PI BY SAHARTY

PI LIVE

Live plug-in host and processing server



USER MANUAL

Version 1.0.0 · macOS & Windows

www.pi-ware.com · support@pi-ware.com

Precision is a constant.

CONTENTS

01 Welcome 3

02 Quick start 5

03 Installation 6

04 Activation & licensing 7

05 Interface tour 9

06 Connecting your console and audio interface 12

07 Working with racks 14

08 Using plug-ins 16

09 Pi's built-in processors 18

10 Pi Vocal AI De-Bleed 27

11 Pi Feedback Guard 29

12 Pi Analyzer 31

13 Scenes 33

14 Show control: console link, timecode and tablet remote 34

15 Remote processing with Pi Live Server 37

16 Backup host 39

17 Crash protection 40

18 Latency and alignment 41

19 Recorder and virtual soundcheck 44

20 Sessions and presets 45

21 Settings & preferences 46

22 Keyboard shortcuts / remote control 47

23 Tips for live/studio use 49

24 Troubleshooting 50

25 Specifications & system requirements 51

26 Support 53

WELCOME

Pi Live by Saharty is a dedicated plug-in host for live sound. It runs your VST3 and Audio Unit plug-ins on the multichannel audio coming from your digital console (over Dante, MADI, USB, AVB or any interface with a Core Audio or ASIO driver) and sends the processed audio straight back. You can process everything on the computer in front of you, or move heavy racks to one or more **Pi Live Server** computers on the network, while you keep editing every plug-in from front-of-house.



Figure 1. Pi Live: the live plug-in host, built for the stage

Pi Live is built for front-of-house, monitor and system engineers who want studio plug-ins on a live console without giving up stability. Racks are never delayed unless you ask, crashing plug-ins are caught while the show goes on, scenes follow your setlist, console, MIDI, OSC or timecode, and a second computer can take over by itself.



Figure 2. Your studio plug-ins, live on stage ▶ **Animated in the online manual**

What's in version 1.0.0

Version 1.0.0 is the first release of Pi Live, with every feature described in this manual.

Both installers contain two applications: **Pi Live** (the host you mix from) and **Pi Live Server** (the remote-processing application for a second Mac or Windows computer).

QUICK START

1. Install Pi Live from the macOS `.dmg` or the Windows Setup `.exe` (see Installation).
2. Launch Pi Live. The licence window opens by itself: enter your licence key and click **Activate**, or click **Start 15-day free trial**.
3. Click **SETTINGS** (top right) and open the **Audio** tab. Choose your interface or console driver (Dante Virtual Soundcard, MADI card, USB console, ASIO...), set the sample rate and buffer size, then click **ENABLE ALL CHANNELS**.
4. Open the **Plug-ins** tab and click **SCAN FOR NEW PLUG-INS**. Pi Live finds your VST3 and Audio Unit plug-ins.
5. Back in the main window, click **+ ADD RACK** (or use **Racks > Add Mono Rack**, **Add Stereo Rack** and so on).
6. Click the rack's routing button (it shows the rack type and its routing) and choose its **INPUTS** and **OUTPUTS**.
7. Click an empty slot (**+**) on the rack and choose a plug-in. Click the plug-in to open its window.
8. In the **SCENES** tab on the right, click **+ NEW** to store your first scene.
9. Save your session with **File > Save** (Cmd+S on Mac, Ctrl+S on Windows).

> **Tip:** Press **F1** at any time for the built-in Quick Guide.

INSTALLATION

macOS

1. Open the `PiLive-<version>-macOS.dmg` disk image.
2. Drag **Pi Live** onto the **Applications** folder. If you want to use the computer as a processing server, or you plan to set up a second computer as a server, drag **Pi Live Server** too.
3. Eject the disk image.

The macOS build is Universal: it runs natively on Apple silicon and on Intel Macs, from macOS 11 Big Sur onward.

First launch on a Mac. If macOS says the app "can't be opened" or "is from an unidentified developer", open **System Settings > Privacy & Security**, scroll down and click **Open Anyway**. On older macOS versions, right-click the app and choose **Open**. You only need to do this once.

On first launch the Mac apps show the End User Licence Agreement; you accept it once (and again only when the agreement changes).

Windows

1. Run `PiLive-<version>-Windows-Setup.exe`.
2. Read and accept the licence agreement, then follow the steps.
3. The installer adds both **Pi Live** and **Pi Live Server**.

Pi Live for Windows is a 64-bit application for Windows 10 and Windows 11. If Windows SmartScreen shows a warning, click **More info**, then **Run anyway**.

What gets installed

Pi Live is a standalone application, not a plug-in: it adds nothing to your plug-in folders and needs no extra runtimes. Sessions are saved in `Documents/Pi Live/` by default and recordings in `Documents/Pi Live/Recordings`. The licence file is `~/Library/Application Support/Pi by Saharty/Licences/pi-live.pilic` on macOS and `%APPDATA%\Pi by Saharty\Licences\pi-live.pilic` on Windows.

First launch

When Pi Live starts for the first time on a computer with no licence, the licence window opens by itself. After you activate (or start the trial), open **SETTINGS > Audio** to choose your audio device, then **SETTINGS > Plug-ins** to scan your plug-ins.

When **Pi Live Server** starts for the first time it asks **Scan plug-ins?** so it knows which plug-ins are installed on that computer. Click **Scan**.

ACTIVATION & LICENSING

Only the Pi Live host needs a licence. **Pi Live Server** has no licence check of its own: it only processes racks sent by a Pi Live host, so you can install it on as many processing computers as you need.

Buying and receiving your key

Buy Pi Live at pi-ware.com/products/pi-live. Your licence key arrives by email after purchase. It looks like `XXXXX-XXXXX-XXXXX-XXXXX`. Your purchase includes free updates.

Opening the licence window

- The licence window opens by itself at launch on a computer with no licence.
- Later, choose **Help > Licence...** or click the licence banner at the top of the main window.

The window shows the current status (for example "Activated to ... Every feature is on.") and the name of this computer.

Online activation

1. Paste your key into the **Licence key** field.
2. Click **Activate**.

If the licence is already active on another computer, Pi Live asks whether to **Move it here**. The other computer gets a 24-hour notice before it switches to limited features. The dialog also shows how many moves you have left this year.

Free trial

Click **Start 15-day free trial**. No payment details are needed, and every feature works during the trial. The licence status line shows the time left, and Pi Live warns you as the end of the trial approaches.

Offline activation

Use this when the show computer has no internet connection.

1. Enter your licence key in the **Licence key** field.
2. Click **Offline activation**. Pi Live shows a request code. Click **Copy code**.
3. On any device with internet access, go to **pi-ware.com/activate** and paste the request code.
4. Download the licence file the site gives you and copy it to the show computer.
5. Click **Load licence file...** and choose the file.

Moving your licence to a new computer

One licence activates one computer. To change computers:

- click **Deactivate this computer** in **Help > Licence...** on the old computer, then activate the new one;
- or activate on the new computer and choose **Move it here**;
- or deactivate / reset computers from your account at **pi-ware.com/account**.

How Pi Live checks the licence

- Pi Live checks the licence whenever it finds an internet connection: at launch, then every hour (every 2 minutes while offline). It keeps working offline with no time limit.
- **The 24-hour rule.** Nothing is ever limited without at least 24 hours of notice on that computer, whatever the reason (licence moved, trial ended, deactivated from your account). During the notice every feature works and the banner shows the countdown.
- **A running show is never cut.** Once the live engine has started it keeps running until you quit Pi Live, even if the licence changes during the show. Audio device changes and driver resets do not stop it either. Any limit applies the next time Pi Live starts.

Limited mode

Without a licence (or after the notice period), Pi Live opens in limited mode:

- You can open, edit and save sessions: racks, plug-ins, routing and scenes.
- The **live engine does not start**: nothing is processed and every output stays silent. Inputs are still metered.
- The top bar shows **LIVE ENGINE NOT STARTED**.

As soon as you activate Pi Live or start the trial, the engine starts and the outputs fade in.

INTERFACE TOUR

The main window has four areas: the **top bar**, the **rack area**, the **side panel** (SCENES, RECORDER, LATENCY) and the **status bar** at the bottom.



Figure 3. The Pi Live main window: racks on the left, scenes on the right

Top bar

Control	What it does	Range / default
< / >	Recall the previous / next scene	Left arrow, Page Up / Right arrow, Space, Page Down
SCENE box	Name of the current scene and its position ("3 / 12"). A "*" means the scene has changed since it was recalled	—
STORE	Menu: **Update ""** or **Store as new scene**	—
BPM display	Tempo sent to plug-ins (tempo-synced delays). Double-click to type a value. Shows the running timecode when timecode is received	20 BPM and up
TAP	Tap tempo	T key, MIDI or OSC
DSP meter	Current and peak audio processing load	0–100 %
Server LED / label	**NO SERVER**, **SERVER** or **SERVERS**. Hover for the status of each server	—
BYPASS ALL	Bypasses every rack (latency is kept, so timing does not jump)	Off

Control	What it does	Range / default
MUTE ALL	Mutes all outputs	Off
SETTINGS	Opens the Pi Live Settings window	—

Next to the tempo, the audio info area shows the device, sample rate, buffer, channel count and total latency in ms, or a state such as **LIVE ENGINE NOT STARTED**, **BACKUP HOST - STANDBY** or **No audio device**.

Rack area

The header of the rack area shows how many racks you have and the column titles: **RACK / ROUTING**, **IN**, **PLUG-INS**, **GAIN**, **M B C S NET**, **LATENCY** and **OUT**. The **HORIZONTAL** and **VERTICAL** buttons (under **RACK LAYOUT**) switch between one row per rack (plug-ins from left to right) and one column per rack (plug-ins from top to bottom, like a mixer).

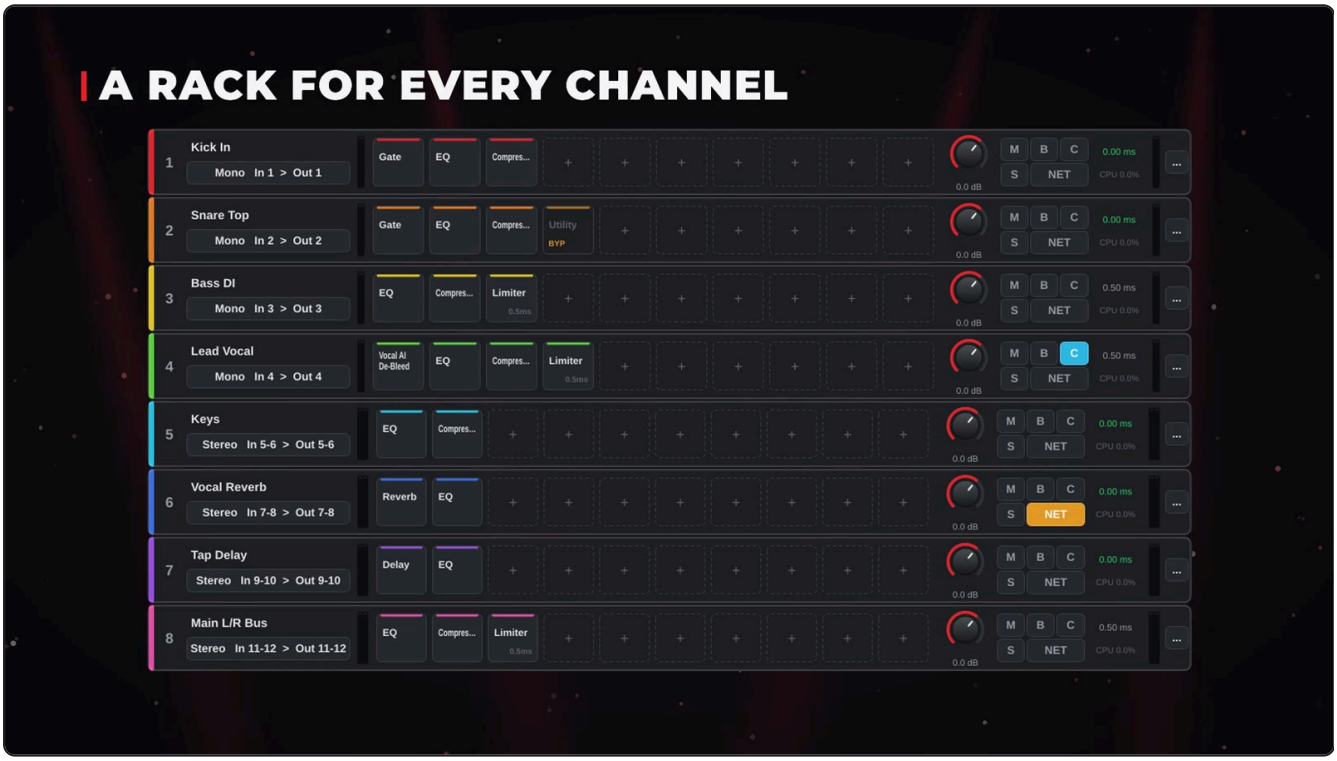


Figure 4. Racks with their routing, plug-in slots, gain, chips and meters

Each rack strip contains:

Control	What it does	Range / default
Routing button	Shows the rack type and routing; click to open the routing panel (channels, inputs, outputs, sidechain key, alignment delay)	—
Plug-in slots	10 slots. Click **+** to insert, click a plug-in to open it, right-click for options, drag to reorder	10 per rack
GAIN knob	Rack output gain. Double-click resets to 0 dB	−60 to +12 dB, default 0 dB

Control	What it does	Range / default
M	Mute	Off
B	Bypass the whole rack (latency is kept)	Off
C	Cue: listen to this rack on the cue outputs	Off
S	Recall safe: scenes won't change this rack	Off
NET	Process this rack on a Pi Live Server (shows **NET2**, **NET3**… for other servers, **+** when a backup server is set, **SAFE** when the crash guard is on)	Off
Latency	Total rack latency (plug-ins + alignment + network) in ms	—
CPU	Share of the audio buffer time this rack's plug-ins use on this computer	—
…	Rack menu (see below)	—

The **NET** chip is green while the rack is processed on the server, and amber when you have asked for the server but the rack is still running locally (for example while the server connects).

