

MOVE

it

MANUAL


HAL

INTRO


To begin with, thank you for purchasing MOVE-IT. As you will see, it's much more than just an immersive panner: it's a powerful tool for managing all your multichannel configurations, integrating a fully-featured mixer and a routing page. We've poured our heart and expertise into creating this tool, and we sincerely hope it meets all your expectations.

MOVE-IT is a plug-in designed to intuitively move your sound sources in any speaker configuration, with support for up to 16 input and output channels (stereo, 5.1, 7.1.2, 9.1.6, or any custom setup). Perfectly match your speakers' layout, whether you're working on a film, a live show, or an art installation. Access multiple parameters effortlessly, including volume, mute, solo, and XYZ coordinates for every source and every speaker. Take advantage of horizontal and vertical mirroring, scaling, and rotations using simple keyboard shortcuts. Have total control over the size of the sources, the bass management, LFE sends and much more. MOVE-IT makes working with complex in/out configurations easier than ever before.

MINIMUM SYSTEM REQUIREMENTS

 macOS 10.13 and later (Intel / Apple Silicon) (64-bit)

 Windows 7 and later (64-bit)

 iLok 2 or higher



HAL

Based in Paris (France), at the heart of POLYSON post-production studios, we work closely with sound engineers, sound editors, re-recording mixers and developers.

Our team has been supporting directors and artists since the early 2000s in designing and implementing the sound of their artistic creations. From international blockbusters to indie movies, podcasts, installation art and more, our work can be heard on hundreds of projects.

HAL seeks to develop innovative tools that are created by and destined for post-production professionals, focusing on audio quality and simplicity of use.

If you have any questions or feedback, feel free to email us at help@hal-audio.com

HOW TO INSTALL

1**Run the installer**

The Move-it installer can be downloaded from the product page right here:

→ <https://www.hal-audio.com/downloads/#move-it>

After downloading and opening the Move-it installer, please follow the on-screen instructions. Files will be copied into the common VST3, AU (macOS only) or AAX plug-in folders on your computer.

Your DAW will recognize the plug-in automatically when next relaunching and you will be asked to register Move-it with your iLok account.

2**iLok registration**

Move-it is licensed using the iLok system and you need to have an iLok account in order to use it. Note that setting up an iLok account is free, and you will find all necessary information on how to do it on www.ilok.com.

After your purchase, you will automatically receive an order confirmation from us containing an iLok activation code (XXXX-XXXX-XXXX-XXXX-XXXX-XX). To activate this license, open the iLok License Manager app. You can download it for free on www.ilok.com.

Either select the menu Licenses → Redeem Activation Code, or click on the small « Redeem Activation Code » icon in the upper right of the application.

