DIY INSTALL WRITE-UP - FOR LUCID OWNERS

Adding the Bass the Base System Is Missing: A Powered Sub in a 2025 Lucid Air Pure

A sub-only, no-cut install using the rear deck woofer nobody told me the base system had - including the two wrong turns that cost me the most time, so they do not cost you yours.

Car: 2025 Lucid Air Pure, blue, base 9-speaker Surreal Sound system | Installed: November 26, 2026 | DIY install



A Lucid Air Pure in blue. Great car, quiet cabin - and a base stereo that needs help at the bottom end.

Why I did this

The base 9-speaker Surreal Sound system in my Pure is rated around 300 watts and, on paper, that sounds fine. In the car it sounds thin. There is no real low end, and once you have lived with a system that has a proper subwoofer - my previous Suburban had a Bose 9-speaker system with one - you notice the missing bottom in everything you play.

I did not want to rebuild the whole system, replace speakers, or cut factory wiring. I wanted one thing: add the bass that is missing, keep everything reversible, and keep the cost sensible. That is exactly what this install does.

At a glance

Item	What I used
Subwoofer	Kicker 51PTRTP10 - powered 10-inch, down-firing enclosure, 400 watts, built-in amplifier
Amp wiring kit	Kicker 46CK8 - 8-gauge kit
Signal source	Rear deck center woofer - one voice-coil pair only
Power source	Rear 12-volt battery in the trunk
Turn-on	Signal-sensing auto turn-on on the Kicker - no remote wire run
Placement	Lower trunk compartment, under the false floor, bottom right half, laying flat
Front control	Kicker remote bass knob (included in the box), cable run to the front
Wire taps	Dorman Conduct-Tite 85037 locking T-taps, 22-20 gauge, 6-pack

What it cost

Part	Price
Kicker 51PTRTP10 powered subwoofer	$374.96
Kicker 46CK8 amp wiring kit	Included in order total below
Crutchfield order total (sub + kit)	$454.95
Dorman 85037 T-taps, 6-pack (AutoZone)	$16.49

Tools: an auto-ranging multimeter (for the ohm test below - not optional), trim tools for push clips, and the usual sockets and cutters for an amp kit.

The decision I made before buying: sub only

I seriously considered adding a small four-channel amp (the Kicker KEY200.4) for the door speakers too. I decided against it: the sub is the big win, and a door amp means more wiring, more cost, and more to go wrong. So this is a **sub-only install, with no distribution block**. Hear the sub first - a door amp can always be a second project.

The short version

Tap **one pair** of wires on the rear deck center woofer for signal, run power from the rear 12-volt battery, drop the powered sub flat in the lower trunk, and run the remote bass knob to the front. No factory wire is cut anywhere in this install.

Read this first: the finned box in the trunk is not the amp

This is the mistake that will eat your afternoon if you let it. Behind the right-side trunk trim there is a finned black box that looks exactly like a factory amplifier. **It is not the amp.**

Do not tap this box

The finned box is the telematics control unit (TCU) - part **P11-K290G0-02**, a Gemalto TCU W3, 12V / 2A, FCC ID 2AXZJ-CTX0710W3. Its harness (a white connector and a bundle of thin multi-color wires) is telematics wiring, **not speaker wiring**. Do not tap it and do not run a 9-volt test on it. If you already unplugged it while exploring, plug it back in.

I will save you the suspense on the obvious next question: I never did confirm where the real factory amp lives, because in the end I did not need it. The signal path in the next sections skips the amp entirely, which is the whole reason this install is as simple as it is.

Also leave the old taps by the battery alone

While you are in the trunk you may find signs of a previous install near the 12-volt battery - in my car there were blue Scotchlok-style taps with yellow disconnects and a loose orange 2-pin connector. That was not my work, and it is probably not yours either if you bought used. Leave it exactly as you found it, and do not borrow it for your sub signal. Start your own clean run instead.

The key discovery: the base system does have a woofer to tap

Everything I had read suggested the base system had nothing useful to tap. It does. There is a **center woofer in the rear deck**, and it is a **dual voice coil** speaker with four wires - two positive/negative pairs, one pair per coil.

- For a mono powered sub, you only need **one pair** - one coil. Tap one pair and leave the other pair alone.
- On my car, I tapped the **two wires on the right side of the plug** (photo in Step 3).
- Access is from the trunk: the trunk-ceiling lining comes down on **four push clips**. Putting the rear seats down helps from the cabin side too.
- Make your taps **1 to 2 inches below the woofer connector**, where you have room to work.
- On the Kicker side, the signal goes in on the white / white-with-black-stripe pigtail pair. Tape off the grey pair you are not using so it can never short against anything.



