PHIL SPEISER

THE_BRIDGE

USER MANUAL

Hum a melody, beatbox a groove, or record a reference — and your Phil Speiser plugins hear it the moment you make it. No MIDI routing, no cables, no setup inside your DAW.

Updated September 14, 2026
The latest version is always at philspeiser.com/manual/the_bridge

CONTENTS

1 What It Is

2 Getting Started

3 The Interface at a Glance

4 Input

5 Calibration

6 DRUMS — Beatbox Into Drum Hits

7 MELODY — Hum Into Notes

8 RECORD — References for Your Plugins

9 Outputs — Plugins and the MIDI Port

10 Unlocking

11 Two Bridges at Once

12 Troubleshooting

13 Keyboard & Mouse

14 Quick Reference

What It Is

THE_BRIDGE is a small app that owns your microphone and hands what it hears to your Phil Speiser plugins.

You know the moment. The idea is in your head, a drum pattern or a hook, and by the time you've clicked it into a piano roll it's gone. Your voice is the fastest instrument you have. It just never had a direct line into your plugins.

So I built one.

THE_BRIDGE runs next to your DAW and does one of three jobs:

1. **DRUMS** — beatbox into the mic. Every kick, snare and hat you make becomes a drum hit, sent straight to the plugins that listen.
2. **MELODY** — hum, whistle or sing. Every note you make becomes a note on and a note off, sent the same way.
3. **RECORD** — capture the mic, or whatever your computer is playing, to a WAV file every plugin can pick up as a reference.

The plugins find THE_BRIDGE on their own. You don't set up a MIDI track, a virtual cable or a sidechain. Open THE_BRIDGE, open a plugin that listens, and they're connected.

On top of that, THE_BRIDGE can send everything out a **MIDI port**, so the same voice can play any instrument in any DAW.

Getting Started

1. **Open THE_BRIDGE.** On macOS, allow microphone access when it asks. Without it the app can open but hears nothing.
2. **Pick where your content lives.** The first time, if this machine has no Phil Speiser content folder yet, THE_BRIDGE asks the same question the PHIL SPEISER CONTROL CENTER asks: **USE DEFAULT LOCATION** (Music/PHIL SPEISER CONTENT on Mac, Documents/PHIL SPEISER CONTENT on Windows) or **CHOOSE A FOLDER**, for example an external drive. Recordings, your mic calibration and every plugin's content go there. You can change it later in the Control Center. If you already set a folder, this step doesn't appear.
3. **Pick your mic.** Click the **device chip** in the top right of the header and choose your input device, channel, sample rate and buffer.
4. **Pick a tab.** DRUMS, MELODY or RECORD, in the tray at the top left.
5. **Calibrate once.** In DRUMS or MELODY, click **CALIBRATE MIC** (or **CALIBRATE VOICE**) and follow the three steps. It takes about 15 seconds, and THE_BRIDGE remembers the result for that mic.
6. **Open a plugin that listens.** It appears under **OUTPUTS** on the right. From here on, what you perform reaches it.

The footer at the bottom always tells you what's happening, and what to do next. Hover any control and the footer explains that control instead.

The Interface at a Glance

The header

- **DRUMS / MELODY / RECORD** — the three tabs. A tab with a padlock isn't unlocked on this computer yet. Click it and the footer tells you what opens it.
- **Status pill** — what THE_BRIDGE is doing right now: **LISTENING**, **SENDING**, **READY TO RECORD**, **RECORDING**, **TEACHING**, **CALIBRATING**, or **AUDIO NOT RUNNING**.
- **Sample rate and buffer** — the format your audio device is running at.
- **Device chip** — the input THE_BRIDGE listens through. Click it to open **AUDIO INPUT**.
- **LISTENING pill** — how many plugins are connected right now.

The body

- **Left: INPUT** — what THE_BRIDGE listens to, how loud it is, and calibration.
- **Centre** — the tab you're in: the SOUNDS grid, the MELODY readout or the RECORD transport.
- **Right** — the tab's settings (DETECTION, VOICE or REQUESTS), and **OUTPUTS** underneath.

The footer

- **Left** — the hint line, or the help for whatever your mouse is over.
- **Right** — **MS IN THE_BRIDGE**: how long THE_BRIDGE itself takes to turn a sound into an event. In MELODY this includes the pitch tracker.

Input

MIC or SYSTEM AUDIO

- **MIC** listens to your audio device's input.
- **SYSTEM AUDIO** listens to whatever your computer is playing, in any app, with no routing. It's made for RECORD: play a track in your browser or music app and capture it as a reference.

On macOS, SYSTEM AUDIO needs **macOS 14.2 or newer**, and macOS may ask for permission the first time you use it. If it can't start, the INPUT panel says why.

