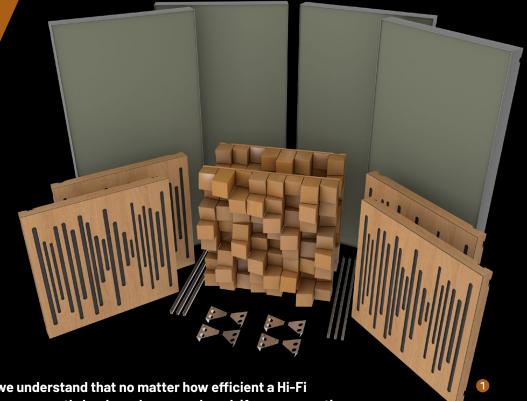
# VicAudiophile VMT Kit

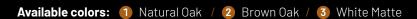


At Vicoustic we understand that no matter how efficient a Hi-Fi system is or how correctly loudspeakers are placed, if room acoustics is not properly addressed, it is likely that you will end up hearing more energy coming from the room than from the loudspeakers. This, of course, will compromise the listening experience and ultimately raise doubts about the investment made in the Hi-Fi system.

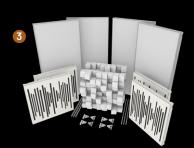
Vicoustic developed an acoustic kit to treat your room and truly enjoy your Hi-Fi system: VicAudiophile VMT Kit.

VicAudiophile VMT Kit is an acoustic kit that can be acquired to maximize the acoustic conditions of your Listening Room without compromising your health and comfort.

Depending on your goals, available space and budget you may acquire one or several sets. The final result is just a matter of how many kits you select.





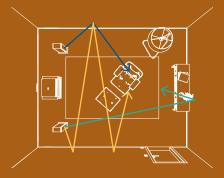


# What issues will **Acoustic Treatment** approach?

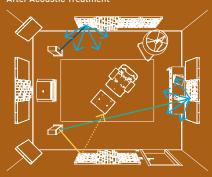
With the new VicAudiophile VMT Kit you'll be able to maximize the acoustics of your Listening Room, by dealing with the following three main areas:

- First Reflections Control
- Reverberation Time Optimisation
- Sound Field Anomalies Control

#### **Before Acoustic Treatment**



#### **After Acoustic Treatment**









Diffused Reflections

## Reverberation Time Optimisation

Reverberation is given by the persistence of sound within an enclosed space as a result of repeated reflections or scattering from the room's surfaces or objects. The more persistent the sound is, the higher the reverberation will be and vice versa.

How does Reverberation impact music enjoyment and how can it be quantified?

The degree of reverberation may influence spaciousness and signal perception/ definition and the Reverberation Time (RT) is the acoustic parameter that quantifies it.

In rooms with high RT's, where late reflections take a long time to be extinguished, the direct sound may be blurred, therefore compromising signal perception.

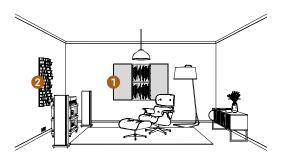
On the other hand, rooms with low RT's may end up sounding too acoustically "dry" or "dead", compromising the enjoyment of being enveloped by music.

#### Step by Step Improvement

With the VicAudiophile VMT Kit you will be able to improve the acoustics of your Hi-Fi Room, either all at once or in different stages, by acquiring several sets.

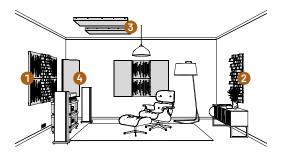
#### Step 1 / One VicAudiophile VMT Kit

- Side walls: treat first reflections 1
- Front wall: start treating front wall reflections
- Start reducing the room's reverberation
- Start controlling flutter echoes between side walls and front and back wall



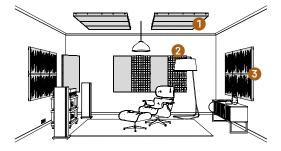
#### Step 2 / Two VicAudiophile VMT Kits

- Same as Step 1
- + Front wall: improve treatment 1
- + Back wall: start treating back wall reflections 2
- + Ceiling: start treating ceiling reflections 3
- + Low frequency treatment using Flat Panel VMT with VicSpacer Plus in the front corners 4
- + Further control of room's reverberation and flutter echoes between front and back walls
- + Start controlling flutter echoes between ceiling and floor.



#### Step 3 / Three VicAudiophile VMT Kits

- Same as Step 2
- + Ceiling: improve treatment 1
- + Side Walls: improve treatment 2
- + Back wall: improve treatment 3
- + Further control of flutter echoes



These suggestions are for a room under 15  $m^2$  (161 ft²) of floor area. For smaller or bigger rooms you can scale up or down the solution to fit your needs.

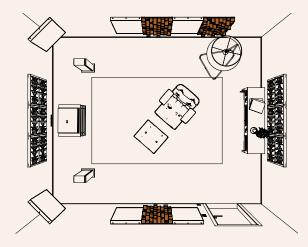
Feel free to request a Project Proposal at https://vicoustic.com/project-request.

### **Choose your configuration**

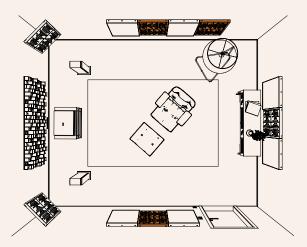
Different listeners will judge the importance of early side reflections differently. While some prefer to have more energy, others prefer to listen to the environment and the reverberation contained in the recordings with minimal influence from the room.

