



# **JMC Soundboard**

**User Manuel**





JMC Soundboard, the loudspeaker made out of tonewood



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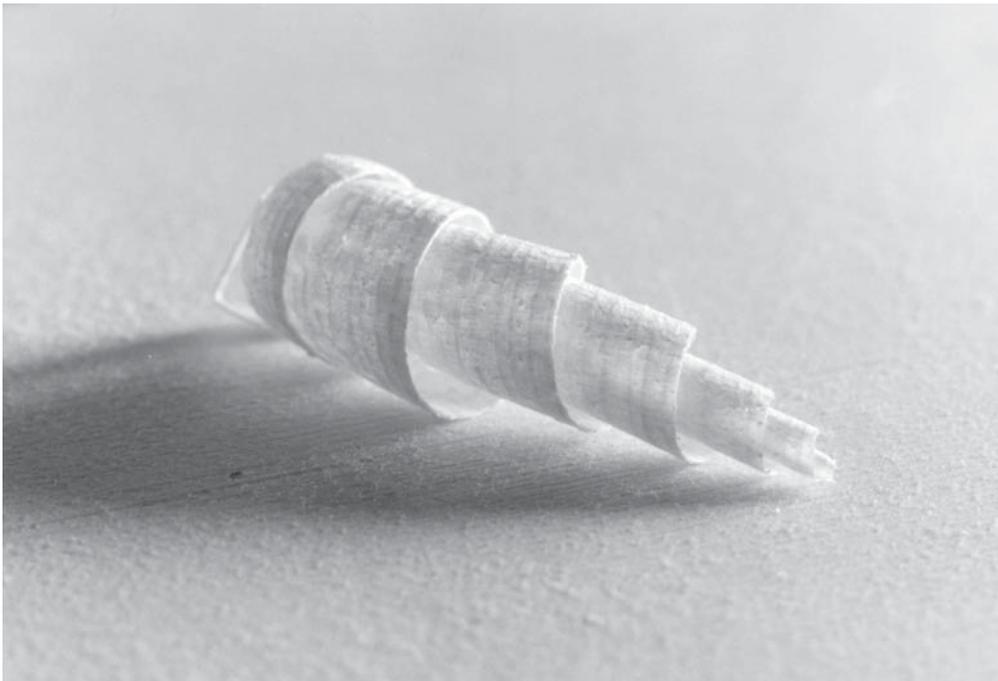
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## Introduction

The JMC Soundboard is a full-fledged musical instrument stemming from 21<sup>st</sup> century lutherie techniques.

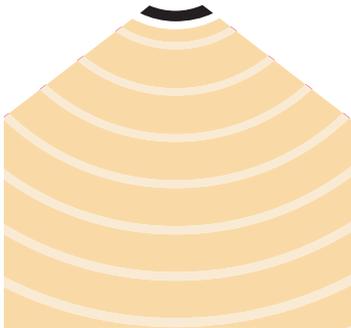
It is thus very important to take great care of it, in terms of packaging (resonance spruce is very soft and thus easily marked); humidity (at least 40%); and exposure to sources of heat (avoid placing it near a fireplace, a radiator or positioning it behind a window in direct sunlight).



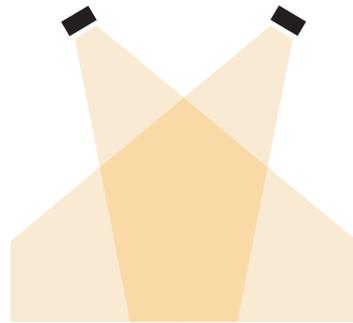
## Choosing the location of your Soundboard

The Soundboard is a plane-type loudspeaker that creates a hemi-directional wave. This means that the sound is perceived in the same way whether one is near or far away from the audio device - and that you are thus free to choose where to locate the Soundboard. This may be determined by the aesthetic appearance of the audio system and by the interior design of the surroundings. It is nonetheless important to be sure not to place it too close to a source of heat and at a reasonable distance from the amplifier. It adapts perfectly well to open two-floor areas as well as L or U-shaped settings.

**Soundboard wave**



**Twin-loudspeaker wave**



The Soundboard works well whatever the size of the room in which it is used. While it is extremely effective in a large living room, it can also fill spaces of up to 400 m<sup>2</sup> in music listening situations. One may of course also opt to install several Soundboards.