SUM / LEFT / RIGHT

Which channel THE_BRIDGE analyses. **SUM** uses left and right together. Pick **LEFT** or **RIGHT** when your mic is plugged into one input of a stereo interface.

The meter

A vertical level meter in dBFS. In DRUMS it also shows the **FLOOR** line: the level a hit has to reach before THE_BRIDGE takes it seriously. It moves with SENSITIVITY.

GAIN

Trims the signal THE_BRIDGE analyses, from -24 to +24 dB. Drag up or down, hold **Shift** for fine steps, **double-click** to reset to 0 dB. Calibration sets this for you.

OUTPUT MUTED / PASSING TO OUTPUT

By default the mic never reaches your speakers. Click to pass it through when you want to monitor yourself. Use headphones: on speakers, a passed-through mic will feed back.

Calibration

A new mic in a new room is a guess. Calibration replaces the guess with measurements, in about 15 seconds.

It runs separately for each tab, because a beatboxed kick and a sung note are very different signals. **DRUMS and MELODY each keep their own result, per mic.** Plug the same mic in tomorrow and the numbers come back on their own.

While calibration runs, nothing reaches your plugins. **ESC** cancels.

CALIBRATE MIC (DRUMS)

1. **STAY QUIET** — two seconds of your room. The floor every hit must clear is set from this.
2. **YOUR LOUDEST KICK, THREE TIMES** — the gain is set so your loudest hit lands at -6 dBFS with nothing clipping.
3. **YOUR QUIETEST HIT, THREE TIMES** — a soft hat or a tick. The floor moves down until that still counts, if the room allows it.

CALIBRATE VOICE (MELODY)

1. **STAY QUIET** — two seconds of your room. The threshold a note has to clear starts from this.
2. **HUM YOUR LOUDEST NOTE, HOLD IT** — the gain is set so a sustained note peaks at -12 dBFS. While you hum, the card shows the note it's tracking, so you know it can hear you.
3. **HUM YOUR QUIETEST NOTE, HOLD IT** — the threshold lands between the room and this note, so quiet notes still start.

SKIP moves on with what's been heard so far. Skipping the loud step keeps the gain as it is. Skipping the quiet step sets the floor, or threshold, from the room alone.

The result

When it's done, the card shows what was set and whether your room lets it work:

Value	What it means
GAIN	The trim that was set
FLOOR / THRESHOLD	The level a hit or a note has to reach
HEADROOM	How far your loudest sound sits below clipping
SOFT MARGIN / MARGIN	How far your quietest sound sits above the room
ROOM	Your room's noise level
LOUDEST / YOUR RANGE	Your loudest hit, or the lowest and highest note you sang

Below the numbers, THE_BRIDGE tells you plainly if something needs fixing: the input clipping before the app even sees it, a loud room, a quiet sound buried in the noise, or notes outside the range it can track. **DONE** keeps the numbers (Return does the same). **AGAIN** runs the three steps once more.

Calibration isn't available in RECORD or with SYSTEM AUDIO. Recordings are written before GAIN, so there's nothing to calibrate there.

DRUMS — Beatbox Into Drum Hits

Beatbox into the mic. Every hit THE_BRIDGE recognises goes to the plugins that listen, and out the MIDI port on **channel 10**.

The nine sound cards

Card	MIDI note
KICK	36
SNARE	38
HAT	42
CLAP	39
OPEN HAT	46
CUSTOM 1	48
CUSTOM 2	49
CUSTOM 3	50
IGNORE	never fires

Every card shows:

- **Its state** — **DEFAULT** (the built-in version of that sound), **YOURS** (you taught it), or **TEACHING**.
- **A fingerprint** — the shape of the sound you taught it.
- **A match meter** — a thin bar that jumps when your last hit came close to this sound. It's the quickest way to see which of your sounds get confused.
- **THRESHOLD** — how loud a hit has to be to count as this sound. **off** means it follows the floor. Drag to set it, double-click to turn it off again.
- **OUT** — the note it sends.

Teach it your sounds

Nobody beatboxes the same kick. The five defaults are a starting point. For the tightest results, teach THE_BRIDGE how **you** make each sound.

1. **Click a card.** The SOUNDS panel turns into the teaching card.
2. **Make the sound once.** THE_BRIDGE captures the hit, shows its waveform and level, and what it sounded like.
3. **KEEP or REDO.** Keep it if that was the sound, redo it if it wasn't. **Return** keeps, **Backspace** redoes.
4. **Eight hits and it's yours.** Every kept hit tightens the match. The card now reads **YOURS**.

While you teach, listening pauses whenever a hit waits for your verdict, and nothing reaches your plugins until that sound is done. **CANCEL**, or a click on the same card, stops teaching. **ESC** does too, as long as no hit is waiting. While one is, ESC redoes it. The nine sounds fold into a strip under the teaching card, so you can jump straight to another sound.