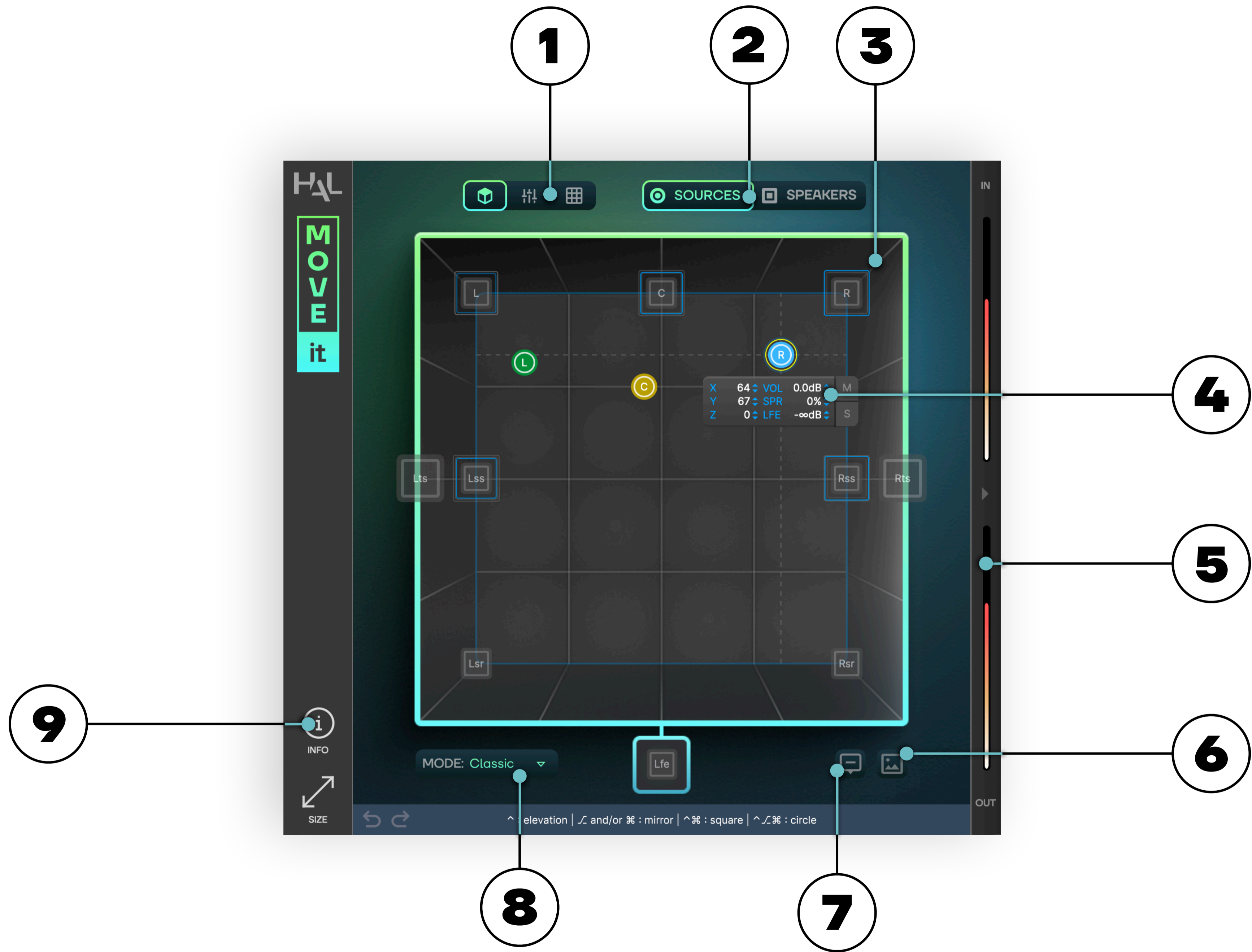
You should then copy and paste the entire iLok activation code you received from us into the entry form. Select your iLok USB dongle, iLok Cloud or your computer as the activation location to immediately activate the license and confirm the location. If you have authorized Move-it on an iLok dongle, the dongle containing the correct and activated license must be plugged into your host computer.

3**Quick start**

Move-it is an audio effect plug-in, destined to be inserted on an audio or an auxiliary track in your DAW. Now you can start exploring!

HOW TO USE

MOVE-IT
Panner
page



Panner page

1 Panner • Mixer • Router

Move-it combines 3 essential spatial audio tools — a panner, a mixer, and a router. Use these buttons to display any of these pages.

2 Sources • Speakers

In the Panner page, « Sources » is the most commonly used mode. It allows you to move the sound sources (IN) anywhere in the surround field. « Speakers » mode lets you set the virtual speakers' (OUT) to where they are in the real world.

3 Panner

The panning space allows you to move the sound sources within a three dimensional multichannel environment. Multiple sources can be selected simultaneously either by holding \hat{u} and clicking on each of them, or with a click and drag over the desired area..

4 Pop-up box

This pop-up appears when hovering over a source or speaker (unless you have disabled this option - see 6.). You can adjust each source's Volume (VOL), Spread (SPR), LFE Send level (LFE) and X, Y, Z coordinates, plus each speaker's Volume (VOL), Re-injection level (REIN), High Pass Filter frequency (HPF) and X, Y, Z coordinates.

5 VU-meters

The VU-meters indicate the maximum level for inputs and outputs. Click on the side bar to expand it and see all the sound levels in dBFS for each source (IN) and for each speaker (OUT).

6 Pop-up display

Show or hide the pop-up boxes when hovering sources or speakers.

7 Background image

Load a background image within the panner. This is particularly useful for displaying the room layout and the speakers' positions, when setting up a sound installation for instance.