The Kicker 51PTRTP10: 10-inch woofer plus passive radiator, with the amplifier and all its controls built into the end of the box.

Step 1 - Check the fit before anything else

The sub lives in the **lower trunk compartment, under the false floor, in the bottom right half**. It lays flat, which is how this enclosure is meant to sit - more on that below. The compartment on my car is about 6 inches tall, so measure your bin before you order. If the box fits the bin, the rest of the trunk stays completely usable, which was a hard requirement for me.

> **Yes, the speaker really does face down**
>
> The 51PTRTP10 is a down-firing enclosure by design. The woofer faces down, the box lays flat, and the sound fires into the floor and spreads from there. It looks wrong the first time you see it. It is right.

Step 2 - Find the right pair with a multimeter, before you tap

Four wires, two coils, and no reliable color guide. Guessing here means tapping two wires from two different coils and getting little or no signal. The meter settles it in about a minute, and it settles it *before* any tap goes on.

1. **Unplug the woofer connector.** This is the important move. Once it is unplugged, the speaker is electrically on its own, so you can measure it cleanly no matter what the car is doing.
2. **Leave the car alone.** The Lucid takes forever to fall asleep, especially with the doors open - and it does not matter. With the woofer unplugged, the car can stay awake. And do **not** disconnect the battery while the car is on or awake; that risks fault codes and voltage spikes, and you do not need to.
3. **Do not strip anything.** Touch the meter probes to the metal pins in the connector or the terminals on the speaker itself. The meter only needs bare metal at the pin, and stripping factory wires just damages them.
4. **Set the meter to ohms** (the omega symbol) and probe two wires at a time.
5. **Read the result:** around **4 ohms** (3 to 4 is fine) means those two wires are one coil - that is a pair, and that is the pair you tap. **OL / no reading** means the two wires belong to different coils. Keep swapping until you find the reading.
6. **Plug the woofer back in** once you know your pair and you are ready to tap.

What the meter cannot tell you: positive and negative

Resistance reads the same in both directions, so the meter will not identify polarity. Two ways to handle it:

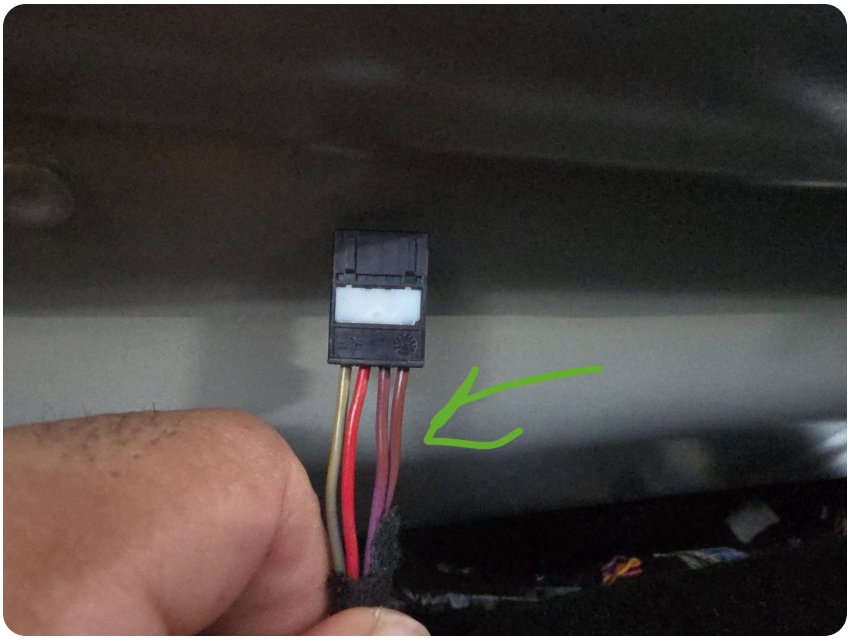
- **The 9-volt pop test:** briefly touch the pair to a 9-volt battery. If the cone jumps *out*, the wire on the battery's positive terminal is your positive wire.
- **Or just use the phase switch:** polarity matters because a sub wired backwards fights the factory woofer and the bass sounds thin and hollow. The Kicker has a phase switch for exactly this - if the bass sounds thin after tuning, flip the switch to 180 and listen again.

Step 3 - Tap one pair, cut nothing

I used **Dorman Conduct-Tite 85037 locking T-taps** (22-20 gauge, 6-pack, $16.49 at AutoZone). They are a screw-down design, and they work a little differently from the squeeze taps most people know:

- The factory wire sits in the **side slot** - it does not pass through the cylinder.
- The stripped end of your new branch wire goes in the **end cap**.
- Twist to pierce and lock. You will need four taps across the job.