Right-click a taught card to forget it. The default comes back.

The CUSTOM cards

Three extra sounds that aren't in the default set: a rimshot, a tom, a vocal chop, anything you can make with your mouth. They only exist once you teach them.

IGNORE

Teach IGNORE the noise that must **never** fire: a breath, your chair, bleed from your speakers. Once it's taught, sounds like that are thrown away instead of turning into hits.

ONLY YOURS

With ONLY YOURS on, only the sounds you taught can fire. The five defaults stay quiet. Use it once your own kit is complete.

Kits

- **SAVE KIT** writes every sound you taught to a **.mouthkit** file.
- **LOAD KIT** brings a .mouthkit file back, on this computer or another one.
- **FORGET ALL** drops every taught sound and brings the five defaults back. Click it twice: the first click asks **SURE?**

DETECTION

- **SENSITIVITY** — how quiet a hit may be. Higher hears more, and misfires more. Default 40 %.
- **MIN GAP** — the shortest time between two hits, from 0 to 200 ms. Raise it when a single hit fires twice. Default 45 ms.
- **INSTANT** — decides 3 ms after the start of a hit, for the tightest feel.
- **ACCURATE** — waits 12 ms and hears more of the sound, for fewer mix-ups between similar sounds.
- **LAST HIT** — the last sound recognised, and how closely it matched.

MELODY — Hum Into Notes

Hum, whistle or sing. THE_BRIDGE tracks the pitch and sends every note as a note on and a note off, to the plugins that listen and out the MIDI port.

The readout

- **The big note** — what you're singing right now. The last note stays dimmed after you stop.
- **Hz and the cents meter** — how far above or below the note you are.
- **SENT AS** — the note and the MIDI channel it goes out on.
- **The pitch trace** — the last four seconds of your melody, so you can see what you just sang.

Settings

- **SENSITIVITY** — how quiet a note may be before it counts. Default 50 %.
- **HOLD** — how long a note survives a gap before it ends, from 20 to 300 ms. Raise it if a long note breaks into several. Default 80 ms.
- **OCTAVE** — shifts every note from -2 to +2 octaves before it goes out. Hum comfortably and play a bass line or a lead anyway.
- **LEGATO** — slides from note to note: the new note starts before the old one ends.
- **RETRIGGER** — every change ends the old note first, then starts the new one.

VOICE

The VOICE panel shows whether THE_BRIDGE hears a voiced note (**VOICED** or **SILENT**) and its level.

A note starts once the pitch holds for 10 ms above SENSITIVITY, and ends after HOLD of silence. THE_BRIDGE tracks notes from **E2 to C6**. **Pro tip:** sing with a clear start, like "da", for the tightest timing. A whisper or a breathy "hmm" gives the tracker far less to follow.

RECORD — References for Your Plugins

RECORD captures the mic, or what your computer plays, to a WAV file that every plugin can find.

Recording

1. **Pick the input** in the INPUT panel: **MIC** to perform, **SYSTEM AUDIO** to capture a track playing in any app.
2. **Pick a LIMIT**: **NONE** records until you stop, or **30 S**, **1 MIN** or **5 MIN** stops on its own.
3. **Hit RECORD.** The clock runs and the level history shows the last eight seconds of input.
4. **Hit STOP.** The file is written, and every connected plugin is told about it.

Your recordings

The **RECORDINGS** list shows your newest recordings with their length, their source and, if a plugin asked for one, which plugin. Click a recording to show it in Finder (or Explorer). **OPEN FOLDER** opens the whole folder.

Recordings are saved in a folder called **THE_BRIDGE CONTENT/Recordings**. It sits inside your Phil Speiser content folder: the one you chose in the PHIL SPEISER CONTROL CENTER, or the one THE_BRIDGE asked you about the first time it opened.

REQUESTS

A plugin can start a recording from inside your DAW and pick up the file the moment it's done. THE_STRIP 3's **CREATE PROFILE** works this way: play a reference track, let THE_BRIDGE capture it, and THE_STRIP 3 turns it into a profile.

The REQUESTS panel lists every plugin that's waiting for a recording right now, and which plugin the current recording is for.

Outputs — Plugins and the MIDI Port

Connected plugins

OUTPUTS lists every Phil Speiser plugin connected to THE_BRIDGE, with what it's there for: **DRUMS**, **MELODY** or **RECORDINGS**. **OPEN** means the plugin is connected but isn't taking events right now.

If the list is empty, no plugin is listening yet. Open a Phil Speiser plugin that supports THE_BRIDGE in your DAW, and it appears here.

Your Phil Speiser plugins don't need the MIDI port. They hear THE_BRIDGE directly, in any DAW, with nothing to route.