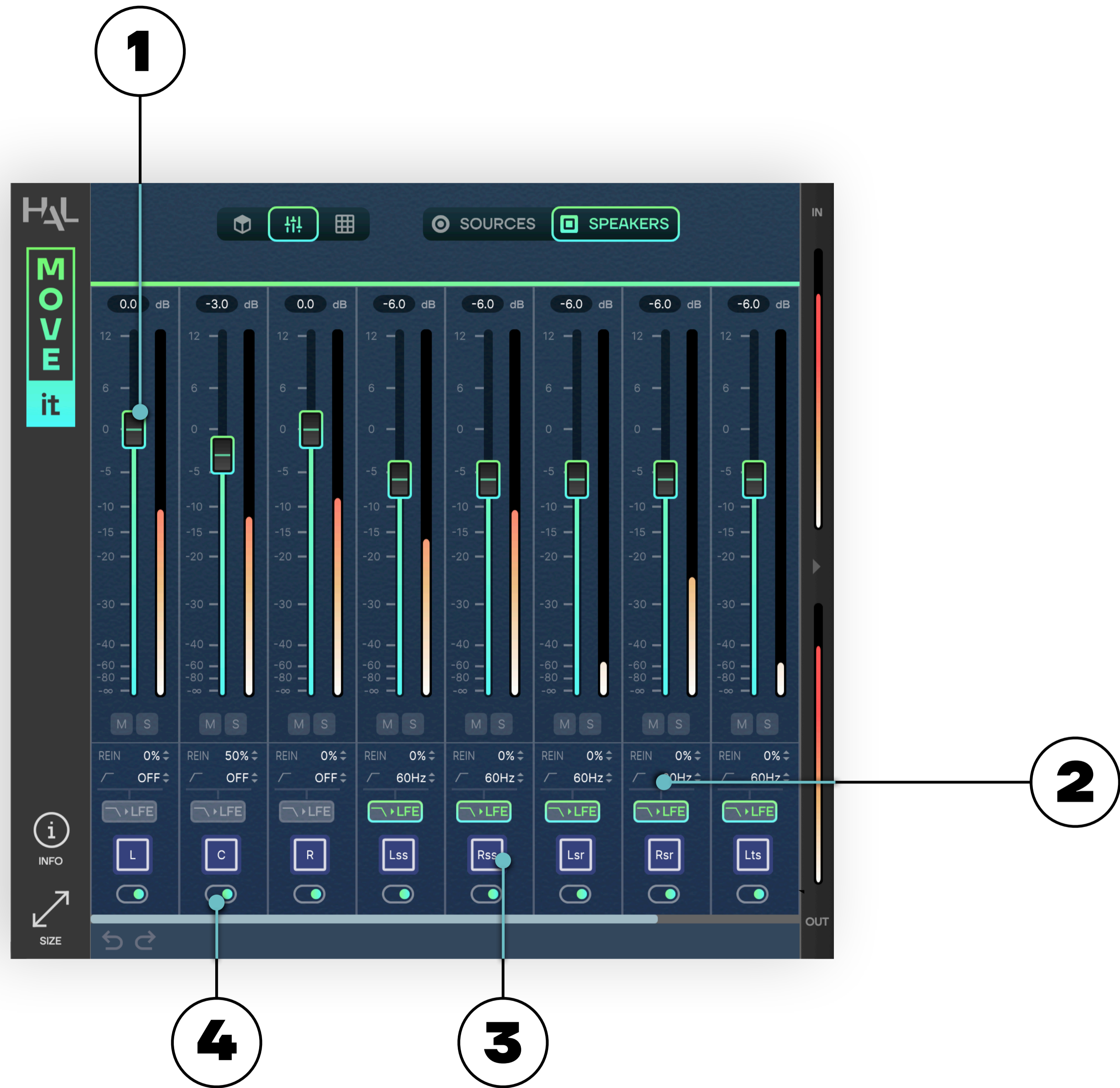
8 Mode

Choose between two panning algorithms: « Classic » is the panning algorithm you're familiar with and that we recommend for most configurations, and « Distance » is an algorithm that takes into account the distance of the sources to the speakers and the Spread value of each source (see p.11 and 12).

9 Info

Display all the keyboard shortcuts that allow you to create coordinated movements between multiple sources: mirror, scale, rotation, and more.