These preferences may even change with the type of music one is listening to:

- Classical music with acoustic instruments and slow rhythmic tempos may sound more pleasant if we have some energy coming from the sides, to increase the sense of spaciousness and feel more enveloped by the music.
- Contemporary popular music with electronic instruments / effects and faster tempos, where some sound sources seem to be (digitally) placed in different acoustic environments, energy coming from the sides may compromise music definition.



For Classical music, to increase the sense of spaciousness, use Multifuser Wood MKII 64 on the side walls.



For contemporary music, to avoid energy coming from the sides, use VicPattern Ultra Wavewood on the side walls.

Tip: Thanks to the VicFix J Profile fixation system, you can treat first lateral reflections according to your preferences and alternate between sound absorbing and sound diffusing panels at any time.

#### **First Reflections Control**

When a hi-fi system is playing, the listene will hear a combination of:

- Direct sound coming straight from the speakers and:
- Multiple sound reflections coming from the room's surfaces.

Some of these reflections arrive at the listening position very soon after the direct sound, and we call these the first reflections.

First Lateral Reflections may influence

- the stereo image (by shifting o broadening it);
- the perception of spaciousness within the Hi-Fi room.

This will strongly determine the enjoyment you will have when listening through a giver sound system.

## Sound Field Anomalies Control

In standard Hi-Fi rooms there are mainly two sound field anomalies that are likely to occur Flutter Echoes

Flutter Echoes are repeated sound reflections caused by sound traveling between parallel reflective surfaces, such as walls, floor and ceiling.

How to deal with Flutter Echoes?

- Using sound absorbing products (such as the Flat Panel VMT with the VicSpacer Plus and the VicPattern Ultra)
- Using sound diffusers (such as the Multifuser Wood MKII 64).

It should be noted that by treating first reflections and reverberation one is already dealing with flutter echoes.

**Room modes** are set-up in rooms due to the relationship between low frequency wavelengths and room dimensions.

Small rooms such as HI-FI rooms normally have poor acoustic response at low frequencies due to these modes.

How to deal with Room Modes?

By including Bass Trap solutions in the corners of the rooms, where high sound pressure levels occur, definition and clarity are likely to be enhanced.

Tip: Using the VicFix Corner, you can use both Flat Panel VMT with VicSpacer Plus and the VicPattern Ultra as bass trap solutions for your listening room.

# A **Sustainable** Listening Room

Standard sound absorbing foams normally used to treat hi-fi room acoustics are proved to contain harmful chemical components, that compromise the air quality, therefore likely being a source of several health hazards. In addition, most of these foams also pose a serious risk in terms of safety (fire) and environmental impact (non-recyclable).

# Vicoustic's continuing research and innovation in acoustic solutions, led to the development of the VMT and VicPattern Ultra lines

Being aware of the human health risk standard sound absorbing foams represent, Vicoustic's new line of products was developed taking into account a holistic approach by fully integrating its acoustic performance with other sustainability goals, such as human health (air quality), use of recycled materials; human safety (fire), etc.. The latest Vicoustic line of products uses new and responsible raw materials that are predominantly made of recycled PET Bottles (65%), which are recyclable and



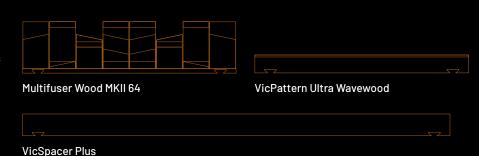
low emitting materials (low VOC emissions), therefore providing good air quality. These products maintain all fire safety regulations and are classified as Class 1 according to 0EKO-TEX 100 Standard, meeting the human-ecological requirements established for baby articles.

The VicAudiophile VMT Kit takes advantage of all these new Vicoustic products to help you maximise the overall conditions of your listening room.

#### **Specifications**

#### Contents of one VicAudiophile VMT Box

- 4 units of Flat Panel VMT with VicSpacer Plus (enhanced acoustic performance)
- 4 units of VicPattern Ultra Wavewood
- 2 units of Multifuser Wood MKII 64
- 6 units of VicFix J Profile 595 mm
- 2 sets of VicFix Corner (4 units, usable for 2 panels)



**Dimensions\*:** Flat Panel VMT: 1190 × 595 × 20mm / 46.8" × 23.4" × 0.8"; VicSpacer Plus: 1190 × 595 × 60 mm / 46.85" × 23.4" × 2.36";

VicPattern Ultra Wavewood:  $595 \times 595 \times 50 \text{ mm} / 23.4" \times 23.4" \times 1.97"$ ; Multifuser Wood MKII 64:  $595 \times 595 \times 143 \text{ mm} / 23.4" \times 23.4" \times 5.63"$ ; VicFix J Profile:  $10 \times 20 \times 595 \text{ mm} / 0.39" \times 0.79" \times 23.4"$ ; VicFix Corner:  $80 \times 83 \times 21.5 \text{ mm} / 3.15" \times 3.27" \times 0.85"$ 

\* For each product. Please notice that the dimensions of the panels have a tolerance of +/- 2mm

Materials: VicPET Wool, Solid Wood and Lacquered Steel; VicPET Wool, MDF and High-Pressure Laminate (HPL); Solid Wood

Installation: VicFix J Profile (included), VicFix Corner (included)

More information: https://vicoustic.com/product/vicaudiophile-vmt-kit

