

# Acoustic Kits



VicStudio Box

An acoustic kit for project studios



VicStudio VMT Box

A complete solution for a sustainable high performance studio



VicAudiophile VMT Kit

Acoustic treatment for Hi-Fi rooms made simple



VicCinema VMT Kit

A set of solutions to enjoy cinema at home

**At Vicoustic, we understand that the acoustic treatment of a room will always be a compromise between the available budget and the ideal case scenario.** And this should also not limit the visual aspect of the room. So whether you need to treat your project studio, home studio, hi-fi room, or cinema room, we have the right kit of acoustic solutions to treat your room step by step.

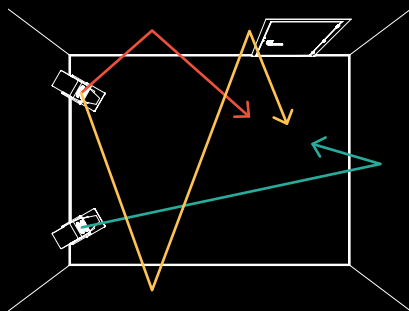
Vicoustic developed acoustic solutions kits specially designed for project studios, hi-fi rooms and home cinemas.

# What issues will Acoustic Treatment approach?

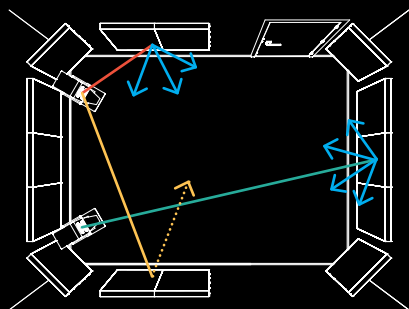
With the Vicoustic acoustic kits you'll be able to maximize the acoustics of your room, by dealing with the following three main areas:

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

Before Acoustic Treatment



After Acoustic Treatment



- First Reflections
- Late Reflections
- Flutter Echo
- 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.

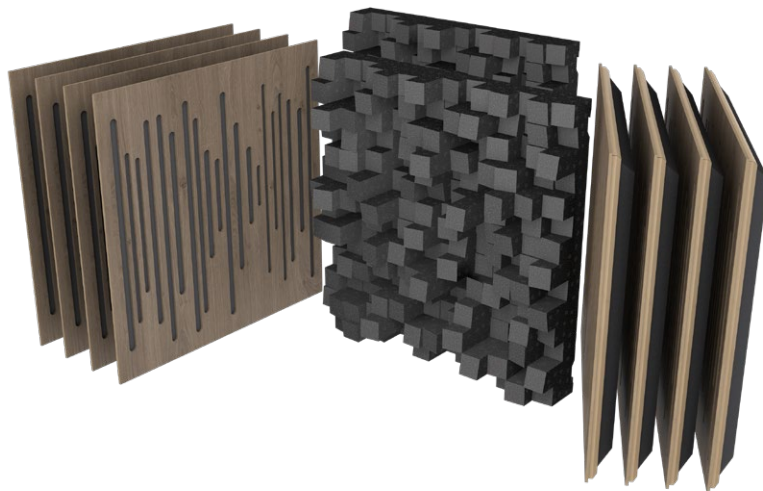
*How does Reverberation impact sound and how can it be quantified?*

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

# VicStudio Box


VicStudio Box is an acoustic kit developed for the acoustic treatment of a Project Studio, with a visual impact for a comfortable environment that is the basis of productivity, whether for composing, mixing, mastering.



## Contents of one VicStudio Box

- 8 units of Wavewood Ultra Lite
- 2 units of Multifuser DC2
- 2 units of Flexi Glue Ultra