MOVE-IT
Mixer
page



MOVE-IT

Mixer page

1 Mixer

The Mixer page includes a number of parameters also available in the Panner page: Volume, Mute and Solo for each source and speaker. Sources also feature Spread and LFE Send level. Speakers, for their part, feature Re-injection level and High Pass Filter frequency.

2 Sources & Speakers' parameters

Sources

SPR (Spread) - Spread, or size, of a sound source is the way in which a source radiates to nearby speakers. The greater the Spread value, the farther away the speakers taken into account. If Spread value is set to 100%, the source is emitted at the same level by all speakers.

LFE (Low Frequency Effect Send) - If your configuration includes a LFE channel (5.1, 7.1, etc.) then the LFE Send lets you route the signal directly into it. You can also click on « LFE » label to choose whether you want the send to be PRE or POST fader.

Speakers

REIN (Re-injection) - Rebalance the signal from any given speaker to any other(s) while keeping the level constant. Re-injection is the percentage of the signal coming to a speaker that is re-routed to one or more other speakers. You can choose which speaker you would like the audio to be re-routed to by clicking on the « REIN » label.

HPF (High Pass Filter) - Use the 12 dB/octave high pass filter to cut the low frequencies from any speaker, with the option to route the filtered signal to the LFE channel by toggling the LFE button (*bass management*).