A slot can show special states: **NOT LOADED** (the plug-in is missing on this computer; right-click to try again or remove it), **CRASHED – OFF** (the plug-in crashed and was switched off; its input passes through), **BYP** (bypassed) and **SC** (sidechain on).

Status bar

The status bar shows messages and, on the right, the version, number of racks, DSP threads and the **xruns** counter (audio dropouts since launch).

CONNECTING YOUR CONSOLE AND AUDIO INTERFACE

Pi Live works with any multichannel interface that has a Core Audio (macOS) or ASIO, WASAPI or DirectSound (Windows) driver. Dante Virtual Soundcard and Dante cards, MADI cards, USB consoles and AVB all appear as ordinary audio devices. Pi Live addresses up to 512 inputs and 512 outputs.

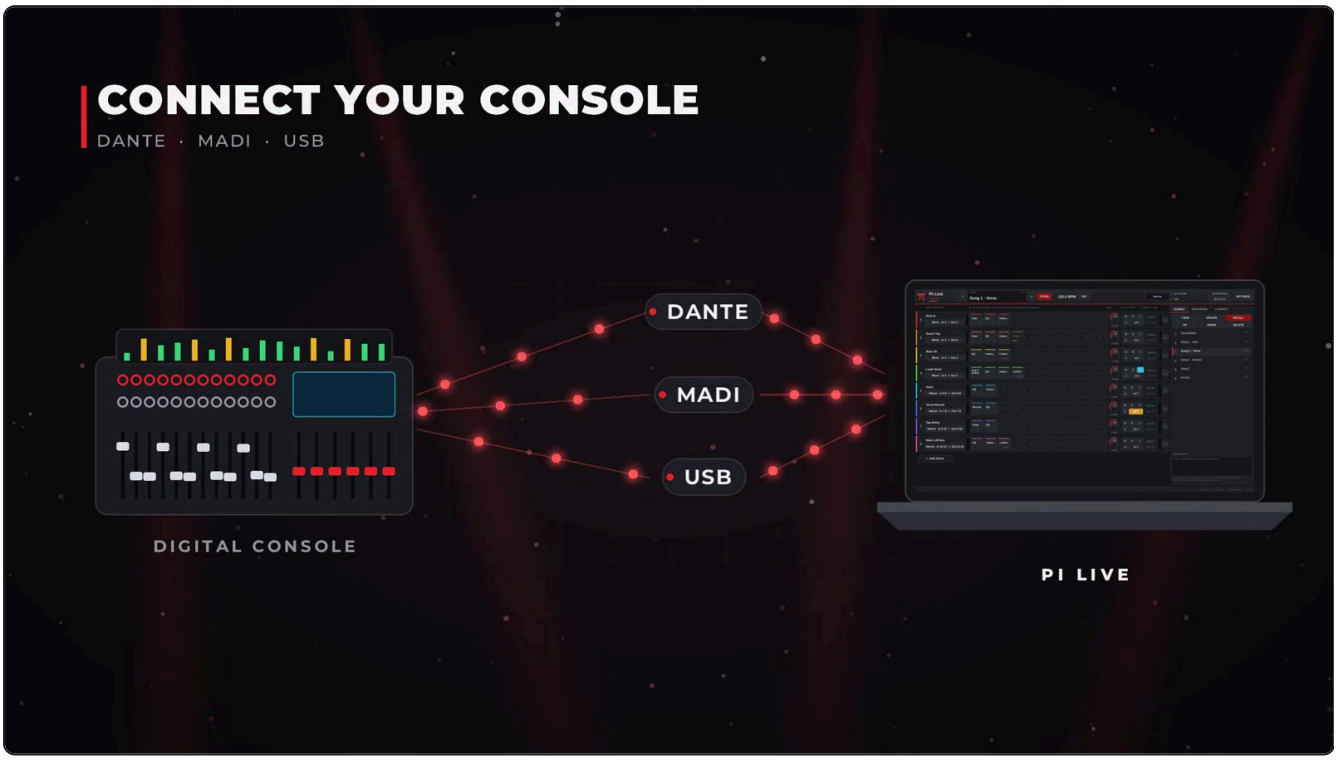


Figure 5. Connect your console over Dante, MADI or USB ▶ **Animated in the online manual**

How to set up your audio device

1. Click **SETTINGS** and open the **Audio** tab.
2. Choose the device type (on Windows, choose **ASIO** for the lowest latency) and the device.
3. Choose the sample rate and the buffer size. Smaller buffers give lower latency but use more CPU.
4. Click **ENABLE ALL CHANNELS**. Pi Live confirms how many inputs and outputs are enabled.



Figure 6. Up to 512 inputs and 512 outputs

WORKING WITH RACKS

A rack is a chain of up to 10 plug-ins processing one source or a group of channels. You can have up to 256 racks.

Rack types

Type	Channels	Typical use
Mono	1 in, 1 out	Vocal mics, kick, bass DI
Mono > Stereo	1 in, 2 out	Mono source into stereo effects (reverb, delay, stereo widening)
Stereo	2 in, 2 out	Keys, playback, stereo buses, master
4 / 6 / 8 / 12 / 16 Channels	4–16 in and out	Drum groups, multitrack stems, surround buses

How to add racks

- **One rack:** click **+ ADD RACK**, or use **Racks > Add Mono Rack** (Cmd/Ctrl+1), **Add Stereo Rack** (Cmd/Ctrl+2), **Add Mono > Stereo Rack** (Cmd/Ctrl+3) or **Add 8-Channel Rack** (Cmd/Ctrl+4).
- **Many racks at once:** click **+ ADD SEVERAL...** or choose **Racks > Add Several Racks...** (Cmd/Ctrl+Shift+R). Enter **How many** (1–64), the **Channels** type and a **Name**, then click **ADD RACKS**. The racks are numbered ("Vocal 1", "Vocal 2"...) and take the next free inputs one after another.
- **From a preset:** use **Load rack preset...** in the add menu, or drag a `.pirack` file onto the window.

The rack menu

Click **...** on a rack to open its menu: **Rename...**, **Colour** (10 rack colours), **Channels** (change the rack type), **Routing...**, **Notes...**, **Process on Pi Live Server** (same as **NET**), **Crash guard (plug-ins in a protected process)**, **Server** (1–4), **Backup server (runs in parallel)**, **MIDI Learn** (Gain, Mute, Bypass, Cue), **Duplicate rack**, **Save rack preset...** (`.pirack`), **Clear all plug-ins**, **Move up** / **Move down** and **Delete rack**.

How to route a rack

Click the rack's routing button to open the routing panel.

- **CHANNELS:** the rack type.
- **INPUTS:** one source per rack channel, chosen from **Device inputs** or **Internal buses**.
- **OUTPUTS:** for every rack channel, any number of device outputs or internal buses. **Clear** removes all output routes for a channel.
- **SIDECHAIN KEY INPUT:** the source for plug-ins with a sidechain input (tick **Stereo key** for a stereo key).
- **ALIGNMENT DELAY:** a manual delay for time alignment, 0 to 500 ms.

Pi Live has 64 internal mono buses. Use them to build sends: for example, route several vocal racks' outputs to buses 1–2 and feed a stereo reverb rack from buses 1–2.

USING PLUG-INS

How to scan your plug-ins

1. Open **SETTINGS > Plug-ins** (or **Options > Plug-in Manager...**).
2. Click **SCAN FOR NEW PLUG-INS**.

Scanning runs in a separate process, so a plug-in that crashes during the scan cannot take Pi Live down. The list shows each plug-in's **Name**, **Manufacturer**, **Format**, **Category**, **Version** and **Safety test** result.

RESCAN ALL forgets the list and scans everything again (racks keep their plug-ins). **CLEAR BLACKLIST** retries failed plug-ins on the next scan, and **UNBLOCK** lets a blocked plug-in be tested again the next time it loads. Use **ADD FOLDER...** and **SAVE FOLDERS** (under **SEARCH FOLDERS**) for plug-ins in custom locations.



Figure 7. Pi Live hosts VST3 and Audio Unit plug-ins

Plug-in safety test

Pi Live tests every new plug-in once, in a separate process, before it loads it. While this runs you see "Testing a new plug-in" (or "Testing new plug-ins (n of m)"). A plug-in that crashes during the test is blocked and can't take Pi Live down. Audio keeps running during the test.

How to insert a plug-in

1. Click an empty slot (**+**) on a rack.
2. Type in the search field ("Search plug-ins (name, maker, category)") to filter the list.
3. Press **Enter** or double-click a plug-in to insert it.

Pi Live's own processors appear alongside your plug-ins.

Mono and stereo plug-ins on wider racks. If a plug-in only supports mono or stereo and you insert it on a wider rack, Pi Live runs linked copies of it, one per channel or per pair (for example "4x Stereo" on an 8-channel rack). You adjust one editor and all copies follow.

The plug-in window

Click a plug-in in a slot to open its window. The bar at the top contains:

Control	What it does
BYPASS	Bypass this plug-in (shows **BYPASSED** when on)
EDITOR	Show the plug-in's own editor
KNOBS	Show Pi Live's knob view: a knob for every parameter
MIDI LEARN	Touch a control in the plug-in, click **MIDI LEARN**, then move a knob or fader on your MIDI controller
Presets	The plug-in's own factory programs
ON SERVER	Open this plug-in's window on the Pi Live Server computer (remote racks)

The window title also shows the plug-in's latency and "on server" when the rack runs remotely. **Racks > Close All Plug-in Windows** (Cmd/Ctrl+Shift+W) closes every plug-in window.

Slot right-click menu

Right-click a plug-in for **Open editor**, **Open knob view**, **Bypass**, **Replace...**, **Remove**, **Sidechain from rack key input** (feed the plug-in's sidechain from the rack's key input), **MIDI Learn bypass**, **Copy settings** / **Paste settings**, **Save preset file...** / **Load preset file...** (`.pipreset`), **Move left** / **Move right** and, on remote racks, **Open editor on server**. On an empty slot the menu offers **Insert plug-in...**, **Paste** and **Load preset file...**.

PI'S BUILT-IN PROCESSORS

Pi Live's own processors run on every rack and every Pi Live Server with no installation or authorization. Most are zero latency.



Figure 8. The built-in Pi processors ▶ Animated in the online manual

Pi EQ (EQ)

A 6-band parametric EQ with high- and low-pass filters.

Control	Range	Default
HPF On / **HPF Freq** / **HPF Slope**	On/Off, 20–1000 Hz, 12 or 24 dB/oct	On, 80 Hz, 12 dB
Low Gain / **Low Freq** (shelf)	–18 to +18 dB, 30–1000 Hz	0 dB, 120 Hz
Low Mid, **Mid**, **High Mid** Gain / Freq / Q	–18 to +18 dB, 40 Hz–16 kHz, Q 0.1–10	0 dB; 350 Hz, 1.5 kHz, 4.5 kHz; Q 1.0
High Gain / **High Freq** (shelf)	–18 to +18 dB, 1–20 kHz	0 dB, 8 kHz
LPF On / **LPF Freq**	On/Off, 1–20 kHz	Off, 18 kHz
Output	–18 to +18 dB	0 dB

Pi Compressor (Dynamics)

A soft-knee compressor with a sidechain key filter.

Control	Range	Default
Threshold	−60 to 0 dB	−18 dB
Ratio	1:1 to 20:1	4:1
Attack	0.1–100 ms	10 ms
Release	5–2000 ms	120 ms
Knee	0–18 dB	6 dB
Makeup	−12 to +24 dB	0 dB
Mix	0–100 %	100 %
Key HPF	20–500 Hz	20 Hz

Pi Gate (Dynamics)

A noise gate / expander with key filters.

