

Tutorial

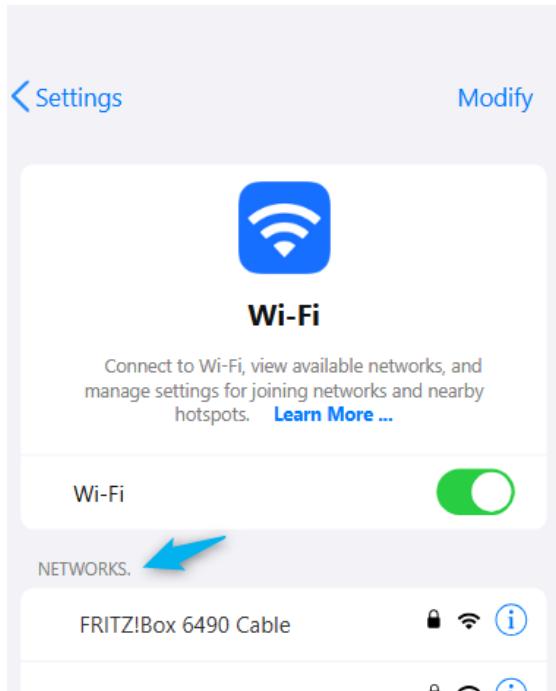
For HACKER with firmware Version 5.3 or higher

Changes and enhancements	3
Reveal indicator	3
Loading screen	3
Faster Loading of the Web App	3
New Features	4
OTA - Over the Air Updates	4
Attack detection	4
Attack detection while PIN Entry Screen is already opened	4
Update of the iPhone Reveal Screen	5
Start sending on start-up	5
New API features	5
Vibrate on API calls	5
Settings Reset via Power cycle	5
Settings Reset via Web App	5
Restart the device via Web App	6
Reminder for Functions already there	6
Export of Settings and Words	6
Import of Settings and Words	6
Importing Words	6
Importing Settings	6
Useful Hints	7
Use a Kiosk App	7
iOS	7
Android	8
Settings	10
General Settings	10
Device Name	10
Reveal Settings	11
Encrypted	11
Without dot	11
Reveal Mode	11
Reveal delay	11
Reverse words for language	11
GUI Settings	12
iPhone or Android	12

Themes	12
Activate Dark Mode	12
Special Features	13
Send Wi-Fi on Startup	13
Start SSID	13
Vibrate on API Calls	13
API Reference	14
Update of the Device, if OTA Fails	16
Via Browser	16
If the online update doesn't work	16
If you have a Mac OS	16
If you have Windows	16

Changes and enhancements

Reveal indicator



In previous Versions, there was a little dot in the header of the Reveal Screen.
With the changes regarding the new iOS Look, this dot is now behind the "Networks" word.
It disappears, if the reveal is triggered.

Loading screen

If you start the Web App, there is now a "Loading..." Screen shown.

This has two reasons:

1. To have time to detect if there is an attack running without showing the PIN Entry Screen
2. To show, that the Web App is loading, and not only showing a white screen.

Faster Loading of the Web App

A lot of effort was made to speed up the loading of the Web App. It's now faster than ever.
The fastest loadings can be achieved with a [kiosk browser](#) (see below)

New Features

OTA - Over the Air Updates

With Version 5.3, we introduce OTA update possibility.

To use OTA you have to have at least Version 5.3 of the firmware installed.

- Download the latest release
- Log into the Wi-Fi provided by the Hacker Device
- Go to <http://192.168.4.1/update>
- upload the bin File you want to install
- There might be a "no Connection" error on the Screen. That's fine, the Wi-Fi will be gone because of the update.
- After the upload, wait for the device to reboot (known by the vibration, which takes up to 1 minute)
- You have to reconnect to the Wi-Fi.
- If the Web App looks weird, please reload the page (close the Web App and reopen it)

Attack detection

Because there are Shortcuts and third party interactions now, there is a new feature.

If you open the Web App, there is a "[Loading...](#)" Screen.

While loading, the Web App checks, whether an attack is already running on the device or not. This could be triggered by a shortcut or the "[send on start-up](#)" feature, which is explained later.

If there is an attack running, the Web App will open the Reveal screen immediately.

From there you can peek the Word which is sending by touching the "AP table". This is the Area with the Nearby Networks on the Screen.

You can then use the Reveal Screen and the Web App as in the previous Version.