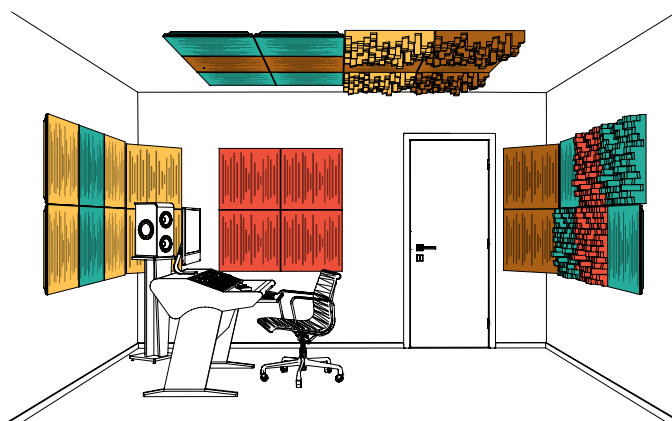
## Finishes (Wood + EPS colors)

-  Brown Oak VicPattern Ultra + Black Multifuser DC2
-  Black Matte VicPattern Ultra + Black Multifuser DC2
-  White Matte VicPattern Ultra + White Multifuser DC2

## Applications

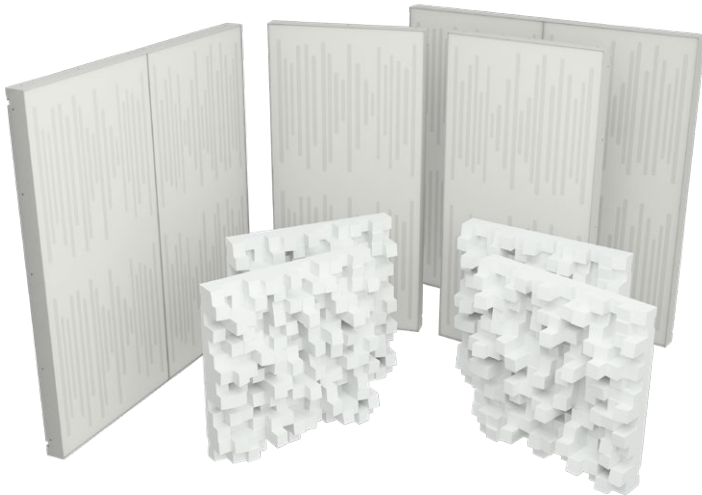
Depending on your goals and/or your available budget for the room you may install one or several boxes:

- 1 Treat first reflections from side walls and late reflections from back wall; start reducing the room reverberation.
- 2 Treat first reflections from the front wall, improve back wall, and start treating ceiling, minimizing comb-filter effects and flutter echoes.
- 3 Improve front wall and ceiling treatment, and low-frequency treatment with the front bass trap.
- 4 Improve ceiling and low-frequency treatment with the back bass trap.



# VicStudio VMT Box




VicStudio VMT Box is a high-quality acoustic treatment set for a Project Studio, combining sustainability with the high sound absorption performance of VMT. The aesthetics of the panels inspired by the Wavewood lines are an important factor for your comfort.



## Contents of one VicStudio VMT Box

- 6 units of VicSpacer Plus with Flat Panel VMT
- 4 units of Multifuser DC3
- 2 sets of VicFix Corner (4 units, usable for 2 panels)
- 1 tube of Glue

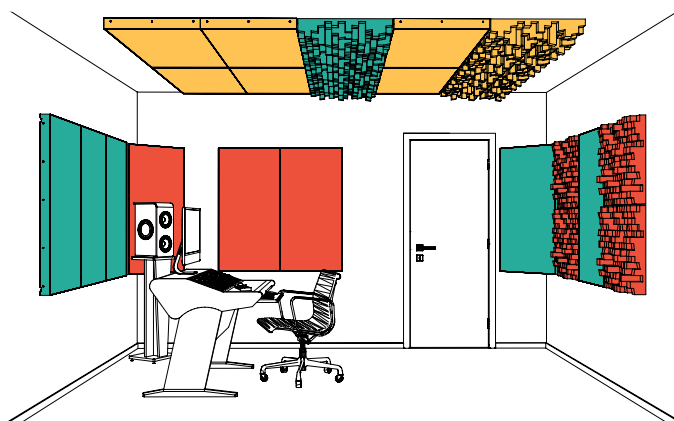
## Finishes (VMT + EPS colors)

- |   |   |
|---|---|
|   | White Wavewood VMT Pattern + White Multifuser DC3 |
|  | Black Wavewood VMT Pattern + Black Multifuser DC3 |
|  | Grey Wavewood VMT Pattern + Black Multifuser DC3  |