Control	Range	Default
Threshold	−80 to 0 dB	−45 dB
Range	−80 to 0 dB	−60 dB
Attack	0.01–50 ms	0.5 ms
Hold	0–500 ms	50 ms
Release	5–2000 ms	150 ms
Key HPF / **Key LPF**	20–2000 Hz / 1–20 kHz	20 Hz / 20 kHz

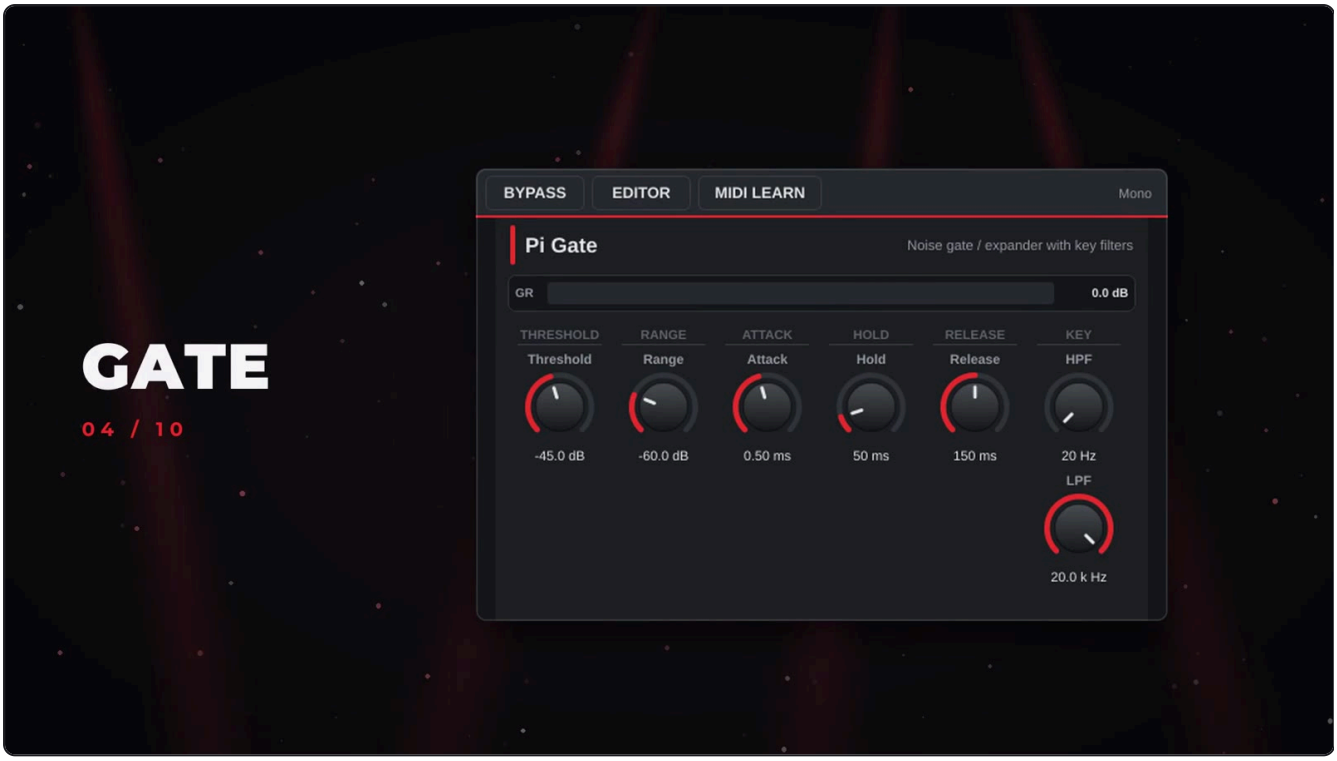


Figure 9. Pi Gate

Pi Limiter (Dynamics)

A look-ahead brick-wall limiter.

Control	Range	Default
Input Gain	0–24 dB	0 dB
Ceiling	−20 to 0 dB	−0.3 dB
Release	1–1000 ms	60 ms
Look-ahead	Off (0 ms), 0.25, 0.5, 1, 1.5, 3 ms	0.5 ms

Pi Dynamic EQ (EQ)

Four bands that cut or lift only while their frequency range is over the threshold.

Control (per band)	Range	Default
Band n On	On/Off	On
Band n Freq	30 Hz–18 kHz	120 Hz, 450 Hz, 2.8 kHz, 7.5 kHz
Band n Q	0.3–10	1.4
Band n Threshold	−60 to 0 dB	−24 dB
Band n Range	−24 to +12 dB (negative = cut, positive = lift)	−6 dB

Shared controls: **Ratio** (1.2:1–20:1, default 3:1), **Attack** (0.3–100 ms, default 5 ms), **Release** (10–2000 ms, default 120 ms) and **Output** (–18 to +18 dB).



Figure 10. Pi Dynamic EQ

Pi De-Esser (Dynamics)

Sibilance control, split-band or wideband.

Control	Range	Default
Threshold	–60 to 0 dB	–30 dB
Frequency	2–14 kHz	6.5 kHz
Max Reduction	0–24 dB	10 dB
Release	10–500 ms	60 ms
Mode	Split, Wide	Split
Listen	On/Off — hear only what is being detected	Off



Figure 11. Pi De-Esser

Pi Multiband (Dynamics)

A 4-band compressor with phase-coherent Linkwitz-Riley crossovers: with no compression the four bands add up to a flat response.

Control	Range	Default
Crossover Low / **Mid** / **High**	40–1000 Hz / 200–5000 Hz / 1–16 kHz	150 Hz / 1 kHz / 5 kHz
Per band (**Low**, **Low Mid**, **High Mid**, **High**): **Threshold**	–60 to 0 dB	–20 dB
Ratio	1:1 to 20:1	2.5:1
Attack	0.1–100 ms	20 ms (Low), 8 ms (others)
Release	5–2000 ms	250 ms (Low), 120 ms (others)
Gain	–12 to +12 dB	0 dB
Output	–18 to +18 dB	0 dB

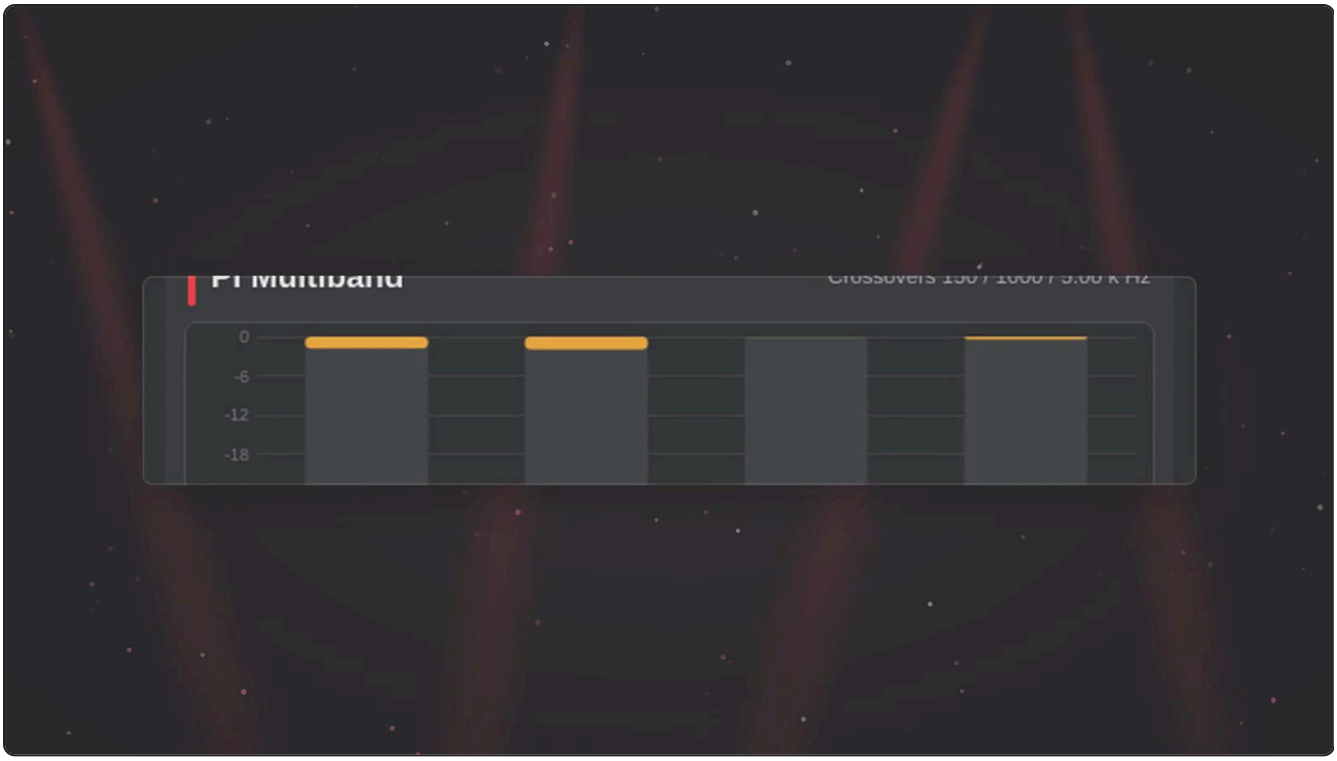


Figure 12. Pi Multiband

Pi Transient (Dynamics)

A transient shaper that works the same at any level.

Control	Range	Default
Attack	−100 to +100 %	0 %
Sustain	−100 to +100 %	0 %
Output	−18 to +18 dB	0 dB
Mix	0–100 %	100 %



Figure 13. Pi Transient

Pi Delay (Delay)

A tempo-synced stereo / ping-pong delay that follows tap tempo.

Control	Range	Default
Tempo Sync	On/Off	On
Division	1/1, 1/2, 1/2 D, 1/2 T, 1/4, 1/4 D, 1/4 T, 1/8, 1/8 D, 1/8 T, 1/16, 1/16 D, 1/16 T, 1/32	1/4
Time (sync off)	1–2000 ms	350 ms
Feedback	0–95 %	35 %
Hi Cut / **Lo Cut**	1–20 kHz / 20–2000 Hz	7 kHz / 150 Hz
Ping-Pong	On/Off	Off
Mix	0–100 %	30 %

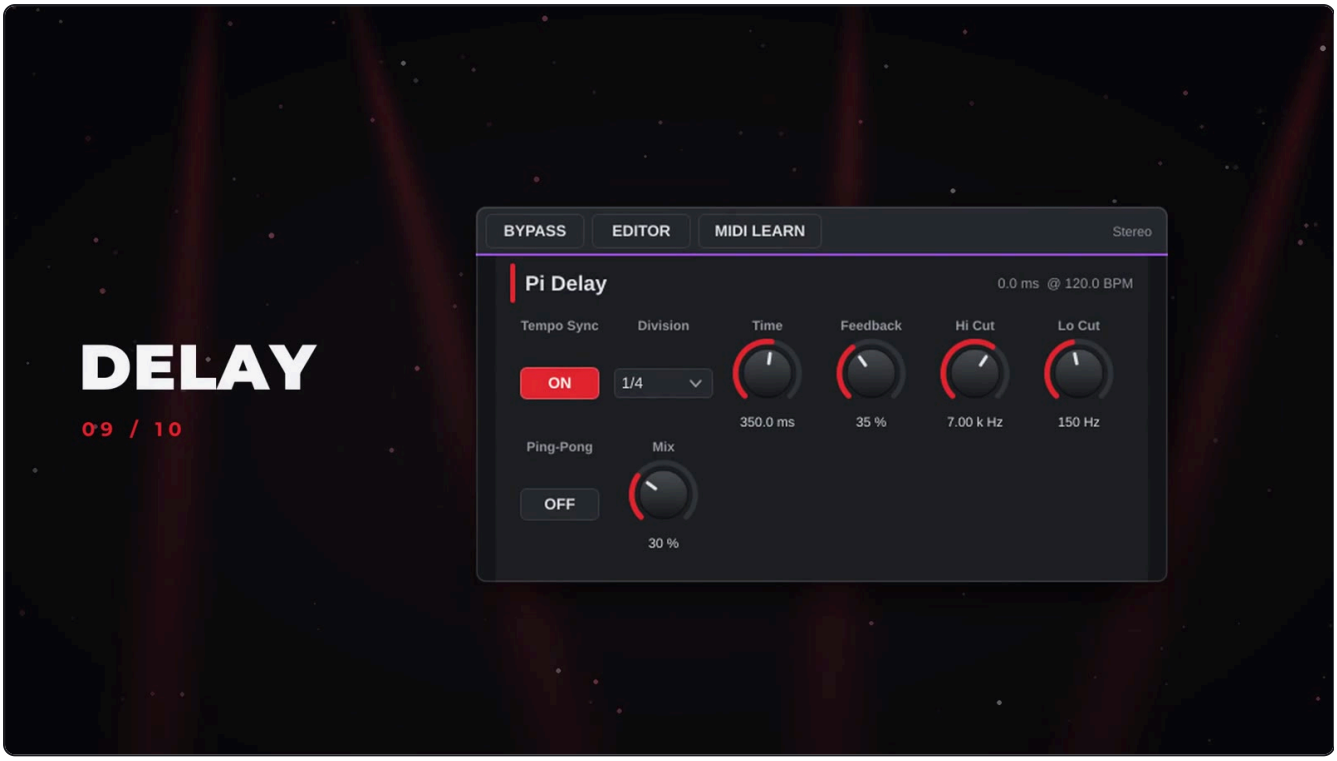


Figure 14. Pi Delay, synced to the tap tempo

Pi Reverb (Reverb)

An algorithmic reverb (8-line feedback delay network) or a zero-latency convolution reverb.

