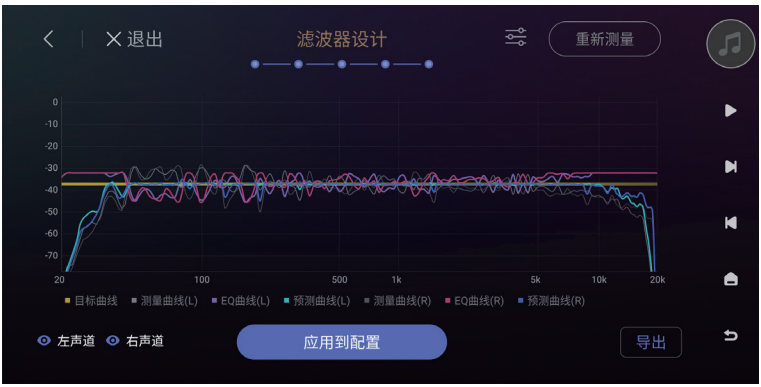
(2) 点击开始设计即可生成滤波器



⑤滤波器设计

(1)DMP 通过分析曲线自动生成滤波器

(2) 观察曲线，了解房间的声学问题



⑥设置：（根据个人房间情况调整设置）

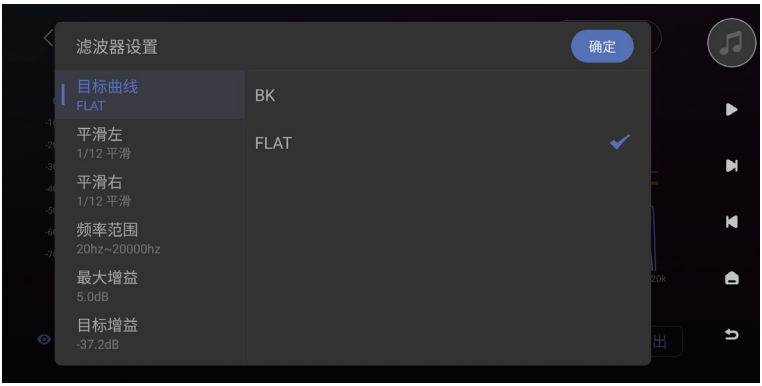
(1) 目标曲线：房型声学特性标准，确保房间校准后的声学特性达到此标准

(2) 平滑：EQ 曲线的平滑度，减少噪声，使声音柔和

(3) 频率范围：可以根据特定需求来设置校准的频率范围

(4) 最大增益：校准的 EQ 曲线允许增加的最大音量，避免失真破音

(5) 目标增益 : 目标曲线的增益，根据此增益进行房间声学校准



⑦应用到配置

直接应用到当前配置的 FIR

⑧导出

选择一个文件夹导出，导出的文件可以应用于多种不同的配置

手机 APP 房间校准

1. 准备工作

①环境要求

(1) 保持房间安静，避免外部噪音干扰

(2) 确保音箱已正确摆放

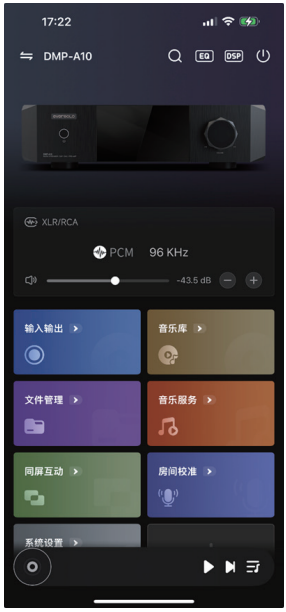
(3) 关闭房间内的所有不必要的灯光和电器

②手机上安装 Eversolo Control 的 APP

2. 校准步骤

①手机 APP 配对

打开 Eversolo Control APP，添加 DMP 完成后，选择设备进入主界面



②进入房间校准模块

在 APP 主界面上点击”房间校准”进入校正流程

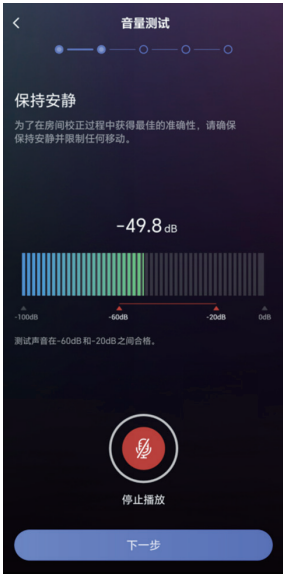
③麦克风选择

(1) 选择外接 USB 麦克风或手机麦克风

(2) 选择麦克风校正文件（如果有的话）

(3) 按照软件提示，将测量 USB 麦克风或手机放置在聆听位置

3. 开始测量



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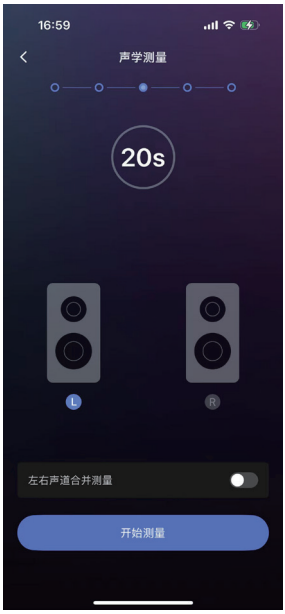

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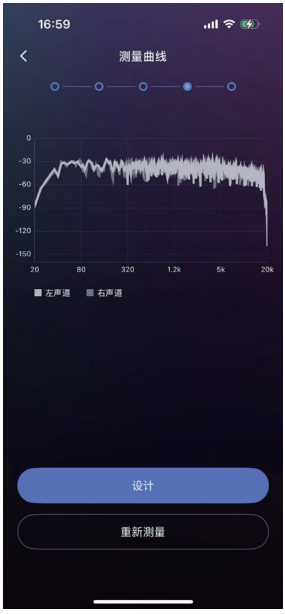

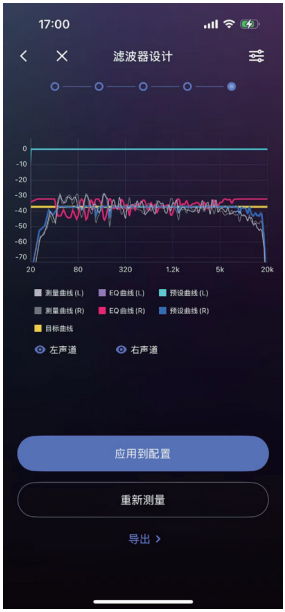

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⑥应用到配置

直接应用到当前配置的 FIR

⑦导出

选择一个文件夹导出，导出的文件可以应用于多种不同的配置

注：导入 FIR 滤波器后，只有对应接口的 DSP 配置启用的情况下，房间校正才会生效