- Start the Reveal
- Go back to the Pin Entry Screen and stop the sending
- etc.

ATTENTION:

Make sure the Web App is closed (Task manager) before you open it, if you want to use this feature.

Attack detection while PIN Entry Screen is already opened

If you have the Web App started, before you trigger the sending of the Wi-Fi's (either via Shortcut, "[send on start-up](#)" or third party app) you can click the "Cancel" Button.

If there is nothing to delete, the Web App will check, if the device sends Wi-Fi's. If yes, it opens the Reveal Screen.

Update of the iPhone Reveal Screen

I changed the look of the Reveal Screen to match the new Wi-Fi Settings Screen of iOS. It's not a perfect match, but nobody will notice.

You can change the wording for the two new texts in the settings via the Web App.

Start sending on start-up

If you want to force a word or card, it can be handy to have the possibility to send this without touching your phone.

You now can activate this feature in the settings and enter the Word that should be sent.

If active, the device will vibrate twice after the normal startup. (three times in sum)

This indicates, that the sending of the word has started.

You then are free to use the new [Attack detection](#) feature to reveal the word.

New API features

There are two new API handlers for third party integration.

For more information, see the [API documentation](#)

Vibrate on API calls

To get noticed by the device, that an API call got received, you can enable "Vibrate on API calls" in the Settings of the Web App.

If active, the device will vibrate if an API call got received and was valid.

Settings Reset via Power cycle

If your device has problems with showing the Web App correctly, or other issues, you can try to do a factory reset.

All Settings will be deleted!

To do the factory reset, do the following:

- Power off the device
- Power on the device until it vibrates
- Turn the device off immediately after the vibration
- repeat these steps 3 times
- on the 4 time, do not power off the device.
- it will vibrate multiple times to let you know the factory reset worked.

Now check, if your problems are solved.

Settings Reset via Web App

In the Settings of the Web App, you can do Settings reset by clicking "Reset".

Restart the device via Web App

In the Settings of the Web App, you can restart the device (to test “send on start-up” or after changing the Wi-Fi name) by clicking “Reboot Device”.

Reminder for Functions already there

Export of Settings and Words

At the bottom of the Settings and Words section in the Web App, you can export a JSON File.

For the Words file, this is handy, because you can edit it on your computer for your needs. The Settings file can be used to restore your favorite Settings after installation of a new version.

Import of Settings and Words

At the bottom of the Settings and Words section in the Web App you can import a JSON File. You can search for a file via the Button.

Importing Words

After clicking the import Button, the Import will start. It is finished when you can see your new Words in the list. The Saved Messages come a bit too early.

Importing Settings

After clicking the import Button, the Import will start. It is finished when the Saved Messages will come.

After importing, it might be that the PIN Entry will not work. Just restart your device.

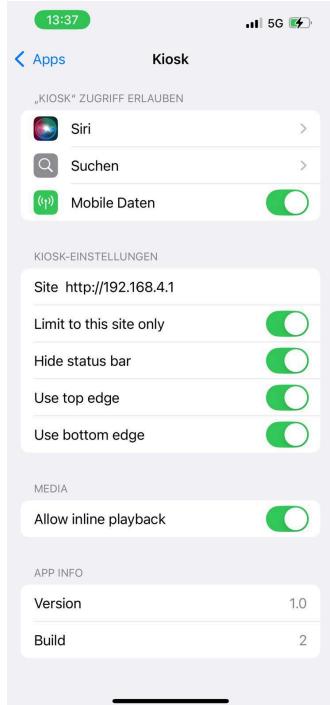
Useful Hints

Use a Kiosk App

Chrome on Android and iOS is making full screen Web Apps harder and harder.
The best (and faster) way is to user a so-called kiosk browser.

iOS

Use [Kiosk - fullscreen browser](#) with the following Settings:



Android

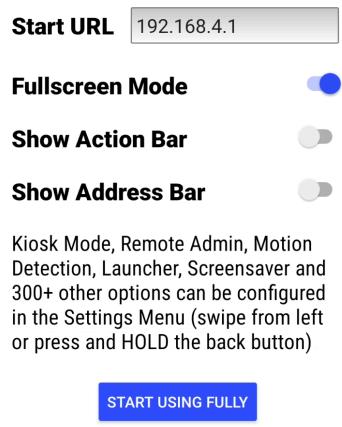
Go to the Play Store and install Fully Kiosk Browser