Control	Range	Default
Engine	Algorithmic, Convolution	Algorithmic
Decay	0.2–10 s	1.8 s
Size	0–100 %	60 %
Pre-Delay	0–250 ms	20 ms
Damping	1–20 kHz	6 kHz
Lo Cut / **Hi Cut**	20–1000 Hz / 1–20 kHz	150 Hz / 12 kHz
Width	0–100 %	100 %
Mix	0–100 %	25 %
IR (convolution)	Hall, Chamber, Room, Plate, Church, Ambience, Your IR	Hall
IR Length	10–100 %	100 %

Choose **Your IR** to load your own impulse response file. The IR is stored inside the session, so a Pi Live Server that runs the rack does not need its own copy.

Pi Utility (Utility)

Control	Range	Default
Gain	–60 to +24 dB	0 dB
Polarity Invert	On/Off	Off
Delay	0–500 ms	0 ms
Balance	–100 to +100	0
Mono	On/Off	Off
Mute	On/Off	Off

Pi Generator (Utility)

Control	Range	Default
On	On/Off	Off
Signal	Sine, Pink Noise, White Noise	Sine
Frequency	20 Hz–20 kHz	1 kHz
Level	–80 to 0 dBFS	–18 dBFS

PI VOCAL AI DE-BLEED

Pi Vocal AI De-Bleed (category **AI**) uses a neural network to separate the voice from the bleed in a live vocal mic: drums, guitar amps, monitors and the PA. You can use it on up to two racks at the same time.



Figure 15. Pi Vocal AI De-Bleed: one Intensity knob for cleaner vocals ▶ Animated in the online manual

How to clean a vocal mic

1. Insert **Pi Vocal AI De-Bleed** in the first slot of a vocal rack.
2. While the band plays, turn **INTENSITY** up until the band and monitors disappear from the vocal mic.
3. If the voice starts to sound thin, raise **Voice Protect** or lower **Max Reduction**.
4. Turn on **Listen Removed** for a moment to hear only what is being removed. Turn it off before the show.

Control	What it does	Range / default
Intensity	Overall amount of bleed removal	0–100 %, 60 %
Max Reduction	The deepest the bleed is pulled down	−60 to −3 dB, −30 dB
Voice Protect	Protects the voice from being reduced	0–100 %, 50 %
Reference	Amount of the bleed reference used (see below)	0–100 %, 100 %
Latency	**Zero** or **HQ 10 ms**	Zero
Listen Removed	Hear the removed part only	Off
Output	Output level	−12 to +12 dB, 0 dB

Zero latency mode applies the network's decisions through a minimum-phase filter, so the vocal is not delayed at all. **HQ 10 ms** gives a little more separation for 10 ms of latency (useful on a playback or broadcast feed, rarely on a lead vocal with in-ears).

Using a bleed reference

Feed a bleed reference (for example the drum overheads) into the rack's **SIDECHAIN KEY INPUT** and turn on **Sidechain from rack key input** on the slot. Pi Live learns the reference while the singer is silent and removes it while they sing; **Reference** sets how much is used.

PI FEEDBACK GUARD

Pi Feedback Guard (category **Feedback**) finds ringing feedback by its spectral signature (a pure, dominant, steady tone with no harmonics that keeps growing) and drops narrow notches on it automatically. It is zero latency, and its notches are saved with the session.

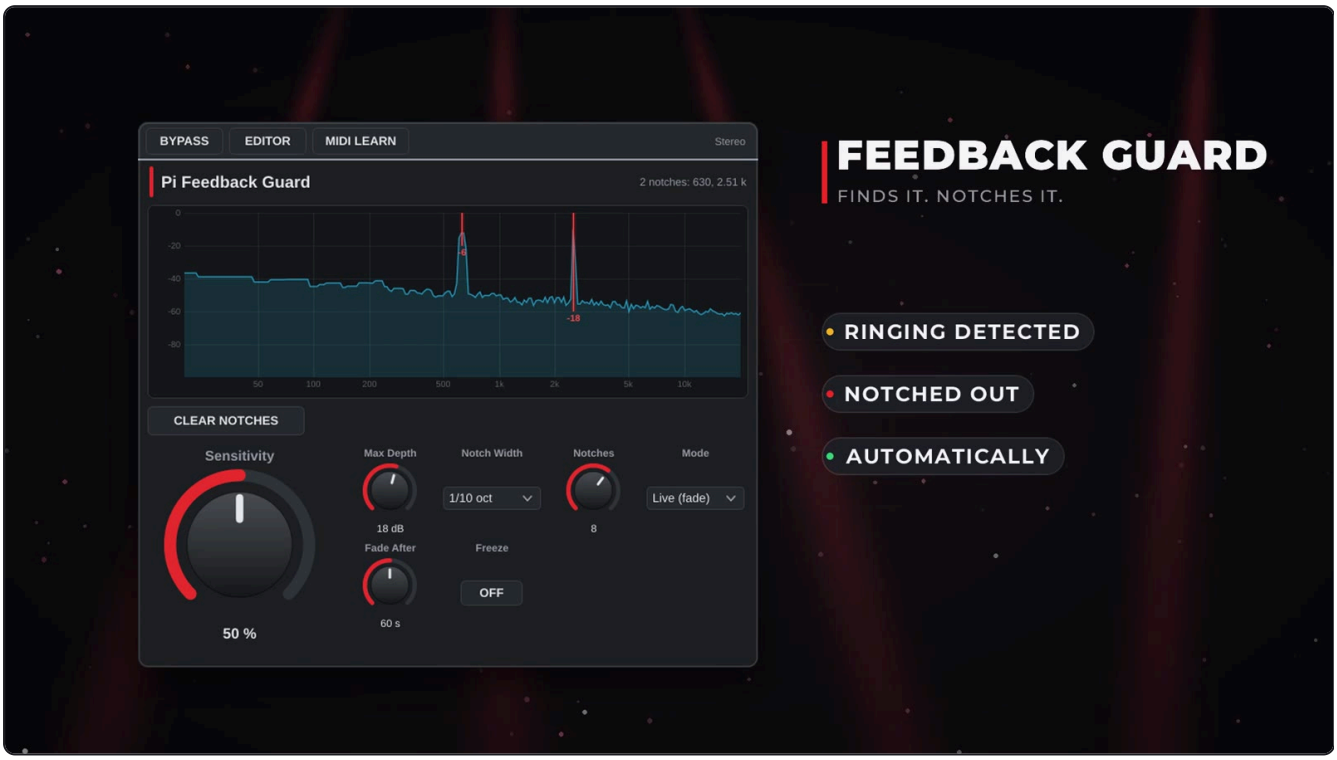


Figure 16. Feedback Guard detects ringing and notches it out automatically ▶ Animated in the online manual

Control	What it does	Range / default
Sensitivity	How quickly a tone is treated as feedback	0–100 %, 50 %
Max Depth	Deepest cut of each notch	3–30 dB, 18 dB
Notch Width	1/5, 1/10, 1/20 or 1/40 octave	1/10 oct
Notches	Maximum number of notches	1–12, 8
Mode	**Live (fade)**: notches fade out when no longer needed. **Fixed**: notches stay (for ringing out)	Live (fade)
Fade After	How long a Live notch stays before fading	5–600 s, 60 s
Freeze	Stop adding or changing notches	Off
CLEAR NOTCHES	Remove all notches	–

How to ring out monitors

1. Insert **Pi Feedback Guard** on the monitor mix rack and set **Mode** to **Fixed**.
2. Slowly raise the monitor level until feedback starts. Pi Feedback Guard notches each ringing frequency.
3. When you are happy, turn on **Freeze** so the notches stay as they are.

During the show, use **Live (fade)** on vocal racks as a safety net: notches appear only when needed and fade after **Fade After** seconds.

PI ANALYZER

Pi Analyzer shows an RTA, loudness, true peak and phase. Insert it anywhere, for example in the last slot of your master rack. It passes the audio through untouched.



Figure 17. Pi Analyzer: real-time spectrum, true peak and loudness ▶ **Animated in the online manual**

- **RTA: RTA Bands** 1/3, 1/6 or 1/12 octave (default 1/3); **RTA Speed** Fast, Medium or Slow (default Medium); with peak hold.
- **Loudness** to ITU-R BS.1770-4 / EBU R128: **MOMENTARY**, **SHORT-TERM**, **INTEGRATED** (LUFS) and **LOUDNESS RANGE**.
- **Loudness Target:** –14, –16, –18, –20, –23 (EBU R128) or –24 LUFS (ATSC A/85); default –18 LUFS.
- **TRUE PEAK MAX:** 4x oversampled true peak.
- **Phase:** correlation meter and goniometer.
- **RESET LOUDNESS** starts the integrated measurement again (for example at the start of the set).

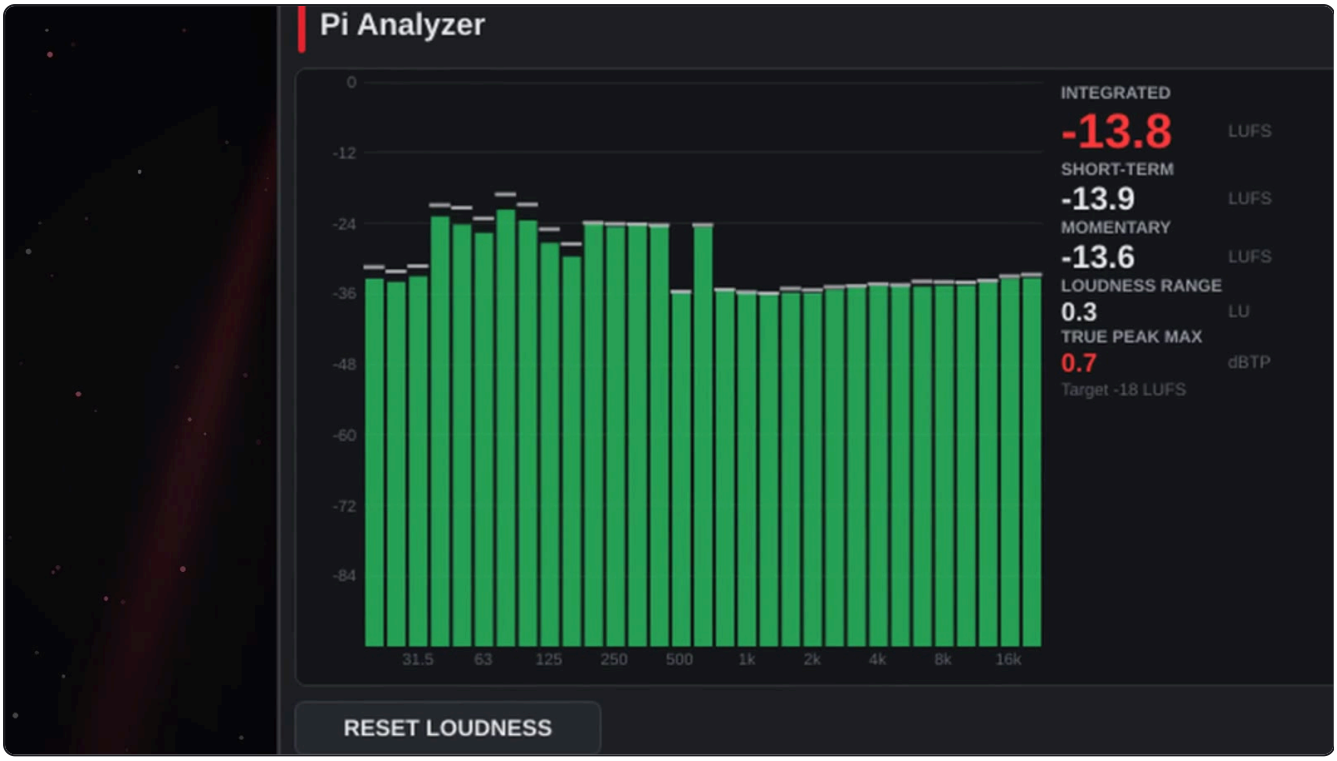


Figure 18. Loudness readings: integrated, short-term, momentary, range and true peak

SCENES

A scene stores, for every rack, the gain, mute and bypass state and the full state of every plug-in. Racks marked recall safe (**S**) are skipped on recall, so a vocal you have just rescued never jumps back.

How to store and recall scenes

- **Store a new scene:** click **+ NEW** in the SCENES tab, choose **STORE > Store as new scene** in the top bar, or press Cmd/Ctrl+K. The new scene is placed after the current one.
- **Update a scene:** select it and click **UPDATE**, choose **STORE > Update ""**, or press Cmd/Ctrl+U.
- **Recall:** double-click a scene, select it and click **RECALL**, or use the arrows: **Right arrow**, **Space** or **Page Down** for the next scene, **Left arrow** or **Page Up** for the previous one.
- **Reorder: UP** / **DOWN**. **Delete: DELETE** (asks first).

The **SCENE NOTES** field holds cues and reminders for the selected song or scene.

Scene right-click menu

Right-click a scene for **Recall**, **Update from current state**, **Rename...**, **Set MIDI program number...** (0–127; empty = the scene's position), **Set tempo on recall...** (BPM; empty = keep the current tempo), **Timecode cue...** (hh:mm:ss:ff), **Timecode cue at the current timecode**, **Remove timecode cue**, **MIDI Learn recall of this scene** and **Delete**. The list shows each scene's program number (**PC**), timecode cue (**TC**) and tempo (**BPM**).

