# **DiY Lowcost Bluetooth Jammer**

shdb17 pre-pitch

Sascha Sascha Held Nov '17

TITLE: DiY Lowcost Bluetooth Jammer DESCRIPTION:

Are you annoyed of brats with their shit music coming out of their bluetooth speakers while you are sitting in the U-Bahn?

Yeah, me too.

We (all?) know that blueetooth is preventing a highjack by encryption and fequency hopping. But the intention is not to own the foreign device, but just to spam so much noise on the frequency band, that no sustainable audio stream is possible in a range of ~10m.

How to do that: Spam a lot of digital noise on a certain amount of frequencies within the bluetooth network, not all of them, just enough to make listening to music not enjoyable anymore. Bluetooth has 79 equidistant canals (1 MHz to each other) and the protocol hops through them 1600 times per second. I assume we need to "block" only 1/10 of that

Doing so by using some 2,4 GHz resonators to have a lot of frequencies, a hand full of 2,4GHz antennas to send out the signals.

Twist: Make it (much) cheaper then commercial solutions

#### EQUIPMENT/SKILLS/PEOPLE NEEDED:

HAVE: A lot of old smartphone and some WLAN Router antennas that can be sacrificed for the goal of silence

NEED: Deeper understanding about how to effectively make more noise/errors in the bluetooth communication between a smartphone and a audio streaming slave device then the implemented error correction and automatic repeat requests can handle.

#### LINKS TO MORE INFORMATION:



Bluetooth is a wireless technology standard for exchanging data over short distances (using short-wavelength UHF radio waves in the ISM band from 2.4 to 2.485 GHz) from fixed and mobile devices, and building personal area networks (PANs). Invented by telecom vendor Ericsson in 1994, it was originally conceived as a wireless alternative to RS-232 data cables. Bluetooth is managed by the Bluetooth Special Interest Group (SIG), which has more than 30,000 member companies in the areas of telecommunic...

## http://www.jammer-shop.com/de/8341HA-5-bluetooth-wifi-stoersender.html

HACKERS:

Sascha

Please add constructive feedback, suggestions, offers of equipment or skills, and gestures of wild enthusiasm as replies below. Thanks!

Joram

Nov '17

Science Hacker

dude you're evil. 😃

lu\_cyP Lucy Patterson Science Hacker Nov '17

niiice... It's the new tv-b-gone.

lisa Nov '17

Another approach that might be worth trying: Take ~14 ESP8266, put them in AP mode, each on a different channel, and have them send data continuously.

Sascha Sascha Held Nov '17

Combined with a tin can (maybe the size of o christmas stollen) this would even make a nice beam antenna to cover a bluetooth receiver in noise

bluetooth ilkill it

Sep '18

Love it... where do we share? isnt it tjust creating the same name as the speaker... and create a beacon for the handshake? 100 times in a vieuw secs?

Hmmm how thoughtfull

https://gattack.io/

bluetooth

Sep '18

🤨 yep

jadolg Akiel Aug '19

Is there any advance on this?

I've been searching everywhere for an application or gadget to stop people from annoying others in public

spaces with their Bluetooth speakers. So far, I have found nothing good.

So far looks like the only solution would be a jammer blocking the whole 2.4 frequency which is too invasive and illegal in a lot of places.

lisa did you try your idea? I know it's the same frequency, I just don't know if we can saturate it with that hardware.

bluetooth did you manage to do something with <a href="https://gattack.io/">https://gattack.io/</a>?

jadolg Akiel Aug '19

I found this about the ESP8266 idea



### alamar808/TheBluetoothJammer

A jammer project done during the Science Hack Day Berlin 2018 - alamar808/TheBluetoothJammer

Blutut Blu Oct '19

Hey, any progress so far? I live next to a school and every evening my house gets flooded with shitty music

mark\_person

Feb 6

I was also looking for the Bluetooth jammer information and it is really informative for me that I found it here.

Thank

Mark wahlberg

**STFUexclamationpoint** 

Feb 9

I think this will be our salvation, in many cases, as soon as the details are released:

## Critical Bluetooth Vulnerability in Android (CVE-2020-0022) - BlueFrag

On November 3rd, 2019, we have reported a critical vulnerability affecting the Android Bluetooth subsystem. This vulnerability has been assigned CVE-2020-0022 and was now patched in the latest security patch from February 2020. The security impact is...

**STFUexclamationpoint** 

Feb 9

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When this vulnerability is detailed, someone will be able to write an app to silence Bluetooth speakers.

Meltrox Mel 17d



# **Coronavirus: Kontaktverfolgung wird Teil von Android und iOS**

Die auf Bluetooth basierende Technik kommt per Software-Update auf iPhones und Android-Geräte. Schutzvorkehrungen sollen Missbrauch erschweren.

Wird natürlich nachdem die Coronagefahr gebannt ist wieder aus dem System entfernt... Wo ist mein Aluhut?