## Installing your Soundboard

You can choose between three different sorts of fixture. While it is generally fixed against a wall, you may for space -or acoustic- related reasons choose to install it in the corner of a room thanks to a longer arm serving to place it in an angle. The latter position will generate more bass tones. If the structure of the room does not enable wall mounting, the Soundboard may also be placed on a dedicated stand.

The Soundboard should ideally be placed between **1.2 and 1.5 m** above ground level (fixing it too high might make you lose the sense of companionship you establish with it).

You must also take account of the structure of the wall against which it is mounted (wood, plaster, concrete, bricks); and each material requires its own screws (and safety precautions!). Before drilling, consider any potential electrical wiring or water pipes that may be hidden inside the wall.

**It is necessary to install the JMC Soundboard with two persons.**

1. Use a pencil and the supplied template to mark the exact spots of the 4 screws (not supplied) for the fixation element.
2. Drill the holes for the screws and plugs, if necessary. Be sure to select well adapted plugs in relation to the material of the wall material. The binding must be robust and not sensitive to vibrations (figure 1).



Figure 1

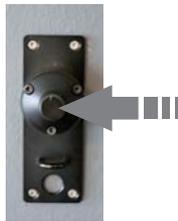


Figure 2



Figure 3



Figure 4



Figure 5

3. Loosen the lower screw on the fixation element (figure 2).
4. Insert the adjustment tool (figure 3) on the fixation element (figure 4) and set it horizontally, first by adjusting the level and secondly by firmly pressing the two horizontal bars of the tool against the wall (figure 3).
5. Block the lower screw (figure 2) by using the provided 4 mm Allen screwdriver (figure 5).
6. Remove the JMC Soundboard from the box and place it flat on the floor. Attention, spruce wood is very tender and can easily be marked.
7. Prepare the 4-wire speaker cable. For installations with visible cables, place the cable in the ring of the fixation element (figure 6), and insert the plugs on the back of JMC Soundboard. In the case of an in-wall cable installation, use the hole in the wall fixation and then move it into the ring.
8. Remove the protective rails, and slide the female part of the fixation located on the back of the JMC Soundboard into the fixation element on the wall until it is completely fixed. Insert the speaker cable plugs into the JMC Soundboard. It is recommended to connect the cable before attaching the JMC Soundboard against the wall, because access to the rear can become difficult at a later stage...
9. Tighten the 2 screws of the female part of the fixation element (figure 6) using the supplied tool (4 mm Allen screwdriver, Figure 5). This tightening is only possible with the supplied tool.



Figure 6

Now the installation is complete and you are ready to enjoy your musical instrument of the 21<sup>st</sup> century.

### Remark

- The JMC Soundboard is suspended so as to enable the vibrations to travel throughout the membrane (and not be dissipated through the wall mount or in the wall). It should therefore normally enjoy a certain degree of freedom when suspended.

## Connecting your Soundboard

Installing the Soundboard is a very simple and straightforward procedure. To plug it in, simply connect the left and right channels of the amp to the left and right terminals on the back of the Soundboard, as on traditional loudspeakers. **Be very careful** to respect the polarity (according to standard practice by which the red wire is connected to the + and the black wire to the -) and to avoid reversing the colours of the plugs and the terminals. The red plugs must always be fitted in the red terminals and the black sockets in the black terminals, just as you will do on the amp. First connect the Soundboard and then the amp in order to avoid any risk of a short circuit.



Now that the Soundboard is plugged in, check that the cables are not touching the cover. If this is the case, you can hold the cables together with a dedicated grip. You can now switch on your amp and listen to your favourite music.

