

LaserWall: setup and control

One wall, one phone, connected over Bluetooth. No router needed.

01 SAFETY

A line, not a dot

An optical scheme engineered by TeslaCoilPro fans every beam into a 60–110° line. Power is spread along its whole length, and R, G and B leave as separate diverging lines. Beyond ~4 metres from the aperture the wall is eye-safe — the usual scanning-laser prohibitions do not apply to it.



Only the near zone is hazardous

The first 2–3 metres in front of the aperture are the only dangerous place: the line has not fanned out yet. Do not look into the output window, and keep the audience 4 metres away — by height, staging or a barrier.

- The line must be even. A bright dot or clump means damaged optics: power off, service.
- Never disassemble the optics: without them this is an ordinary point laser with all its hazards.
- Keep concave and focusing surfaces out of the beam (flat glass and mirrors are fine — they only redirect the line).
- Never aim at roads or aircraft — that is law, not optics.

02 INSTALLATION

Mount and connect the module

01

Mount

Stock hardware, stable support, no cable tension that could swing the body.

02

Aim

The first 4 metres out of everyone's reach.

03

Connect

All cables with power off, by connector markings.

04 Power up

Standing beside the aperture: a brief blue flash is possible on cold start.

03 CONNECT

Connect the phone

The app remembers the wall and reconnects on its own afterwards.

01 Turn on Bluetooth

Grant Android nearby-devices access when it asks.

02 Devices → “Set up single device”

On first launch the app offers the choice itself — pick “Single device”.

03 Pick your wall from the list

Keep the phone close until “Device connected!”, then “Done”.



Lost the link?

Move closer and run the wizard again. The wall itself needs nothing.



The wizard checks Bluetooth and permissions itself, then finds the wall.

04 COLORS

First light and looks

01 Check the channels

“Effect” → “Static”, moderate “Brightness”, move R, G and B one at a time. Every channel responds, the line stays even.

02 Pick an effect

“Crossfade”, “Jump”, “Breathe”, “Strobe”, “Rainbow” — plus “Speed”. Strobe is an audience-comfort call.

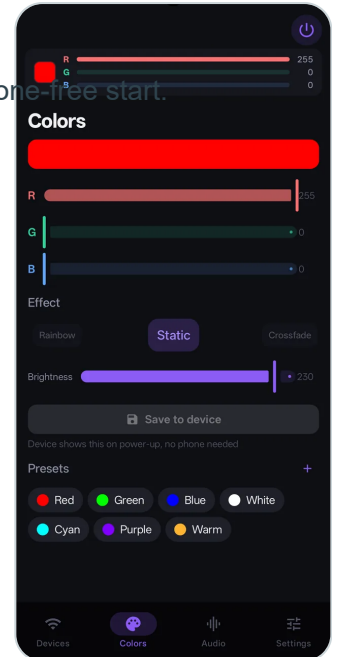
03 Save the look

Presets live in the app. “Save to device” writes the look into the wall for phone-free start.



Sliders locked?

Audio owns the output. “Audio” → “Stop” and the tab is yours again.



“Static” + moderate brightness is the first wall check.

05 AUDIO

Light from music

The phone listens through its mic and drives the wall live.

01 Tap “Start”

Grant mic access. If it won't start, another app holds the mic.

02 Pick a mode

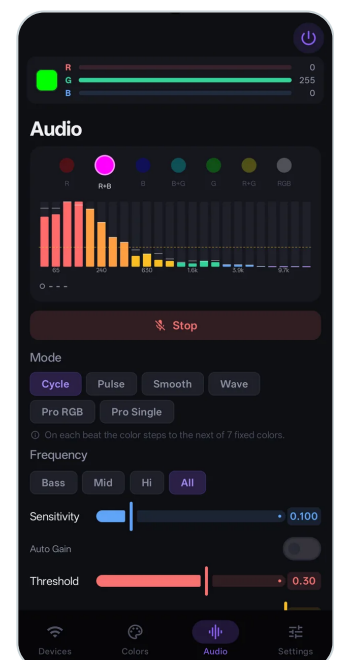
“Cycle” steps color each beat; “Pulse” adds loudness; “Smooth” walks the hue; “Wave” rolls RGB. Every mode has a (?) explainer.