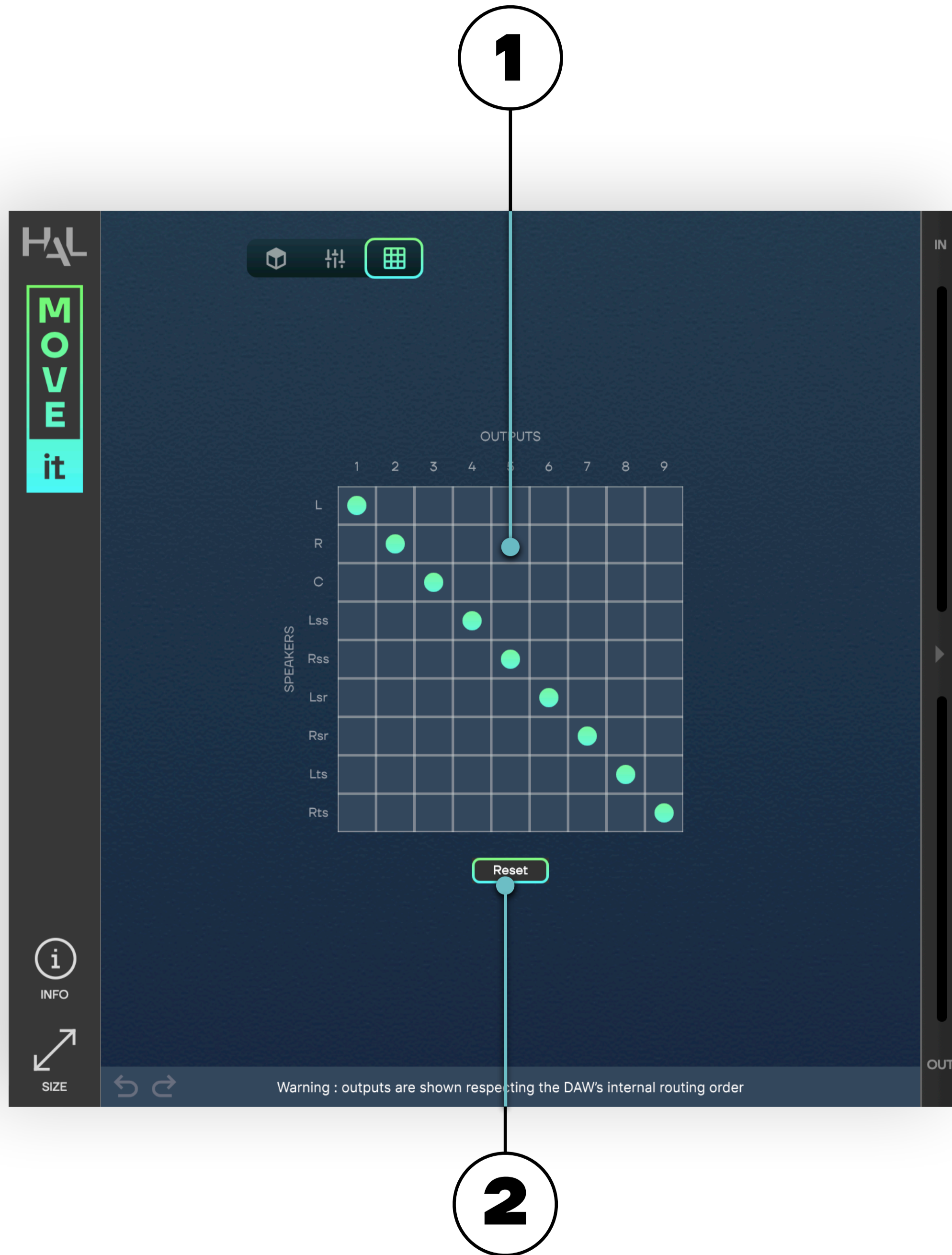
3 Sources & Speaker's name

Double click on any source or speaker's name to edit it, with a limit of 3 characters maximum.

4 Sources & Speaker's bypass

Enable or disable the selected source or speaker. Note that Bypass is different from Mute, and that a bypassed source or speaker is no longer taken into account by the panning algorithm, nor is visible in the Panner page.

MOVE-IT Routing page



1 Routing matrix

Change how the speakers are routed to the plug-in outputs. **Be aware that the outputs are shown respecting the DAW's internal routing order, which does not necessarily match the path order displayed in your host software.**

2 Reset