### Important note

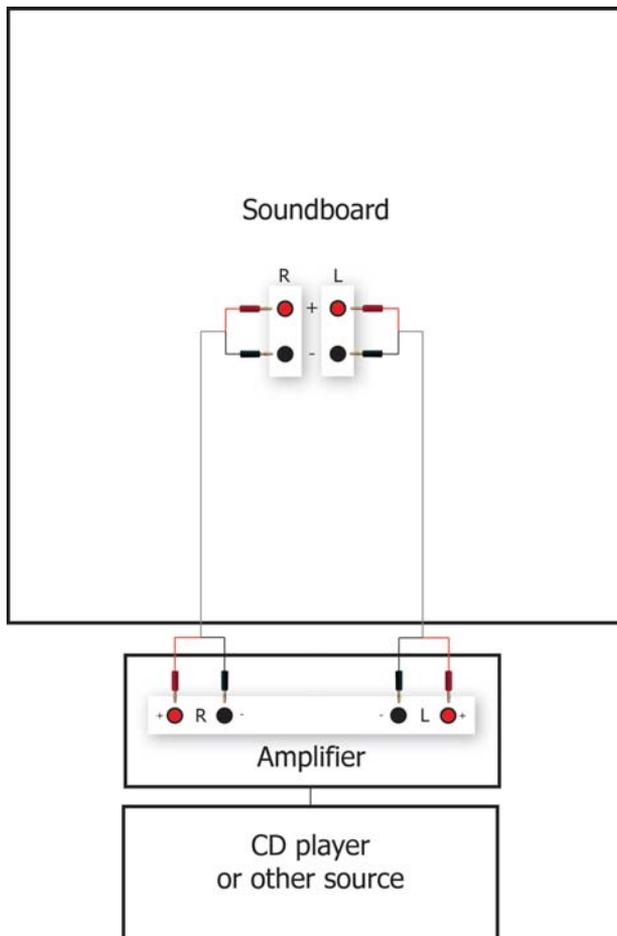
When you first begin to use it, the Soundboard generates rather discreet bass tones. You may choose to enhance them for a certain period of time using the amp, providing it is equipped to do so, but you will soon see that the Soundboard is gradually enriched with bass tones.

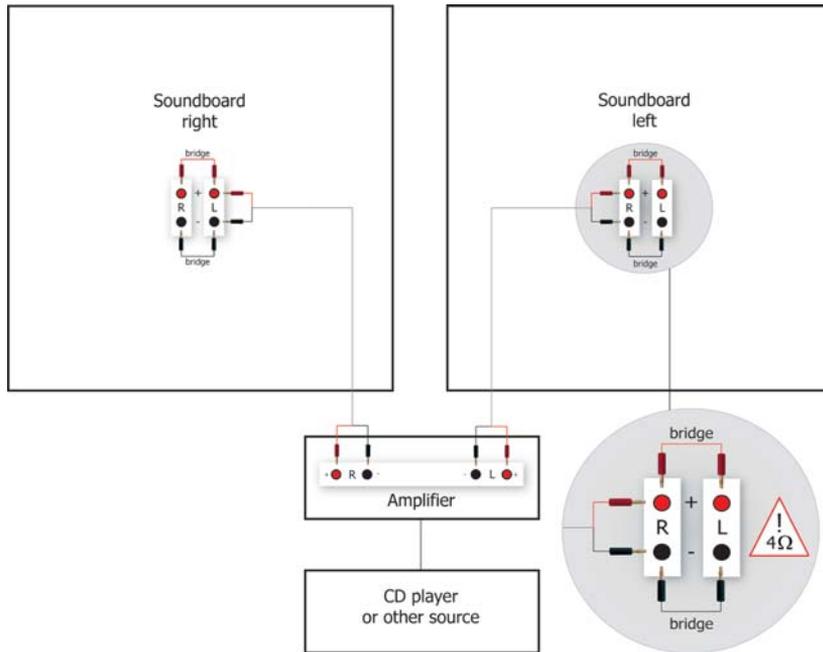
## Standard installation

Connection diagram for a single (stereophonic) Soundboard

Impedance 8 to 16 Ohms

The Soundboard is a single stereophonic loudspeaker and two loudspeaker cables must therefore be plugged into the Soundboard (as if there were two traditional loudspeakers).