SHOW CONTROL: CONSOLE LINK, TIMECODE AND TABLET REMOTE

Open **SETTINGS > Show Control** (or **Options > Show Control (console, timecode, tablet)...**).

Console link: follow the console's scenes

Pi Live can follow your console's scene recalls over the network, and can recall the console's scenes when you recall a scene in Pi Live.

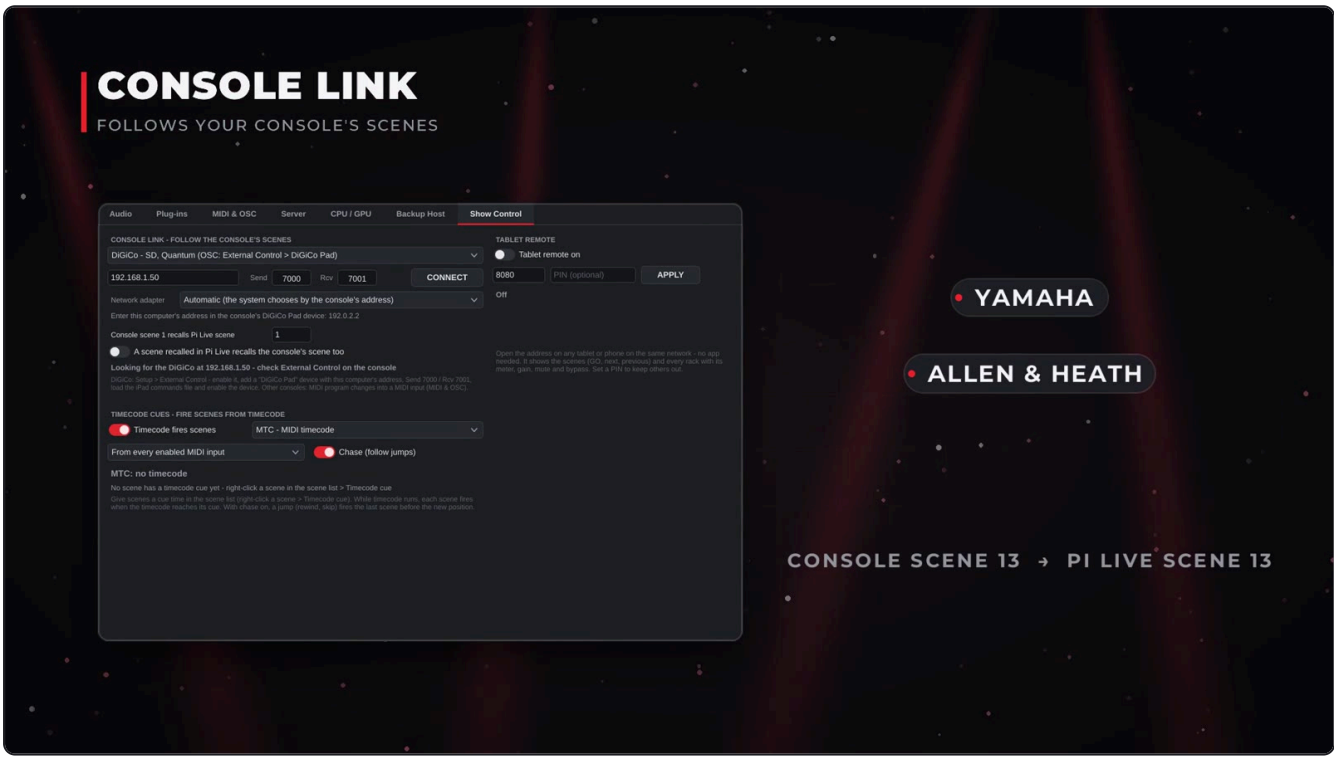


Figure 19. Console link: Pi Live follows the console's scene changes

1. Under **CONSOLE LINK – FOLLOW THE CONSOLE'S SCENES**, choose the console family: - **Yamaha – CL, QL, TF, Rivage PM, DM3, DM7 (TCP 49280)** - **Allen & Heath – dLive, Avantis, SQ (MIDI over TCP 51325)**: also set **MIDI ch** to the console's MIDI channel (Utility > Control > MIDI on the console). - **DiGiCo – SD, Quantum (OSC: External Control > DiGiCo Pad)**: set the **Send** and **Rcv** ports (default 7000 and 7001).
2. Enter the **Console IP address**.
3. Choose the **Network adapter** connected to the console network, or leave **Automatic (the system chooses by the console's address)**.
4. Set **Console scene 1 recalls Pi Live scene** (the offset between the console's scene numbers and Pi Live's). Scenes with a MIDI program number answer to that number instead.
5. Tick **A scene recalled in Pi Live recalls the console's scene too** if you want two-way recall.
6. Click **CONNECT**.

DiGiCo set-up: on the console, open **Setup > External Control**, enable it, add a "DiGiCo Pad" device with this computer's address (Pi Live shows it), set **Send 7000 / Rcv 7001**, load the iPad commands file and enable the device.

Other consoles: send MIDI program changes into a MIDI input (see Keyboard shortcuts / remote control).

Timecode cues

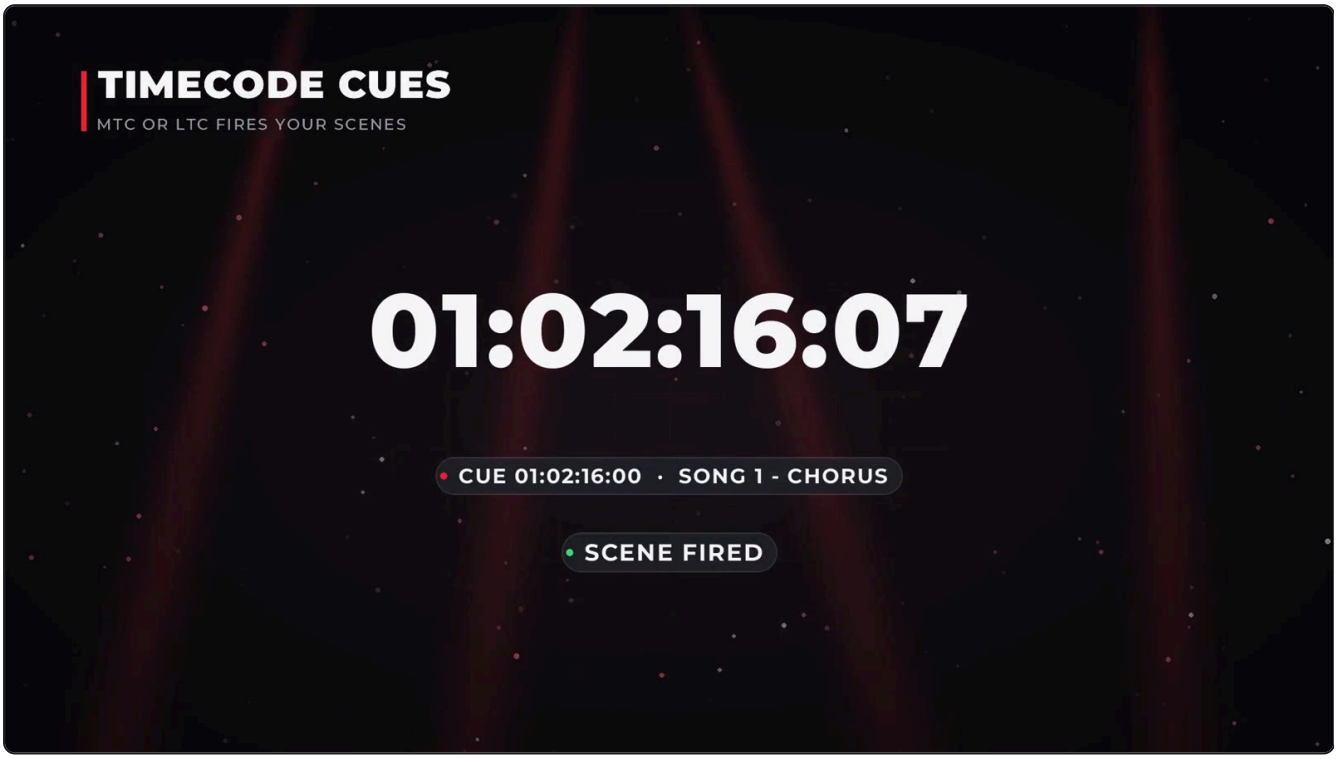


Figure 20. A timecode cue fires its scene

1. Under **TIMECODE CUES – FIRE SCENES FROM TIMECODE**, tick **Timecode fires scenes**.
2. Choose the source: **MTC – MIDI timecode** (from every enabled MIDI input or from one chosen input) or **LTC – timecode on an audio input** (choose the input).
3. Tick **Chase (follow jumps)** if the playback may jump: on a rewind or skip, Pi Live fires the last scene before the new position.
4. In the scene list, right-click each scene and set a **Timecode cue...**.

While timecode runs, the top bar shows it next to the tempo, and each scene fires when the timecode reaches its cue. Pi Live reads 24, 25, 29.97 drop-frame and 30 fps. The Show Control page shows how many scenes have a cue and which one is next.

Tablet remote

A web page for any tablet or phone on the same network. No app is needed.

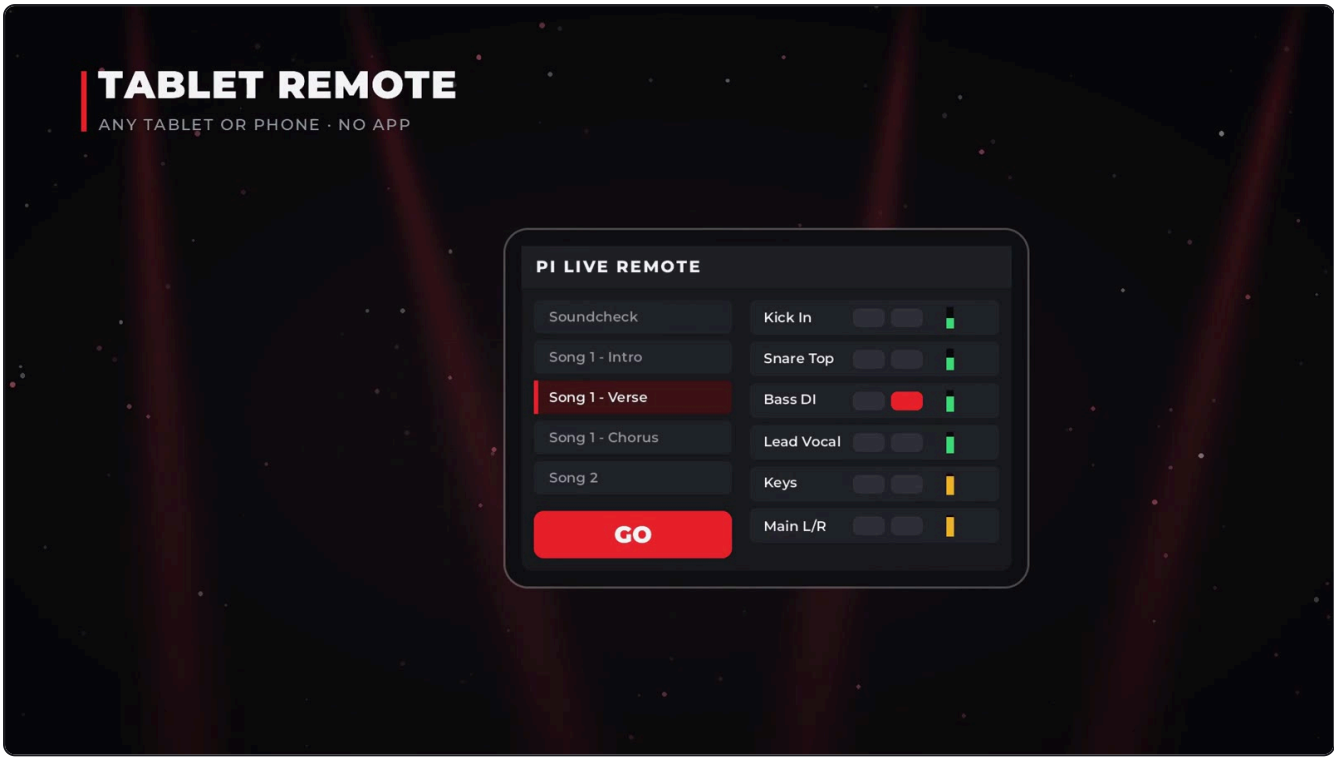


Figure 21. The tablet remote: scenes with GO, and every rack

1. Under **TABLET REMOTE**, tick **Tablet remote on**.
2. Set the port (default 8080) and, optionally, a **PIN** of up to 8 digits.
3. Click **APPLY**. Pi Live shows the address to open.
4. Open the address in the browser of your tablet or phone. If you set a PIN, enter it and tap **CONNECT**.

The remote shows the current scene with **PREV**, **GO** and **NEXT**, the scene list, and every rack with its meter, gain, **MUTE** and **BYPASS**. It updates live.