You can reset the routing matrix to its default state by clicking on the Reset button.

Panning algorithms

Easily accessible from the main page, Move-it offers two panning modes (or algorithms): « Classic » and « Distance ».

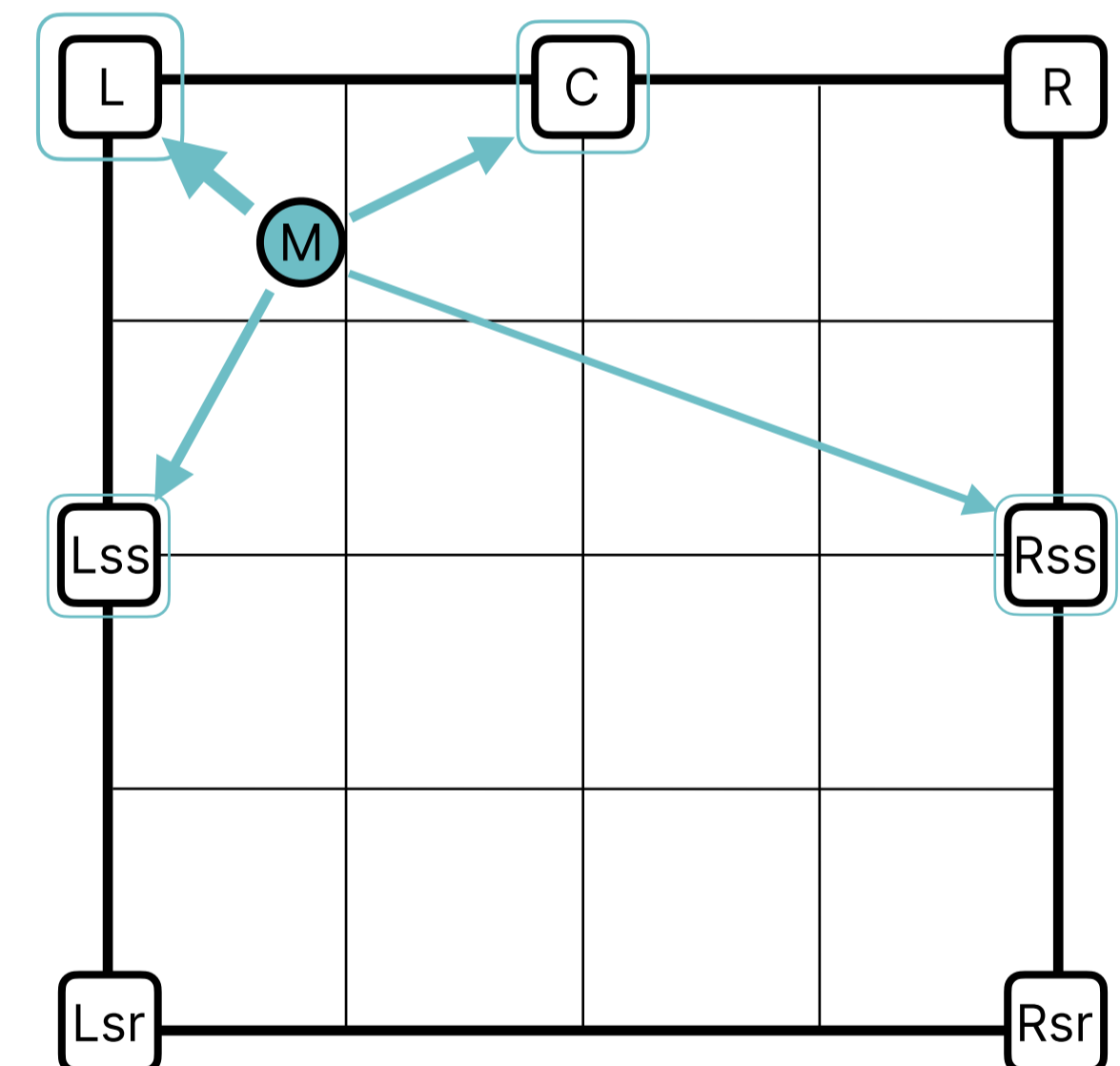
- « Classic » is the algorithm you're already familiar with if you've ever used surround panners and it's the algorithm we recommend for most setups, especially if you're working on film or music.
- « Distance » is an algorithm that takes into account the distance of the sound sources to the speakers, plus the Spread value of each source. It will give the best results if you're working with a custom speakers configuration, like in a sound installation.

