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Thread: [Kali Linux Introduces Two New Tools to Supercharge Wi-Fi on Raspberry Pi](#)

JoseMar - July 23, 2025, 5:30 am

Kali Linux Introduces Two New Tools to
Supercharge Wi-Fi on Raspberry Pi

Kali Just Made Your Pi Dangerous (In a Good Way)

Alright. So here's something you probably didn't expect to read this week.

Kali Linux just dropped two new packages that, honestly, quietly shift the entire game for anyone using a Raspberry Pi for wireless work. No hype, no clickbait. Just legit functionality we've been waiting years for.

If you've ever messed with Wi-Fi auditing on a Pi, you know the pain: you get excited, fire up your setup, and boom, nothing works unless you lug around a USB Wi-Fi adapter. And sure, that works... but it kinda defeats the whole "portable, minimal rig" idea. Especially if you care about stealth or size.

Now that's changed.

No More Dongles. No More Excuses.

The new packages are called `brcmfmac-nexmon-dkms` and `firmware-nexmon`.

Yeah, not the sexiest names. But what they do? Very sexy. They unlock monitor mode and frame injection on the internal Wi-Fi chipsets of several Raspberry Pi models, no adapters needed.

That's... massive.

Kali shipped these with their 2025.1 release, and they've been tested across the board: Raspberry Pi 5, Pi 4 (32 and 64-bit), Pi 3B, Zero W, Zero 2 W... basically all the boards you'd realistically use in the field.

How They Pulled This Off (Hint: Nexmon)

Here's the magic: Nexmon.

If you've never heard of it, it's a C-based firmware patching framework cooked up by SEEMOO Lab at TU Darmstadt (Germany). It modifies the closed-source Broadcom firmware and Linux drivers to do what Broadcom never intended, give us control.

The DKMS package (`brcmfmac-nexmon-dkms`) means the patched driver rebuilds itself when the kernel updates, so it doesn't break every time you run `apt upgrade`. That's been a huge headache for a while, and this just... fixes it. Clean.

Okay, But Does It Actually Work?

Short answer: Yes.

Longer answer: Yes, and it's surprisingly stable. The Kali devs had some rough patches (literally) when trying to integrate all this into kernel 6.6. Stuff kept breaking. So they waited.

Then they jumped to kernel 6.12, cleaned house, and got everything working right. And it shows. Monitor mode works. Frame injection works. Tools like aircrack-ng, aireplay-ng, kismet, etc., all play nice with the Pi's internal Wi-Fi.

You can finally build a fully self-contained Wi-Fi audit rig that fits in your hoodie pocket.

The Install Process (So Simple It Hurts)

Here's all you need to do, assuming you're already running Kali on your Pi:

```
sudo apt update
sudo apt full-upgrade -y
sudo apt install -y brcmfmac-nexmon-dkms firmware-nexmon
sudo reboot
```

That's it.

No building from source, no messy blacklisting, no digging through 6-month-old Reddit posts trying to figure out what broke. It's clean.

So... Why Should You Care?

Because this opens a ton of doors for cheap, mobile pen testing setups. Especially in the kinds of situations where carrying a full laptop isn't ideal, or safe.

Maybe you're running recon from a car. Maybe you're in a building where attention = risk. Or maybe, you just love the elegance of a compact solution.

This update basically turns your Raspberry Pi into a respectable field tool. No hacks, no dongles. Just plug and go.

Props to the People Behind It

Gotta give it to the Kali team, the SEEMOO Lab folks, and all the community testers. This wasn't an overnight win. The Nexmon integration took real work, patience, and a lot of trial/error through unstable kernel transitions.

It's one of those updates that doesn't scream for attention but quietly upgrades your entire toolkit.

And honestly? That's the kind of upgrade that sticks.

New entry for [7](#)contest?

? Big shoutout to [6](#) for making this even more exciting?

Hey guys, check this out.?

[DemonAsylum](#) [Immortal](#) [I N C R E D I B L E](#) [itcorp](#) [Jen](#) [vyactor](#) [Dystortion](#)

This isn't just a new feature.

It's a shift in how we can approach portable Wi-Fi security testing. If you've got a Pi lying around, especially a 4 or 5, it's time to give it new life.

Install the packages. Rebuild your setup. Take it for a spin.

And maybe next time someone asks how much you spent on your pentesting gear, you just smile and say, "About 35 bucks."

Let me know how it runs for you. And if you break something in the process? Even better. Post it. That's how we all learn.

DramaKing - *July 23, 2025, 6:04 am*

This is cool, except the pwnagotchi already exists.

DI?E - *July 23, 2025, 8:59 am*

(Jul 23, 2025 06:04 AM)DramaKing Wrote: [\[CITE\]](#) This is cool, except the pwnagotchi already exists. The pi is always a great addition to any hacking arsenal. ?

Minerva1 - *July 23, 2025, 12:13 pm*

Very great addition