REMOTE PROCESSING WITH PI LIVE SERVER

Pi Live Server runs on a second Mac or Windows computer and processes racks for your Pi Live host over the network. You keep editing every plug-in on the host; the server does the processing. Up to 4 servers can be used at once.

How to set up a server

1. Install **Pi Live Server** on the second computer (it is in the same installer).
2. Install and authorize every plug-in you want to run there with its own installer (iLok, Waves, serial numbers, exactly as on any computer).
3. Launch Pi Live Server and let it scan its plug-ins.
4. Connect both computers to the same network. A direct Gigabit cable or a dedicated switch is best.
5. On the host, open **SETTINGS > Server**. Servers found on the network are listed under **PI LIVE SERVERS ON THE NETWORK**. Select one and click **CONNECT**, or type its address under **CONNECT MANUALLY**.
6. Click **NET** on each rack you want to move to the server.

> **Note:** A Mac host with a Windows server needs the VST3 versions of your plug-ins on the Mac, because Audio Units only exist on macOS. Use the same plug-in format on both computers.

The Server page

Besides the server list and **CONNECT MANUALLY**, the page shows the **CONNECTED SERVER** (system, processor, cores, number of plug-ins), the **NETWORK BUFFER** setting, and **PLUG-INS ON THE SERVER**, which lists the plug-ins of your show that the server is missing. **RESCAN ON SERVER** makes the server scan again after you install new plug-ins.

Network buffer. 0 blocks is synchronous: no added latency, but the server must answer within the same audio buffer (direct cable, fast server). Each block adds one audio buffer of latency on remote racks. **AUTO** measures the real network round trip (average, 99 % and maximum) and uses the lowest safe setting. If you hear dropouts on remote racks, raise the buffer.

Choosing servers per rack

With several servers connected, open a rack's **...** menu and choose **Server** (1–4). The **NET** chip shows the server number (**NET2**, **NET3**...).

Redundant server

A rack can also run on a **Backup server (runs in parallel)**. Both servers process the rack at the same time: any audio block the main server misses is taken from the backup, and if the main server is lost the backup takes over with no gap and no switch to local processing. The **NET** chip shows a **+** (for example **NET1+**).

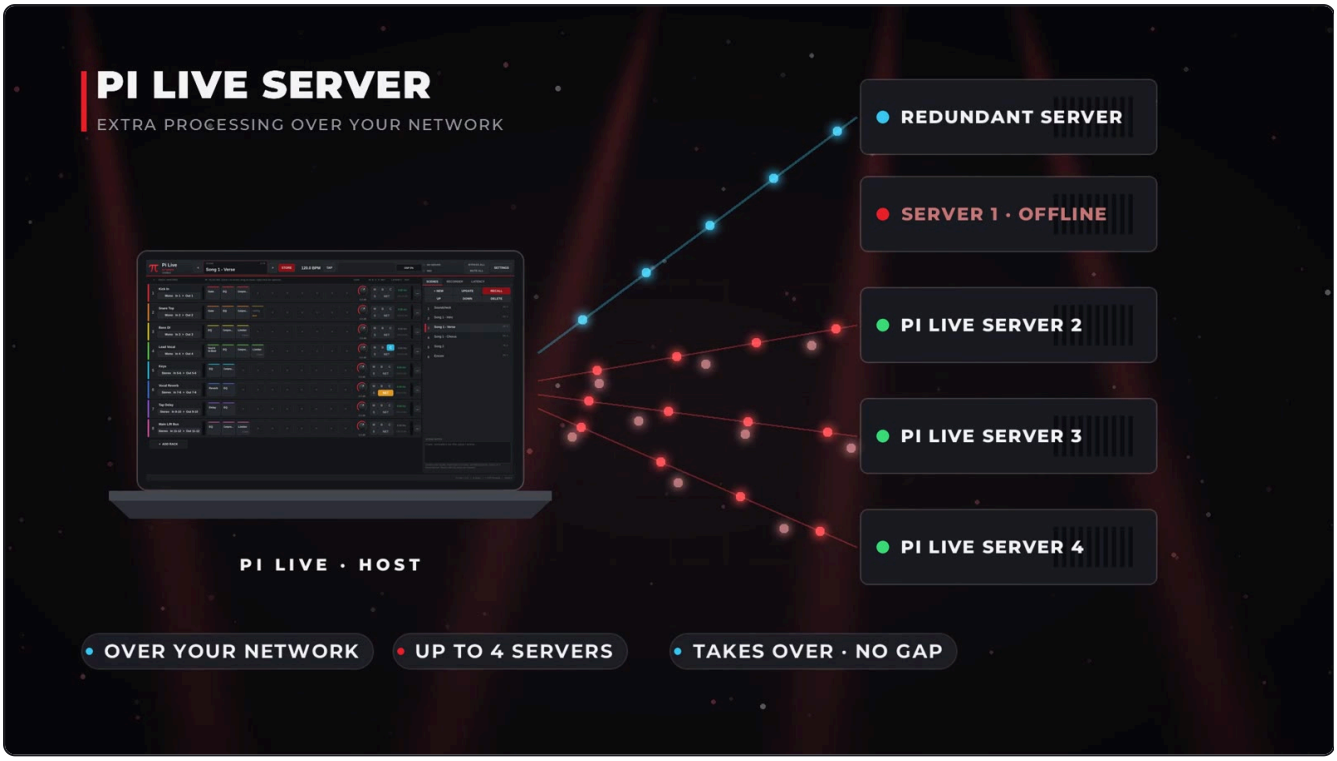


Figure 22. A redundant server takes over with no gap ▶ Animated in the online manual

If a server disappears

A rack without a backup server falls back to local processing instantly, with the same settings, and Pi Live reconnects to the server by itself. While the rack waits for the server the **NET** chip is amber ("Waiting for Pi Live Server … processing locally for now").

The Pi Live Server window

The server window shows its status, address, connected hosts and a **HOSTED RACKS** table (**Host**, **Rack**, **Plug-ins**, **Latency**, **Load**); double-click a rack to open its plug-in windows there. Under **SERVER NAME / PORTS (TCP, UDP)** you can rename the server and change its ports.

BACKUP HOST

Run Pi Live on a second computer as a hot spare. The backup host copies the show from the main host (racks, plug-ins, routing, scenes, MIDI / OSC set-up) and then follows every change as it happens: knobs, mutes, scene recalls. If the main host stops answering, the backup takes over within 1.5 seconds.

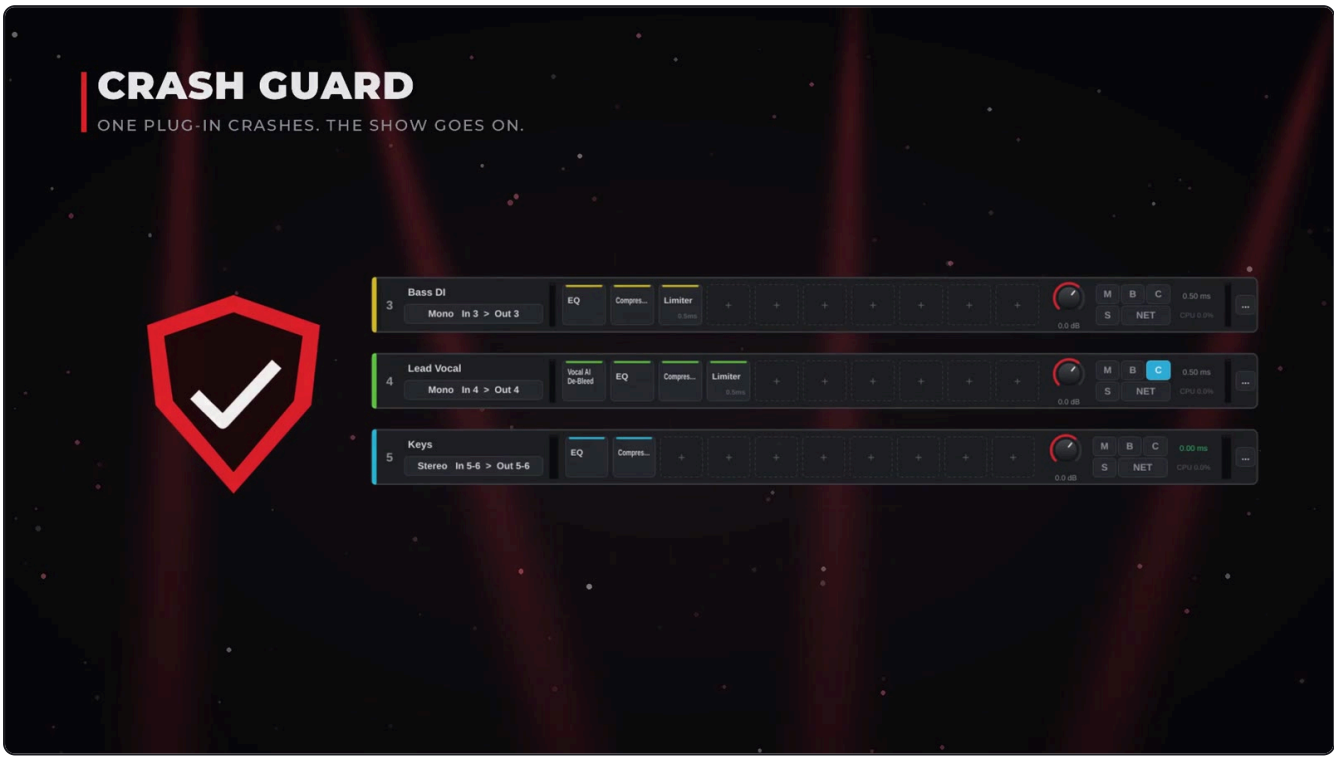


Figure 23. The backup host follows every move and takes over by itself ▶ **Animated in the online manual**

How to set up a backup host

1. Give both computers the same inputs (for example the same Dante flows) and patch both outputs to the console or to a switch.
2. Install the same plug-ins on both computers.
3. On the main computer, open **SETTINGS > Backup Host** and choose **Main host – a backup host may follow this computer**. Note the address it shows.
4. On the backup computer, choose **Backup host – follow the main host**, enter the **IP address of the main host** and click **FOLLOW**.
5. Tick **Keep this computer's outputs silent until it takes over** if both outputs feed the same console inputs.

While it waits, the backup's top bar shows **BACKUP HOST – STANDBY**. Use **TAKE OVER NOW** to switch by hand and **BACK TO STANDBY** to return. Each computer uses its own Pi Live Servers.

CRASH PROTECTION

Pi Live protects the show from misbehaving plug-ins at three levels:

1. **Safety test.** Every new plug-in is tested once in a separate process before it loads; one that crashes is blocked.
2. **Crash catching.** A plug-in that crashes while running is switched off (its input passes through) and blocked; the slot shows **CRASHED - OFF**.
3. **Crash guard (per rack).** Turn on **Crash guard (plug-ins in a protected process)** in the rack menu. The rack's plug-ins run in a protected process on the same computer, with no added latency, and the chip shows **SAFE**. If a plug-in crashes, only that process goes down: the rack plays dry for a moment, the plug-in that crashed is named and bypassed, the process restarts and Pi Live keeps running. Plug-in windows of guarded racks open from the protected process.

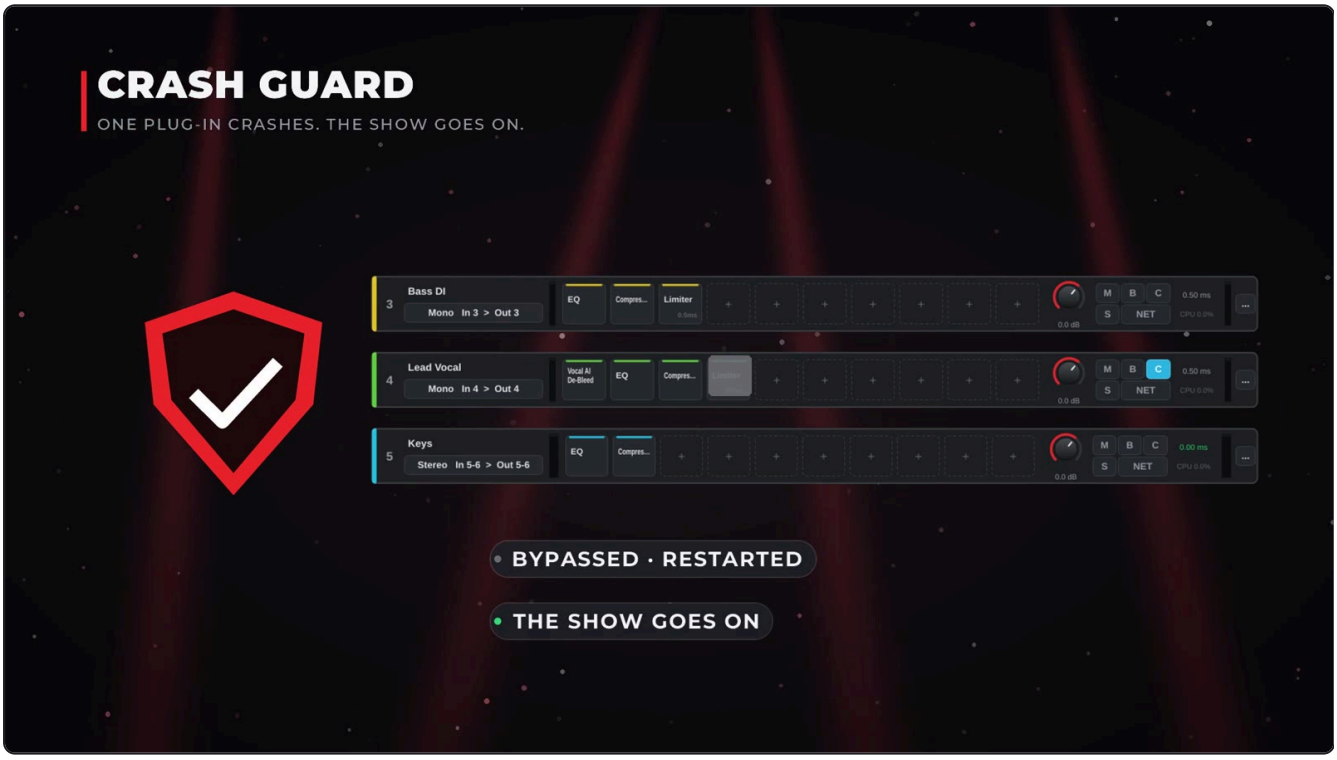


Figure 24. One plug-in crashes, the show goes on ▶ **Animated in the online manual**

Pi Live also mutes invalid audio (NaN / Inf) from any plug-in before it reaches the outputs.