Pan law

Move-it uses a 3dB pan law, which is the most commonly used. To understand what it means, let's consider a simple stereo setup without a pan law. When you pan a mono signal to the center, you would notice that it sounds louder than when it's panned fully to one side. This happens because in the center position, the signal is coming out of both speakers equally, effectively doubling the sound energy. The pan law compensates for this by reducing the signal's level when it's panned to the center, so the perceived loudness remains consistent as possible as you pan between two speakers. The 3dB pan law is a compromise chosen for its effectiveness in nearly every multichannel situations.

Classic

Based on this 3dB pan law, the « Classic » algorithm of Move-it distributes the sound of a source between up to two pairs of speakers: the pair above it (with the higher Y value) and the pair below it (with the lower Y value). Note that to be considered as a pair, two speakers must have the same Y and Z values.



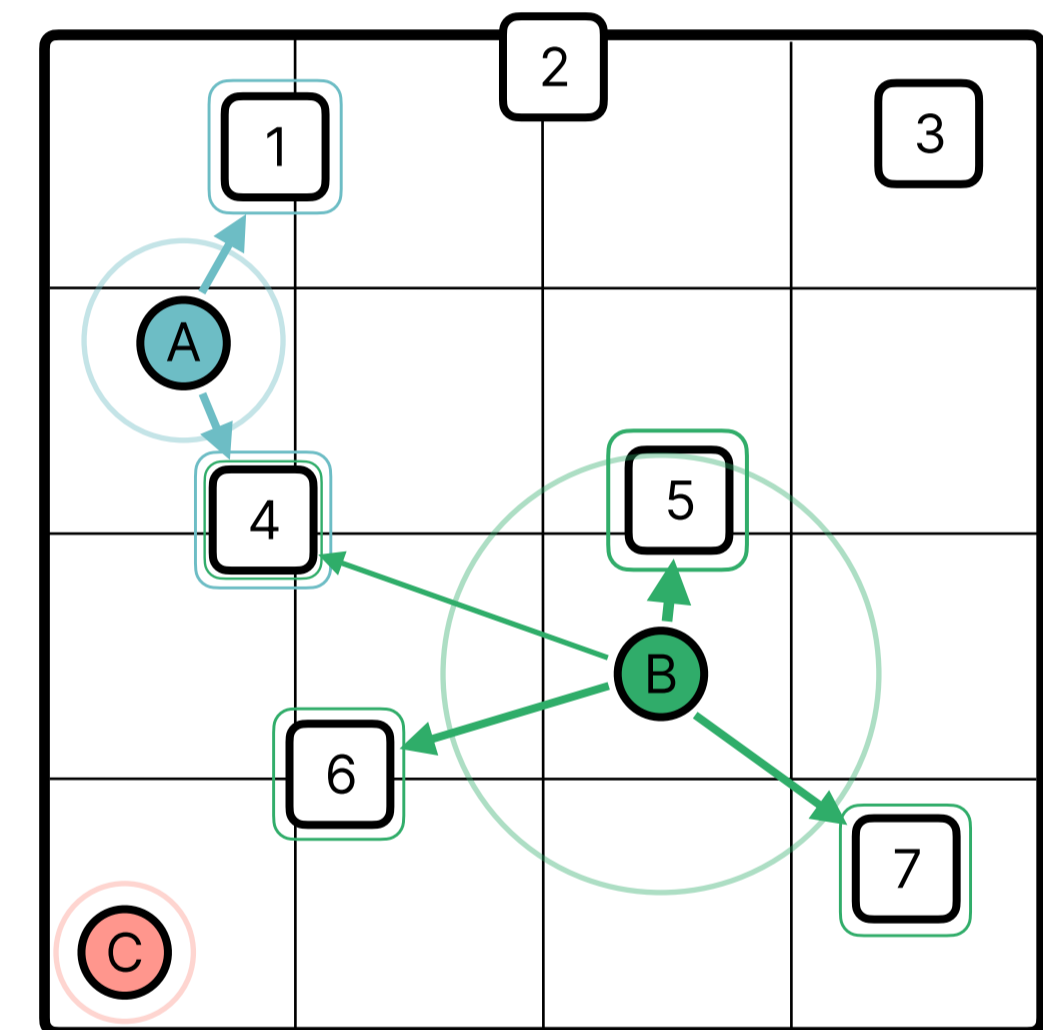
Distance

The « Distance » algorithm of Move-it uses is our own version of a DBAP (Distance-Based Amplitude Panning). Like the DBAP, it determines the volume at which different sound sources are emitted in the speakers, based on their distance from them. The farther a speaker is from the sound source, the lower its amplitude. Unlike DBAP, our « Distance » algorithm functions in conjunction with the Spread parameter of each source. The greater the Spread, the more speakers will be taken into account by the algorithm.

At every moment, the algorithm calculates the distance from a source to all the speakers and, depending on the Spread of the source, distributes the sound to a certain number of speakers.

The main difference between the « Classic » and the « Distance » algorithms is that with « Distance », there are potentially places in the Move-it panning space where a source would not transmit to any speakers, if the Spread is set low.

The « Distance » algorithm can be applied to any speaker configuration, not just standard setups like 5.1 or 7.1.2. It works great with custom or non-standard speaker placements, making it very useful in installations.



macOS shortcuts

Click

 : Select

 : Select all

Shortcut + click

 : Reset position

 : Select multiple objects

Shortcut + drag

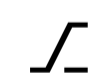

 : Elevation



 : Mirror (↑)


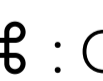
 : Mirror (↔)

  : Mirror (↑) locked

  : Mirror (↔) locked

  : Scale

  : Square

   : Circle

   : Square + Elevation

    : Circle + Elevation

Windows shortcuts

Click

 : Select

 : Select all

Shortcut + click

Alt : Reset position

 : Select multiple objects

Shortcut + drag

Alt : Elevation

Ctrl : Mirror

 Ctrl : Mirror locked

Alt Ctrl : Scale

 Alt : Square

 Alt Ctrl : Square + Elevation

EUCON

Meta-Parameters

1 : Left - Right

2 : Front - Rear

3 : Width

4 : Depth

5 : Rotate Square

6 : Elevate

7 : Front Width

8 : Rear Width

9 : Speaker 1 Volume

10 : Speaker 2 Volume

11 : Speaker 3 Volume

12 : Speaker 4 Volume

13 : Speaker 5 Volume

14 : Speaker 6 Volume

15 : Speaker 7 Volume

16 : Speaker 8 Volume

CREDITS

Conception

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Engineering

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Thanks

Niels Barletta, Charles Bussienne, Guillaume Bouchateau,
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User Manual

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