MIDI OUT

Turn on **MIDI OUT** and THE_BRIDGE also sends every event out a MIDI port, so your voice can play any instrument, in any DAW.

- **Melody notes** go out on the channel set in **CH** (1 to 16). Drag to change it, double-click to reset to 1.
- **Drum hits** always go out on **channel 10**.

On macOS, THE_BRIDGE creates its own virtual MIDI port called **THE_BRIDGE**. In your DAW, pick it as the MIDI input of an instrument track.

On Windows, an up-to-date Windows 11 (with Windows MIDI Services) gives THE_BRIDGE its own **THE_BRIDGE** port, and you pick it in your DAW the same way. On older Windows, or to use a different port, click **OTHER PORT** (or **PICK A MIDI PORT**) and choose one from the list. **AUTO** goes back to THE_BRIDGE's own port.

Unlocking

THE_BRIDGE is free, and you never log in to it. It recognises the Phil Speiser plugins you already own through the PHIL SPEISER CONTROL CENTER, and opens the tabs that belong to them.

- **Each tab** opens with the Phil Speiser plugin that uses it, or with **THE_CIRCLE**.
- **The MIDI port** is part of **THE_CIRCLE**. Your Phil Speiser plugins hear everything without it.
- **Click a locked tab** and the footer names exactly what opens it. The list comes from my server, so a new plugin can open a tab without you updating THE_BRIDGE.

If nothing is unlocked on this computer, THE_BRIDGE shows what each tab does and what opens it. If you already own one of those plugins, sign in to the PHIL SPEISER CONTROL CENTER, and the tab unlocks here by itself.

Two Bridges at Once

Only one THE_BRIDGE sends to your plugins at a time. If a second one is already sending, the status pill reads **ANOTHER BRIDGE IS SENDING**.

Close the other one, or press **TAKE OVER** to make this one the bridge that sends. The other one steps back.

Troubleshooting

What you see	What to do
NO SIGNAL	Click the device chip and pick your mic. On macOS, click **OPEN MIC SETTINGS** in the footer and allow THE_BRIDGE under Microphone.
AUDIO NOT RUNNING	The audio device isn't running. Click the device chip and pick an input device.
NO LISTENERS	Open a Phil Speiser plugin that supports THE_BRIDGE in your DAW.
Hits misfire, or room noise fires hits	Calibrate. Then lower SENSITIVITY, or teach IGNORE the noise.
Soft hits get lost	Calibrate, get closer to the mic, or raise SENSITIVITY.
One hit fires twice	Raise MIN GAP.
Kick and snare get mixed up	Teach both sounds your own way, and switch to ACCURATE.
A long note breaks into several	Raise HOLD, and sing with an open vowel rather than a whisper.
Notes don't track	Stay between E2 and C6, and use OCTAVE to move the result where you need it.
SYSTEM AUDIO COULD NOT START	Read the message in the INPUT panel. On macOS, SYSTEM AUDIO needs macOS 14.2 or newer.
ANOTHER BRIDGE IS SENDING	Close the other THE_BRIDGE, or press TAKE OVER.
A locked tab	Click it. The footer names what opens it.

Keyboard & Mouse

Action	How
Change a value	Drag up or down
Fine adjustment	Hold **Shift** while dragging
Reset a value	Double-click
Teach a sound	Click its card
Forget a taught sound	Right-click its card
Keep a captured hit	**Return**
Redo a captured hit	**Backspace** or **ESC**
Stop teaching (no hit waiting) / cancel calibration	**ESC**
Finish calibration	**Return**
Explain any control	Hover it, and read the footer

Quick Reference

- **What it is:** a standalone app that turns your voice into drum hits, notes and reference recordings for your Phil Speiser plugins.
- **Tabs:** DRUMS (beatbox), MELODY (hum, whistle or sing), RECORD (mic or system audio to WAV).
- **Connection to plugins:** automatic, in any DAW, no MIDI routing.
- **Drum notes:** KICK 36, SNARE 38, HAT 42, CLAP 39, OPEN HAT 46, CUSTOM 48 to 50, all on MIDI channel 10.
- **Teaching:** eight kept hits per sound, saved and shared as .mouthkit files.
- **Detection:** INSTANT decides after 3 ms, ACCURATE after 12 ms.
- **Melody range:** E2 to C6. Notes start after 10 ms of stable pitch.
- **Calibration:** three steps, about 15 seconds, remembered per mic, separately for DRUMS and MELODY.
- **MIDI port:** THE_BRIDGE's own virtual port on macOS and Windows 11. Part of THE_CIRCLE.
- **Price:** free. Tabs open with the Phil Speiser plugins you own, or with THE_CIRCLE.

Stuck, or found something this manual doesn't cover? Write to me at philspeiser.com/support. I answer support myself.