<https://play.google.com/store/apps/details?id=de.ozеров.fully>

Open the Fully Kiosk Browser and set it up like this:

Fully Kiosk Browser

Quick Start Settings

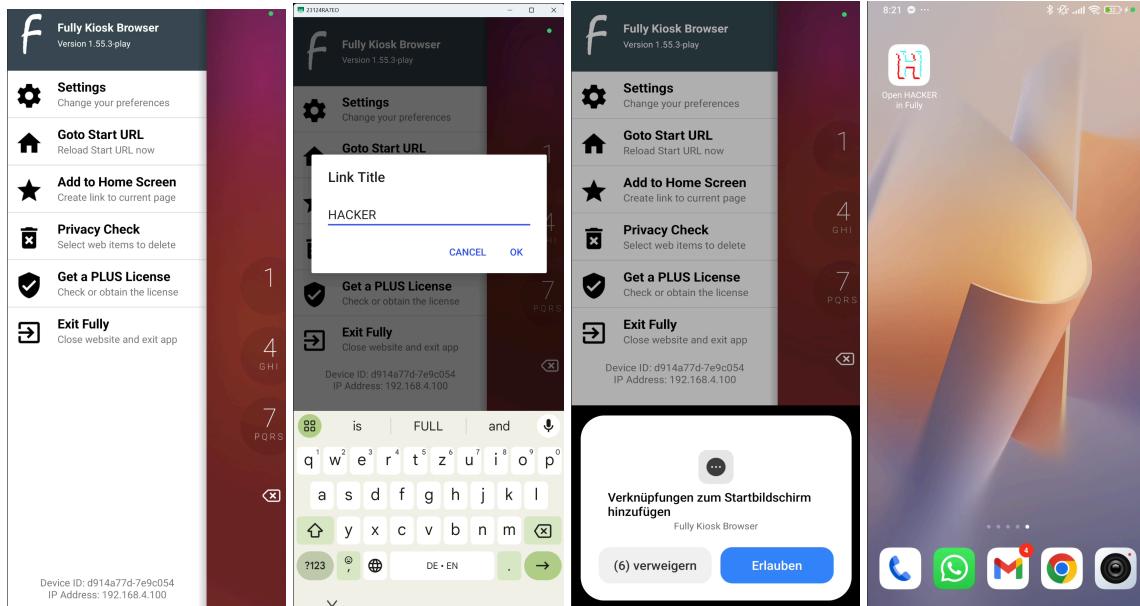


After connecting to your HACKER Network, you can start using Fully Kiosk browser.



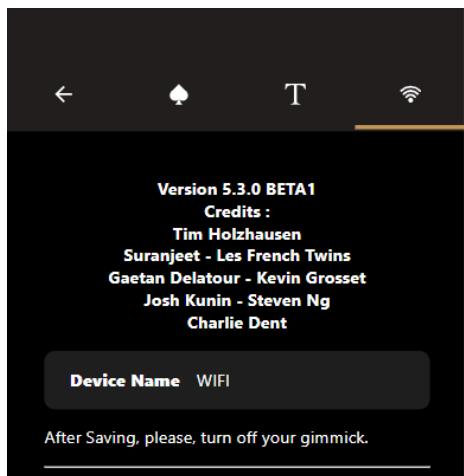
To get the HACKER Icon on your Home Screen, open the Settings of Fully by swiping from the left and click "Add to Home Screen".

Give it a name as you like.



Settings

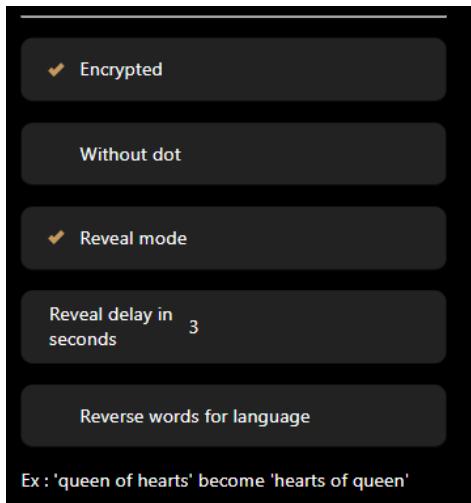
General Settings



Device Name

The SSID the device will provide to connect to.
The Password will always be HACKER1234