03 Tune out the noise

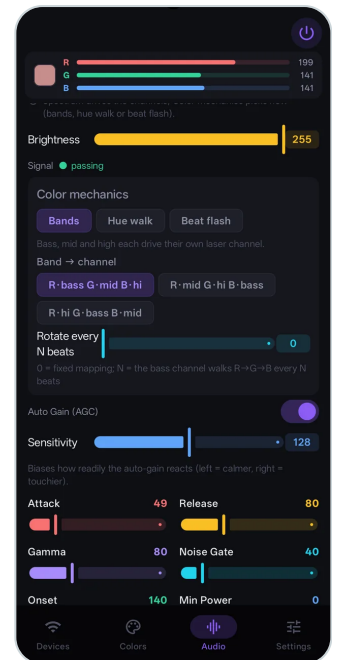
“Threshold” cuts false beats; “Auto Gain” handles drifting volume.

Pro modes

- Pro RGB: bass, mid and high each drive a channel. “Color mechanics”: “Bands” (rotating every N beats), “Hue walk”, “Beat flash”.
- Pro Single: one energy band, one chosen color.
- The “Signal” indicator: gate closed while music plays — lower “Noise Gate”, don't touch brightness.



Spectrum and beat indicator — tune at real volume.



Pro RGB: band-to-channel mapping and the live gate indicator.

06 PHONE-FREE

Autonomous start

After “Save to device” the wall shows the look as soon as power arrives. Brightness is capped at ~10% as a safeguard; raise it from the app. Audio does not work autonomously: the mic is in the phone. Rehearse one power cycle before the show.

07 FIRMWARE

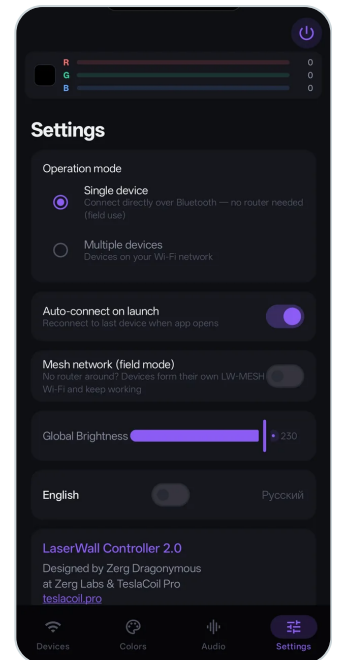
Updating

The “Firmware” row on the wall's card shows the version and an update button when the app carries a newer one. Keep the phone close during the update and don't cut power. “Reinstall firmware” re-writes the same version if the wall misbehaves.

08 SETTINGS

What to leave alone

- “Operation mode” — “Single device”. Network and fleet settings belong to the several-walls guide; leave them alone here.
- “Auto-connect on launch” — the link restores itself when the app opens.
- “Global Brightness” — the ceiling for everything the app outputs.



Mode — “Single device”; the rest is taste.

09 TROUBLESHOOTING

If it doesn't work

SYMPTOM	WHAT TO DO
Wall not found in scan	Power, Bluetooth, permissions; move closer, rescan.
Link keeps dropping	Move closer, check power, reconnect via the wizard.
Colors won't change	“Audio” → “Stop”.
Audio doesn't react	Mic permission; lower “Threshold” or “Noise Gate”.
Wall is dim after power-up	That's the ~10% autonomous-start cap. Raise brightness from the app.
Update failed	Leave power on, wait for the wall to return, retry.

10 BEFORE THE SHOW

Checklist

- ✓ The first 4 metres are out of the audience's reach; nobody can look into the aperture.
- ✓ The line is even, optics clean, mounting and cables checked.
- ✓ “Static” confirmed all three channels.
- ✓ A look is saved, or audio rehearsed at show volume.
- ✓ After the show: “Stop” in Audio, output killed, power off.