To give a blocked plug-in another chance, select it in **SETTINGS > Plug-ins** and click **UNBLOCK**, then use **Try loading it again** on the slot.

LATENCY AND ALIGNMENT

Pi Live puts minimum latency first: racks are never delayed unless you put them in the same **align group** (or choose to align everything). Every rack shows its own latency, and the **LATENCY** tab gives you the full picture.

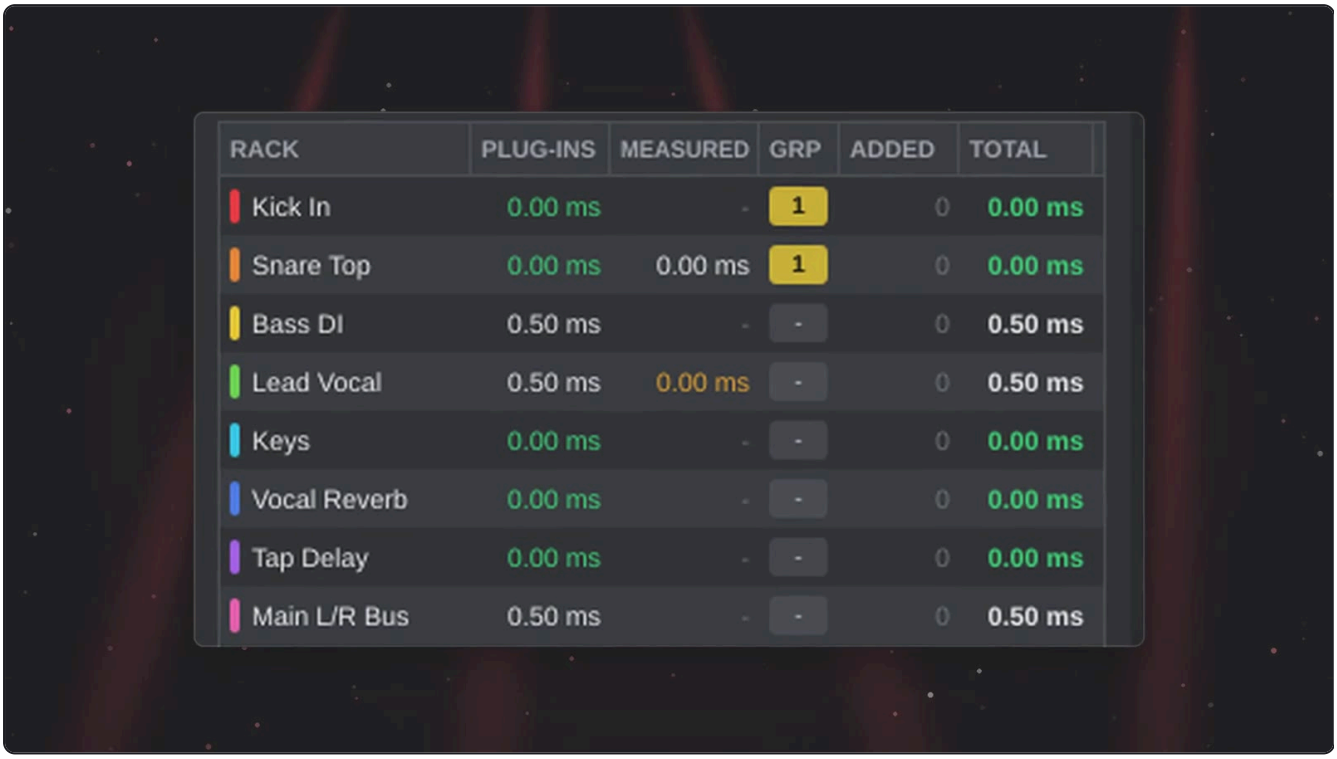


Figure 25. The LATENCY tab: plug-in, measured, group, added and total latency per rack

The LATENCY tab

The **LATENCY PER RACK** table has these columns:

Column	Meaning
RACK	Rack name ("(server)" for remote racks)
PLUG-INS	Latency reported by the plug-ins (+ network for remote racks)
MEASURED	Latency measured through the rack
GRP	Alignment group. Click to set it; **None (never delayed)** or Group 1, 2…
ADDED	Delay added by latency compensation, plus the manual alignment delay
TOTAL	Total latency the rack adds

Under **COMPENSATION**, choose:

- **Align: off (lowest latency everywhere)**
- **Align: groups only (recommended)**

- **Align: every rack to the slowest**

and tick **Compensate with measured latency** to use measured values instead of what plug-ins report.

How to align racks that are summed together

1. In the LATENCY tab, click **GRP** on each rack that is mixed together: a drum kit's mics, a stereo pair, a source and its parallel compression rack.
2. Give them the same group number.
3. Only those racks are delayed to line up with the slowest of the group. Every other rack keeps its own minimum latency.

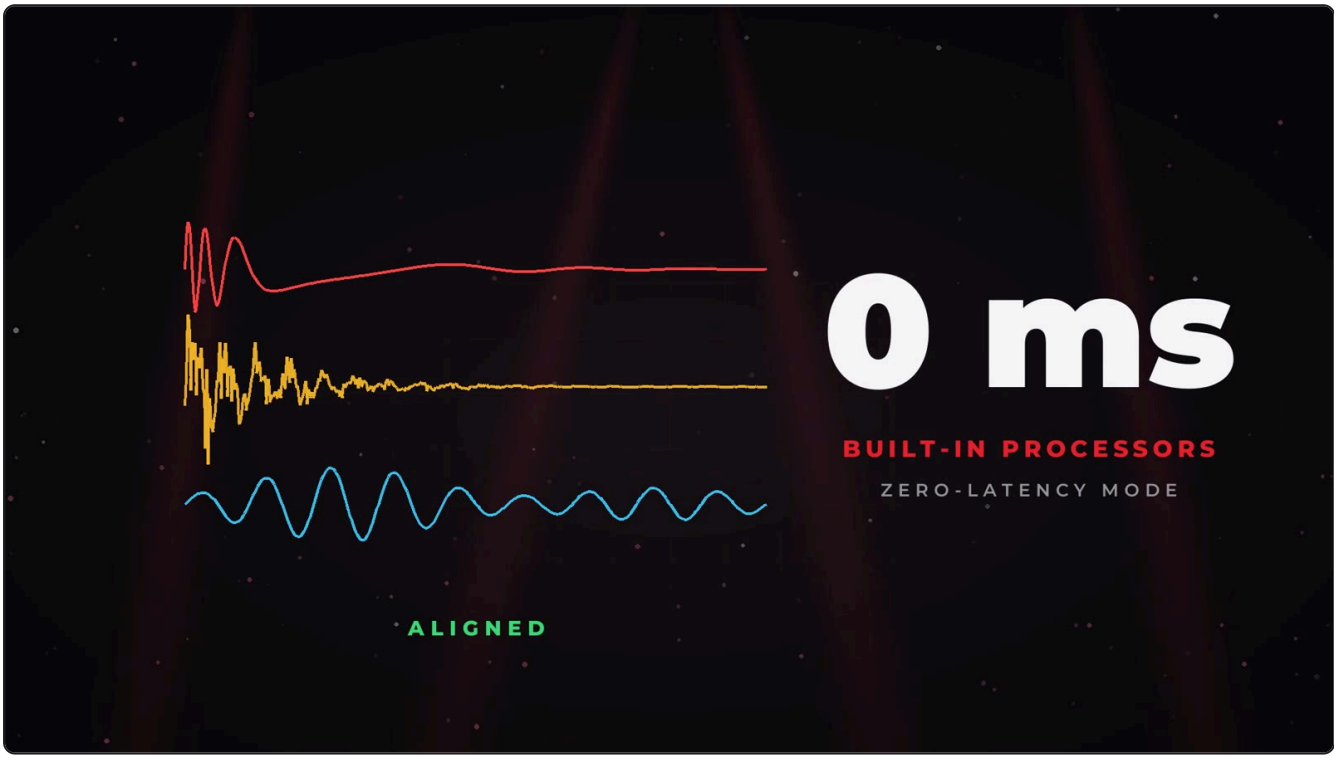


Figure 26. Racks in the same group are perfectly aligned ▶ **Animated in the online manual**

How to measure real latency

Some plug-ins report their latency wrongly. Pi Live can measure it.

1. Select a rack in the table and click **MEASURE SELECTED**, or click **MEASURE ALL**.
2. Pi Live sends a short noise burst through the rack and finds the real latency by cross-correlation. The rack's outputs are muted for about 4 seconds.
3. If the result differs from the reported value, Pi Live tells you; turn on **Compensate with measured latency**.

CLEAR removes all measurements. Right-click a rack in the table for **Measure this rack** and **Clear measurement**.

> **Warning:** Measuring mutes the rack for a few seconds. Do it at soundcheck, not during the show.

I/O round trip

Under **I/O ROUND TRIP (LOOP AN OUTPUT BACK TO AN INPUT)**, choose an **Output** and an **Input** that are physically connected (a loop cable, or a loop through your console or network), then click **MEASURE ROUND TRIP**. This measures your converters and network. **USE FOR ALL INPUTS** applies the result to every input.

The bottom of the tab shows your audio device's buffer (samples, kHz and ms) and the input + output latency the driver reports.

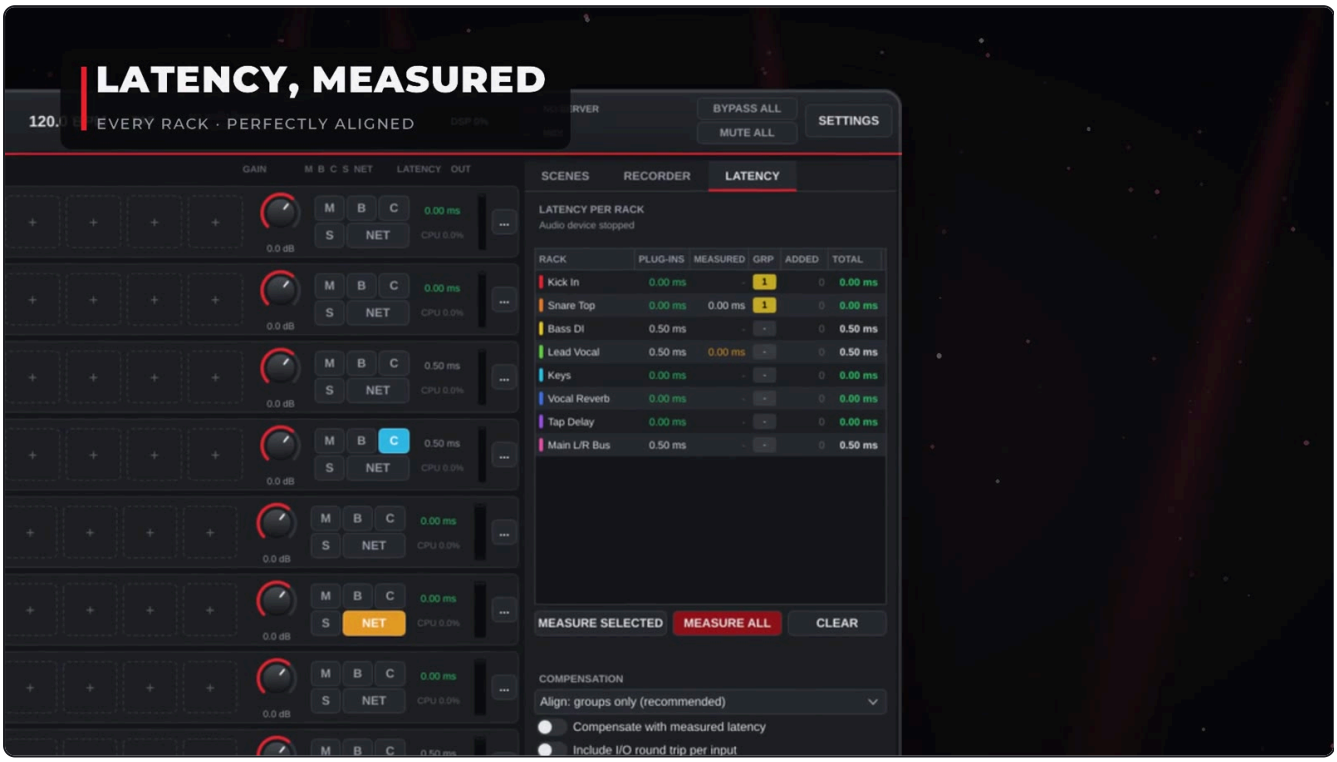


Figure 27. The LATENCY tab beside your racks

Bypassing a rack or a plug-in keeps its latency constant, so timing never jumps when you bypass.