Place the two signal taps on your confirmed pair, 1 to 2 inches below the woofer connector. On my car, I tapped into the **two wires on the right side of the plug** - the pair the green arrow is pointing to in the photo below. Factory wire is tapped in parallel, never cut - the factory woofer keeps playing exactly as before, and the whole install can come back out cleanly.



The woofer plug on my car. The green arrow points to the two wires on the right side of the plug - that is the pair I tapped.

Fit check before you are under the deck

The Kicker's speaker-level wires are around 16 gauge, which is thicker than the 85037 taps are rated for. Test-fit the bare copper in the cap hole on the bench first. If it will not seat, use a short length of thinner wire as a pigtail between the tap and the Kicker wire rather than forcing the tap.

Step 4 - Power from the rear 12-volt battery

- Run the 8-gauge power wire from the **rear 12-volt battery** - it is right there in the trunk, so this is a short, easy run compared with most cars.
- Put the **fuse holder within 18 inches of the battery**. No exceptions on this one.
- Ground the amp section to clean, bare metal, kept as short as practical.
- **No remote turn-on wire is needed.** The Kicker senses signal and turns itself on and off, and it shuts off when the car sleeps. (The thin clear wire in the kit is the remote lead - with signal-sensing turn-on, you do not need to run it.)

Step 5 - Run the remote bass knob to the front

The remote bass control **is included in the box** - check before you order one separately, because I nearly did. Plug its cable into the Remote Bass jack on the amp, run it forward under the sill plates, and mount the knob somewhere reachable from the driver's seat, in the console or under the dash. This knob becomes your everyday bass control, so put it where your hand actually falls. **Start with it in the middle.**

Step 6 - Set the box in place

Lay the enclosure flat in the lower trunk compartment, bottom right half, woofer facing down. Refit the false floor over it, reconnect the woofer connector if you have not already, and double-check that no wire is pinched, stretched, or resting against a sharp edge before the first power-up.

Tuning: the settings I ended up with

Control	Setting
Input level	HI (speaker-level input)
Crossover	About 80 Hz - the dial only marks 50 and 120, so set it just under halfway between the two
KickEQ bass boost	0 - off
Phase	0 to start; flip to 180 only if the bass sounds thin or hollow
Remote bass knob	Middle to start; this is your day-to-day control from the front
Gain	Set by ear - see below, never maxed

Setting the gain by ear

1. Start with the gain all the way down.
2. Play music you know well, with the head unit at about three-quarters volume.
3. Turn the gain up slowly until the bass fills in and blends with the door speakers.
4. Stop as soon as it sounds full. If you hear buzzing or distortion, back it down right away - you have gone too far.

> **Gain is not a volume knob**
>
> The amp and sub are matched at 400 watts, so raw power alone is not what kills a speaker - distortion is, and distortion is what you get when the gain is set too high. Gain only matches the amp to the signal feeding it. Leave the KickEQ boost off for the same reason: boosted, clipped signal is the fastest way to cook a sub.

If you smell burning

Turn it off right away - music off, car off. Do not keep playing through it.

- A **faint** warm smell the very first time a brand-new sub plays can just be the fresh voice coil. That is the only version of this that is normal.
- A **strong** burning smell is not normal. Let everything cool, then check the three things that cook a sub: gain too high, KickEQ boost left on, or the remote knob maxed out. Also check for pinched wires or anything touching where it should not.
- If it smells strong again on the next power-up, or you see smoke, or the amp is hot to the touch - leave it off until you find the cause.

What I would tell the next owner doing this

- **Measure before you tap.** Two minutes with a multimeter on the unplugged woofer removes all the guesswork from a four-wire, dual-coil speaker.
- **Do not trust the first finned box you find.** In this trunk, that box is the telematics unit, not the amp.
- **Tap one coil, not both.** A mono sub needs one pair. The other pair is not extra signal, it is a mistake waiting to happen.
- **Keep it reversible.** Every connection in this install is a tap, a plug, or a bolt. No factory wire was cut, and the car can go back to stock in an afternoon.
- **Add the sub before you add an amp.** One change at a time tells you what actually fixed the sound - and in my case, the sub was the fix the system was missing.

DIY write-up shared to help other Lucid Air owners. Prices are what I paid in November 2026 (Crutchfield and AutoZone) and will move. Work on your own car at your own risk: if you are not comfortable around 12-volt wiring and a multimeter, a good local audio shop can do this install with this write-up in hand. This is not affiliated with Lucid Motors or Kicker.