## Applications

Depending on your goals and/or your available budget for the room you may install one or several kits:

- 1 Treat first reflections from side walls and late reflections from back wall; begin low-frequency treatment using VMT as a bass trap; start reducing the room reverberation; control flutter echoes.
- 2 Treat first reflections from the front wall, improve back wall, and start treating ceiling reflections, minimizing comb-filter effects and flutter echoes.
- 3 Complete the treatment of the ceiling's surface; improve diffusion towards the back part of the room; control flutter echoes between floor and ceiling.



## First Reflections Control

When a speaker system is playing, the listener 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 or broadening it);
- The perception of spaciousness within the room.

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

## Sound Field Anomalies Control

In standard rooms there are mainly two or three sound field anomalies that are likely to occur:

**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
- Using sound diffusers

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 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.

**Comb-filter effects** occur when two or more identical audio signals are mixed together with a slight delay between them, which affects the appropriate perception of the frequency spectrum due to cancellation of certain frequencies, mostly in home studios.

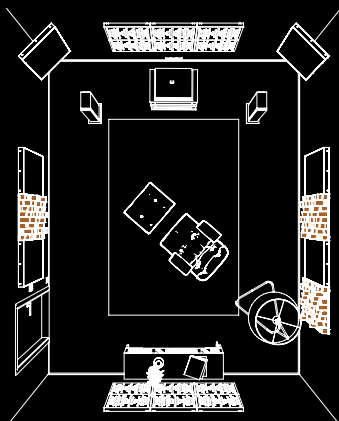
## Choose your Configuration

Treat first lateral reflections according to your preferences and alternate between sound absorbing and sound diffusing panels at any time, thanks to the **VicFix J Profile** fixation system.

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.

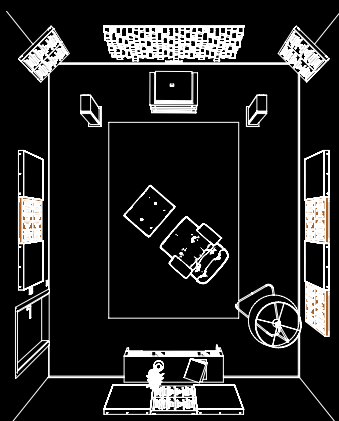
These preferences may even change with the type of music one is listening to:

- 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.



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

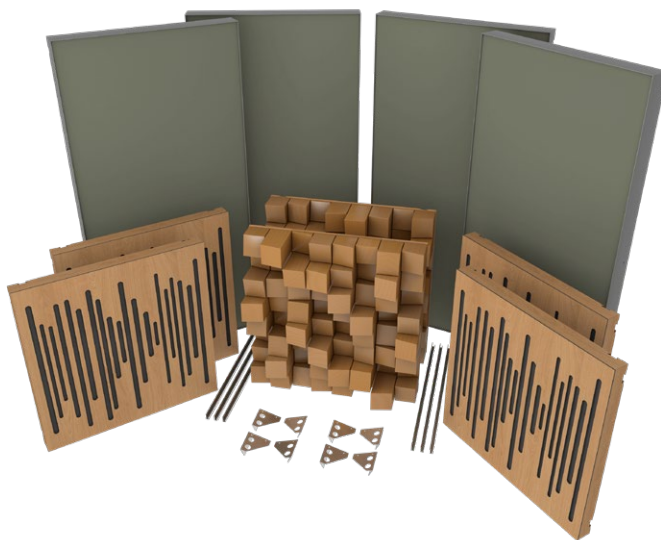
- Contemporary popular music with electronic instruments / effects and faster tempos, where some sound sources seem to be (digitally) placed in different acoustic environments, energy coming from the sides may compromise music definition.