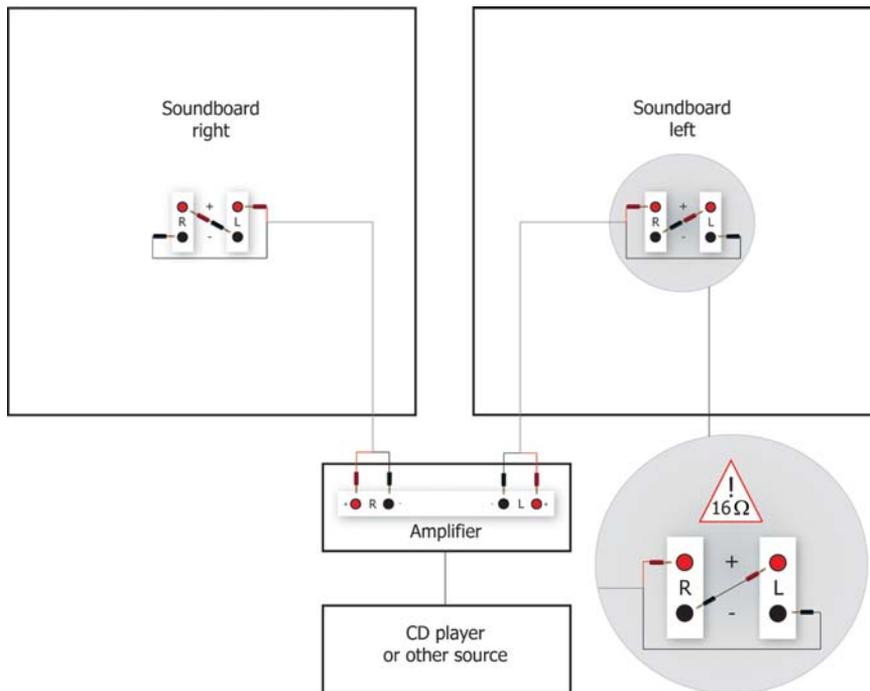


### Special installation 1

Connection diagram for two Soundboards in stereo/bridged operation.

The amp must be able to handle a 4-Ohm impedance. If such is not the case, opt for the installation suggested on the next page.

Connecting both sides of the Soundboard in parallel (side-by-side) as shown above or in series (end-to-end) means it operates in monophonic mode and one can thus place two Soundboards in a room like a pair of speakers.



## Special installation 2

Connection diagram for two Soundboards in stereo/bridged operation.

Impedance 16 Ohms

Here, in series (end-to-end), the **two loudspeaker cables** must be plugged into the Soundboard **with the cables crossed**.

## Selecting the audio system

There is a broad range of audio amps available. We recommend a high-quality amp providing at least  $2 \times 60 W_{\text{RMS}}$  into 8 Ohms (for a transistor amp). Depending on your preferences, perhaps you will choose a valve/tube amp which also creates a very pleasant rendering. It is worth nothing that with your Soundboard, you have treated yourself to an extremely high-quality loudspeaker that is very transparent. By going for a quality amp as well as cables and a source of correspondingly high quality (a good CD player, non-compressed files), you will achieve an optimal rendering.

We are naturally available to provide any advice you might require in this respect and we represent certain brands in Switzerland.

*« Thank you very much for the quick delivery. Installing it was so simple that I did it myself: with just four screws, the Soundboard was secured to the wall. The sound is incomparable and fills the entire room, covering the entire spectrum from treble to bass notes. Complex sounds are extremely accurate and detailed. All the delicate nuances of brass instruments are admirably conveyed. The sound is clear, warm, pleasant and well-rounded. »* Ch. S.

## Caring for your musical instrument

The membrane of this speaker has been crafted from over 350-year resonance spruce using lutherie techniques. It is glued and varnished with varnishes that do not perturb the vibration. It is important to care for it like a musical instrument - which means it **must not be installed near a source of heat, i.e. not above a fireplace or woodburning stove, a radiator, nor behind a window in direct sunlight.**

### Cleaning and maintenance

It is important to check the humidity rate in the room. We advise you to maintain a minimum 40% humidity rate. To clean it, we suggest using a soft damp cloth if necessary. Do not use cleaning products (so as to keep the natural satin-finish effect) and definitely not detergents (which may damage the varnish). Be careful not to



knock it with any hard materials. While such impacts should not disturb the sound, they could easily leave marks and it is virtually impossible to remove these marks.

## Technical Information

Loudspeaker type	Plane, stereophonic, 2 x 3-way
Bandwidth	35 Hz to 20'000 Hz
Distortion	0.05 %
Impedance	8 Ohms
Average level at 1 m	105 dB
Nominal power	2 x 60 Watts <sub>RMS</sub>
Wave shape	Hemi-directional, similar to a plane wave
Attenuation	- 3 dB each time the distance doubles
Sound	95 % air-borne, 5 % structure-borne
Number of vibrators	8
Filter	Low-loss splitter
Cables	Litz 0,942 mm <sup>2</sup>
Dimensions	890 mm x 890 mm x 100 mm
Wall space occupied	890 mm x 890 mm x 210 mm
Fixture	Central mount, secured to the wall by four screws. The Soundboard may be placed either flat or in a corner.
Anchorage	Approx. 1.2 m to 1.5 m from floor level
Weight	15 kg (depending on the model)
Amplifier power	Minimum 2 x 60 Watts on the 8 $\Omega$ output
Inputs	Stereo
Connexions	4 plugs (to be screwed in or inserted)
Operating temperature	15 to 45 °C
Humidity level	40 to 85 %