RECORDER AND VIRTUAL SOUNDCHECK

The **RECORDER** tab records every input to one WAV file per channel, and plays a take back in place of the live inputs, so you can tune your racks when the band isn't there.

How to record a multitrack

1. Open the **RECORDER** tab.
2. Under **MULTITRACK RECORDER**, choose the channels (**All device inputs**, or **Inputs 1 – 2** up to **Inputs 1 – 128**) and the format (**24-bit WAV** or **32-bit float WAV**).
3. Click **RECORD**. Click **STOP RECORDING** to finish. The elapsed time is shown while recording.
4. Click **SHOW FILES** to open the recordings folder (`Documents/Pi Live/Recordings`). Each take is a folder named with its date and time.

How to run a virtual soundcheck

1. Under **VIRTUAL SOUNDCHECK PLAYBACK**, click **LOAD TAKE…** and choose a take folder.
2. Click **PLAY**. The take replaces the live inputs, and every rack processes it as if the band were playing.
3. Tick **Loop** to repeat it. Click **PAUSE** to stop.

When no take is loaded, the panel shows "No take loaded – inputs are live".

> **Warning:** Always check that playback is stopped before the show starts, or your racks will hear the recording instead of the stage.

SESSIONS AND PRESETS

File	Contents
`.pilive`	A complete session: racks, plug-ins and their states, routing, scenes, MIDI / OSC mappings, latency groups, server choices
`.pirack`	One rack with all its plug-ins
`.pipreset`	One plug-in's state

- **File > New Session** (Cmd/Ctrl+N), **Open Session...** (Cmd/Ctrl+O), **Save** (Cmd/Ctrl+S), **Save As...** (Cmd/Ctrl+Shift+S) and **Open Recent**.
- Drag a `.pilive` or `.pirack` file onto the window to open it.
- **Autosave and crash recovery.** Pi Live saves your work automatically in the background. If it did not shut down properly, it asks **Restore session?** at the next launch: click **Restore** to continue where you were, or **Start fresh**.

If a session opens on a computer where some plug-ins are missing, Pi Live opens it with warnings and marks those slots **NOT LOADED**, keeping their settings so nothing is lost.

SETTINGS & PREFERENCES

Open **SETTINGS** in the top bar (or Cmd/Ctrl+,). The Pi Live Settings window has the tabs **Audio**, **Plug-ins**, **MIDI & OSC**, **Server**, **CPU / GPU**, **Backup Host** and **Show Control**; each is described in its own chapter. This chapter covers **CPU / GPU**.

CPU / GPU

Setting	Options	Default
CPU - DSP THREADS	**Automatic (n helper threads)**, **Off (single core, lowest overhead)**, or a fixed number of helper threads	Automatic
DSP THREAD WAKE-UP	**Efficient - threads sleep between buffers**, **Balanced - poll 0.25 ms before sleeping**, **Lowest jitter - poll 1 ms (uses more CPU)**	Efficient
Pin DSP threads to their own CPU cores	On/Off (Windows; macOS does this through audio workgroups)	Off
High-performance mode (high priority, no power throttling)	On/Off	—
GPU - INTERFACE RENDERING	**Automatic (system GPU compositing)**, **GPU - OpenGL (lowest CPU for meters)**, **CPU - software rendering** (the GPU option on Windows uses Direct2D)	Automatic
Meters	15 fps (least CPU), 30 fps, 60 fps (smoothest)	30 fps
LATENCY ALIGNMENT	Off / Align groups only (recommended) / Align all racks to the slowest one	—
CUE OUTPUTS	Left and right outputs for the **C** (cue) buttons, e.g. your headphone amp	—
INTERFACE SIZE	80 % to 200 %	100 %

Racks are processed in parallel on all CPU cores. Helper threads benefit sessions with many racks most. The page also shows the live DSP load, the number of DSP threads, the buffer in samples and ms, and the xruns count.

> **Note:** Audio plug-ins always run their DSP on the CPU. The GPU setting only moves the drawing of the interface and meters to the graphics card, leaving more CPU for audio.

KEYBOARD SHORTCUTS / REMOTE CONTROL

Keyboard shortcuts

On Windows, use **Ctrl** where the table says **Cmd**.

Shortcut	Action
Cmd+N	New Session
Cmd+O	Open Session...
Cmd+S	Save
Cmd+Shift+S	Save As...
Cmd+1	Add Mono Rack
Cmd+2	Add Stereo Rack
Cmd+3	Add Mono > Stereo Rack
Cmd+4	Add 8-Channel Rack
Cmd+Shift+R	Add Several Racks...
Cmd+D	Duplicate Selected Rack
Cmd+Backspace	Delete Selected Rack
Right arrow / Space / Page Down	Next Scene
Left arrow / Page Up	Previous Scene
Cmd+U	Update Current Scene
Cmd+K	Store New Scene
T	Tap Tempo
Cmd+Shift+B	Bypass All Racks
Cmd+Shift+M	Mute All Outputs
Cmd+Shift+W	Close All Plug-in Windows
Cmd+,	Audio Settings...
F1	Quick Guide

MIDI

Open **SETTINGS > MIDI & OSC**.

- **MIDI INPUTS:** enable the MIDI inputs Pi Live listens to.

- **PROGRAM CHANGE > SCENE RECALL:** tick **Recall scenes** and choose **Any channel** or a specific channel. A program change recalls the scene with that program number, or the scene at that position if no number is set.
- **MIDI LEARN:** buttons to learn **NEXT SCENE**, **PREV SCENE**, **TAP TEMPO**, **BYPASS ALL** and **MUTE ALL**. The list shows all mappings; **REMOVE SELECTED** and **CLEAR ALL** remove them.

How to MIDI learn any control:

1. Right-click a knob and choose **MIDI Learn** (or use a rack, slot or scene **MIDI Learn** item; for a plug-in's own editor, touch the control, then click **MIDI LEARN** in the plug-in window).
2. Move a knob or fader (or press a button / note) on your controller. Pi Live confirms "MIDI mapping saved".

Mappings are saved with the session.

OSC

Under **OSC REMOTE CONTROL**, tick **Enable OSC**, set the port (default 8000) and, optionally, a **feedback IP** and port (default 9000) to receive feedback. Click **APPLY**.

Address	Arguments	Action
`/pilive/scene/next`	—	Next scene
`/pilive/scene/prev`	—	Previous scene
`/pilive/scene/recall`	n (1 = first scene)	Recall scene n
`/pilive/scene/name`	text	Recall the scene with that name
`/pilive/tap`	—	Tap tempo
`/pilive/tempo`	bpm	Set the tempo
`/pilive/bypass`	0 / 1	Bypass all
`/pilive/mute`	0 / 1	Mute all
`/pilive/rack/<n>/gain`	dB	Rack n gain
`/pilive/rack/<n>/mute`	0 / 1	Rack n mute
`/pilive/rack/<n>/bypass`	0 / 1	Rack n bypass
`/pilive/rack/<n>/cue`	0 / 1	Rack n cue
`/pilive/rack/<n>/slot/<m>/bypass`	0 / 1	Bypass slot m of rack n
`/pilive/rack/<n>/slot/<m>/param/<k>`	0..1	Set parameter k of the plug-in in slot m

Feedback: Pi Live sends `/pilive/scene/current <n> <name>` whenever the scene changes. Rack, slot and parameter numbers start at 1.

TIPS FOR LIVE/STUDIO USE

- **Keep latency low where it matters.** Leave racks out of align groups unless they are summed with another rack. A lead vocal in in-ear monitors should have no group and only zero-latency processing (Pi processors are zero latency; use **Look-ahead Off** on Pi Limiter and **Zero** on Pi Vocal AI De-Bleed).
- **Use the smallest stable buffer.** Watch the **xruns** counter in the status bar during soundcheck. If it climbs, raise the buffer, add helper threads, choose a more active **DSP THREAD WAKE-UP**, or move heavy racks to a server with **NET**.
- **Mark rescue racks recall safe.** When you fix a problem mid-show, press **S** on that rack so the next scene doesn't undo it.
- **Use the crash guard** on racks with plug-ins you don't fully trust, for example a new third-party plug-in on the lead vocal.
- **Measure at soundcheck.** Use **MEASURE ALL** once on a new system; some plug-ins report latency incorrectly, and the measurement tells you.
- **Keep BYPASS ALL and MUTE ALL in mind.** They are always on screen and work with Cmd/Ctrl+Shift+B and Cmd/Ctrl+Shift+M. **BYPASS ALL** keeps latency, so it is a safe A/B of your whole processing.

TROUBLESHOOTING

Symptom	Cause	Fix
Top bar shows **LIVE ENGINE NOT STARTED**, no audio out	Pi Live is not activated (limited mode)	Open **Help > Licence...** and activate or start the trial. The engine starts and outputs fade in
Top bar shows "No audio device"	No device chosen or the device is unavailable	Open **SETTINGS > Audio** and choose your interface
Clicks, dropouts, xruns counter rising	Buffer too small, CPU overloaded, or network buffer too low on remote racks	Raise the buffer size, use automatic helper threads and high-performance mode, move racks to a server, or set **NETWORK BUFFER** to **AUTO**
A plug-in doesn't appear	Not scanned, or in a custom folder	**SCAN FOR NEW PLUG-INS**; add its folder with **ADD FOLDER...**
Slot shows **NOT LOADED**	The plug-in is not installed (or not authorized) on this computer	Install / authorize it, then right-click the slot > **Try loading it again**
NET chip stays amber	The server is not connected or not answering	Check **SETTINGS > Server**, the network cable, and that Pi Live Server is running
Server is missing plug-ins	Plug-ins not installed on the server, or a different format	Install and authorize them on the server, use VST3 for a Mac host with a Windows server, then **RESCAN ON SERVER**
MIDI program changes do nothing	MIDI input disabled or scene recall off	Enable the input and tick **Recall scenes** in **SETTINGS > MIDI & OSC**; check the channel
A plug-in is blocked or shows **CRASHED - OFF**	It crashed in its safety test or during the show	Update it, click **UNBLOCK** in **SETTINGS > Plug-ins**, or turn on the rack's crash guard
Scenes don't follow the console	Wrong console type, IP, adapter or ports	Check **SETTINGS > Show Control**
Mac says the app can't be opened	Gatekeeper check	**System Settings > Privacy & Security > Open Anyway**

SPECIFICATIONS & SYSTEM REQUIREMENTS

Specifications

Item	Specification
Product	Pi Live by Saharty, version 1.0.0
Type	Standalone live plug-in host, plus Pi Live Server for remote processing
Hosted plug-in formats	VST3 (macOS, Windows), Audio Units (macOS). AAX and VST2 are not hosted
Audio drivers	Core Audio (macOS); ASIO, WASAPI, DirectSound (Windows)
Audio I/O	Up to 512 inputs / 512 outputs
Racks	Up to 256; Mono, Mono > Stereo, Stereo, 4 / 6 / 8 / 12 / 16 channels
Plug-in slots	10 per rack
Servers	Up to 4 Pi Live Servers at once, plus a backup server per rack
Network ports	UDP 47800 discovery, TCP 47801 control, UDP 47802 audio, TCP 47803 backup host

System requirements

	macOS minimum	macOS recommended
OS	macOS 11 Big Sur	Latest macOS
Processor	Apple silicon or Intel (Universal)	Apple M1 Pro or better
Memory	8 GB	16 GB
Disk	100 MB	100 MB
Audio	Core Audio interface or console	Multichannel interface, USB / MADI / network card
Server	Optional	Dedicated processing computer on a direct network link

	Windows minimum	Windows recommended
OS	Windows 10 64-bit	Windows 11 64-bit
Processor	Intel Core i5 / AMD Ryzen 5, 4 cores	Intel Core i7 / AMD Ryzen 7, 8 cores
Memory	8 GB	16 GB
Disk	100 MB	100 MB
Audio	ASIO driver	Multichannel ASIO interface or console
Server	Optional	Dedicated processing computer on a direct network link

Pi Live Server has the same requirements; use a wired Gigabit network for remote processing.

SUPPORT

- Email: **support@pi-ware.com**
- Website, downloads and your account: **www.pi-ware.com**
- Video tutorials: **youtube.com/@pibysaharty**

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www.pi-ware.com · support@pi-ware.com
Video tutorials: youtube.com/@pibysaharty
Online manual with animations: https://www.pi-ware.com/manuals/pi-live/

Precision is a constant.

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