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

## 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.



### Contents of one VicAudiophile VMT Kit

- 4 units of VicSpacer Plus with Flat Panel VMT
- 4 units of VicPattern Wavewood
- 2 units of Multifuser Wood MKII
- 6 units of VicFix J Profile 595 mm
- 2 sets of VicFix Corner

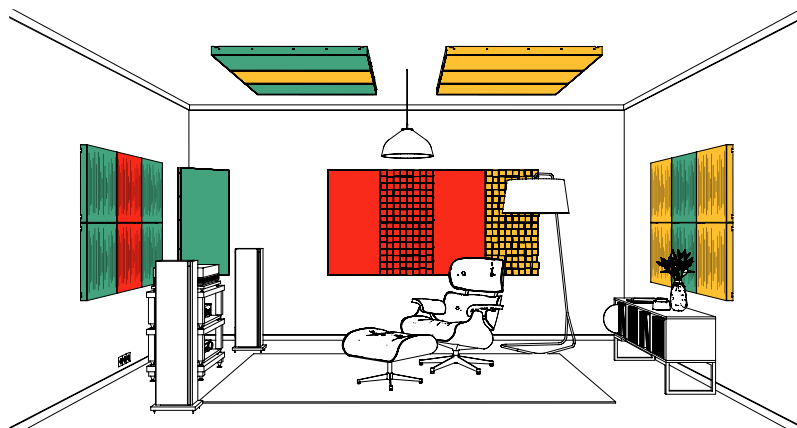
### Finishes

			VicPattern Ultra Wavewood
+	+	+	
			Multifuser Wood MKII
+	+	+	
			Flat Panel VMT

### Applications

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

- 1 Treat first reflections from side walls; start treating front wall reflections; start reducing reverberation and flutter echoes.
- 2 Improve front wall treatment; start treating back wall reflections; start treating ceiling reflections; low-frequency treatment using VMT in the front corners.
- 3 Improve treatment of ceiling, sidewalls, back wall, and further control flutter echoes.





# VicCinema VMT Kit

Taking into account that the acoustic design of a Home Cinema should reach a neutral acoustic environment, for a clear and complete film audio experience, Vicoustic developed the simple and effective acoustic solution: VicCinema VMT Kit.



## VicCinema VMT Walls and Ceiling Kit

- 4 units of VicSpacer Plus with Flat Panel VMT
- 4 units of VicPattern

## VicCinema VMT Mega Bass Trap Kit

- 2 units of Mega Bass Trap Kit

## Applications

With the VicCinema VMT Kit you'll be able to maximize the acoustics of a Home Cinema. Depending on your goals, available space and/or budget you may acquire one or several kits.

- 1 Treat first reflections from side walls; start reducing reverberation and flutter echoes.
- 2 Start treating back wall reflections.
- 3 Improve treatment of reflections from the front end and sidewalls.
- 4 Treat reflections from the ceiling.
- 5 Begin low-frequency treatment using Mega Bass Trap on the front-wall corners of the room.
- 6 Add two Mega Bass Trap VMT to the back-wall corners of the room to further treat low frequencies.



## Finishes

### VicCinema VMT Walls and Ceiling Kit



### VicCinema VMT Mega Bass Trap Kit



## VicCinema VMT Mega Bass Trap Kit

The new Mega Bass Trap has the aesthetic versatility of the VMT technology, helping increase the performance in the medium and low-frequency region. All of these features culminate in what Vicoustic proudly presents as an eco-friendly bass trap.



Being this a broadband absorber, the Mega Bass Trap will also contribute to further absorption.

By including Bass Trap solutions such as Mega Bass Trap in the corners of the Home Cinema, you will be treating Room modes that are set up in rooms due to the relationship between low-frequency wavelengths and room dimensions.

# A Sustainable Acoustic Treatment

Most standard acoustic solutions throughout the years revolve around the use of: 1) Foam, containing harmful chemical components, that compromise the air quality, therefore likely be 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); 2) Mineral wool, covered by stretched-fabric for aesthetic purposes and because exposure to these fibres is generally not advised for health purposes. Mineral fibres may often contain harmful chemical components, that compromise air quality, therefore likely being a source of health hazards.

## **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 standards sound-absorbing foams and mineral wool 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 OEKO-TEX 100 Standard, meeting the human-ecological requirements established for baby articles.

The acoustic kits developed with VMT take advantage of all these new Vicoustic products to help you maximise the overall conditions of your listening room.