*Some models may feature certain variations.*

### **What is different about it in comparison with traditional loudspeakers?**

Loudspeakers generate a focal wave and it takes two of them for the listener to be at the intersection of two waves. The Soundboard generates an omnidirectional wave. Listeners can be near, far or even in another open space, and they can perceive the music on the same level of quality. The Soundboard is crafted in the tradition of musical instruments that actually play music for us. The impression is that of a concert, with a powerful presence, precision and a well-rounded sound. Music is heard and sensed in all its dimensions.

### **How does the stereo effect work?**

The two signals from the two channels are physically mingled in the membrane. In terms of the rendering, when it comes to the presence of the music generated by the Soundboard, one could really speak of a three-dimensional rather than a stereo sound. The listener is literally enfolded in or immersed within the musical climate. While there is less panoramisation than in a conventional system, the Soundboard creates more sound levels and more depth of field.

### **Is there enough bass?**

Yes, like a musical instrument such as the piano, the naturally generated bass tones are clearly present. Just like a guitar with a resonance spruce soundboard that has to be regularly played for three years to develop its full potential, the Soundboard will further enrich its frequencies according to the number of hours of listening and vibrations. The position of the Soundboard can also enhance its ability to emit bass tones, such as installing it in an angle.

### **Where is the resonance chamber?**

One can in fact see the all piece as a resonance chamber, and the Soundboard plays the role of a vibrating membrane. Despite what one reads on the topic of resonance chambers which are said to amplify sounds, they in fact mostly serve to enable listeners to hear all the frequencies emitted by the soundboard by reducing the acoustic short-circuit inherent to the moment when a membrane begins to vibrate. Moreover, the materials from which they are made have a strong influence on its timbre, which is a bad thing as far as the Soundboard is concerned, which is why it has been reduced to a totally muffled cover.

### **Are all Soundboards identical?**

They are made in the same way, but they are nonetheless all a little different in that they are built from a living material, spruce. Like all musical instruments, they will evolve in their own particular way, depending on where they are installed, the music they play and the people for whom they play.



## Repairs and guarantee

### Repairs

If you are in any doubt, kindly check that the loudspeaker cables are properly plugged in according to the appropriate polarity. Contact an official distributor or JMC Lutherie SA directly. Returns are only possible by prior agreement and in the original packaging (empty spare packaging may be ordered ahead of time).

### Warranty

JMC Lutherie SA guarantees the quality of its products. The warranty may only be issued by JMC or by its official distribution network. It is valid for two years as of the date of purchase, and only for JMC instruments and Soundboards accompanied by the original invoice. Accessories are covered by their respective brand or supplier guarantees. The warranty does not cover normal wear such as natural ageing (scratches or fading), damage resulting from improper maintenance, nor damage due to indirect causes or negligence. The customer must inform JMC Lutherie SA in writing and in detail of any potential hidden flaw within 15 days of taking delivery of the goods. If such a report is not received, the product is considered to be exempt from any such flaws.

## Delivery and returns

### Delivery

The customer undertakes to check the goods immediately upon taking receipt of them. If any damage or irregularities are observed, he must mention them on the shipment documents and inform the forwarding agent. JMC must be informed in writing within 5 days. Beyond this deadline, the customer loses any right to reimbursement. Import taxes are payable by the customer, who undertakes to settle them. JMC creations are unique because they are made from natural wood, which means that certain slight differences (in size or appearance) between various items may occur due to the wood fibre structure.

### Returns

If no prior arrangement has been made, the cost of any returns must be covered by the customer and the original packaging (of which an empty version may be pre-ordered) to ensure appropriate protection.

### Installation

If we handle the installation, we secure the Soundboard to the wall and connect it to the audio system. However, if any cables need to be run, this must be done by your electrician in accordance with our indications.

### Applicable law

Swiss law. The Vienna Convention is in no way applicable. The place of jurisdiction is Le Chenit, Vallée de Joux, Switzerland.

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