Reveal Settings



Encrypted

The SSID('s) that will be sent are encrypted to look hacker like

Without dot

The SSID('s) that will be sent will not have the dot in front. The dot will sort the SSIDs at the beginning of the List of Wi-Fi's on the spectator's phone

Reveal Mode

If turned on this enables the 'Glitch' reveal whereby

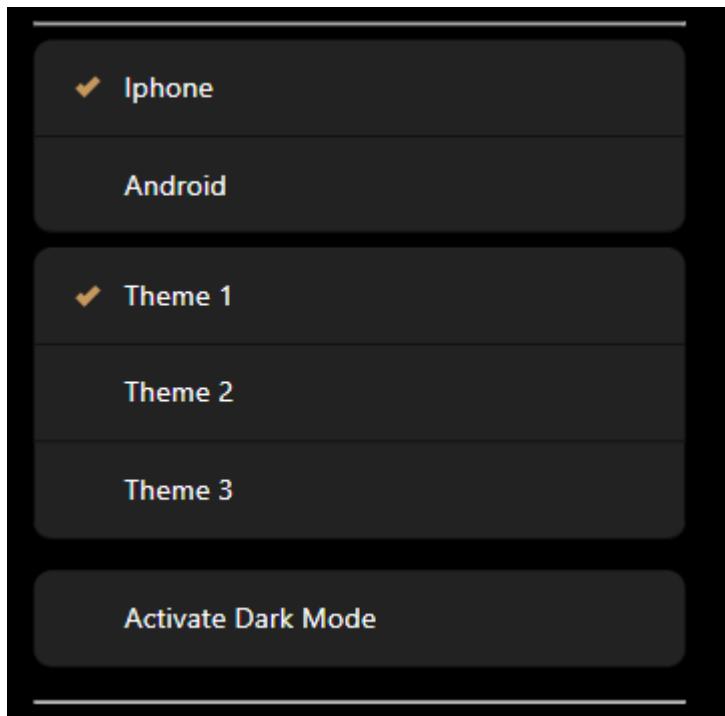
Reveal delay

The number of seconds after pressing the "Wi-Fi" section on the screen, before the glitch will start.

Reverse words for language

Will reverse the order of Suit and Value of the Card if that fits your language better.
Ex: "Queen of Hearts" will become "Hearts of Queen"

GUI Settings



iPhone or Android

Here you can change the look and feel of the Web GUI. You can choose between iPhone or Android general look.

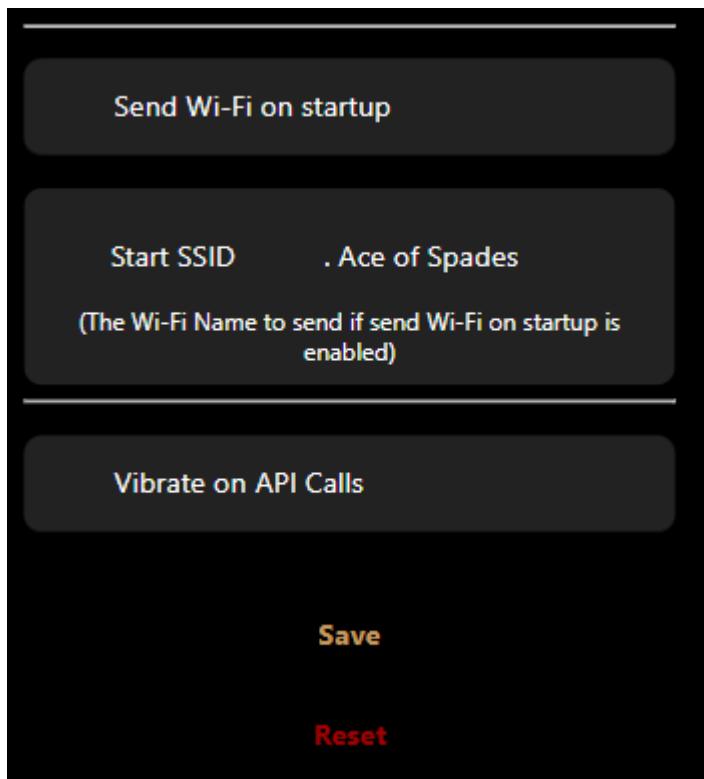
Themes

There are 3 Themes you can choose. They change the Look of the “OIN Entry” Page

Activate Dark Mode

If enabled, the Revealscren will have the look of the original Dark mode screens .

Special Features



Send Wi-Fi on Startup

If enabled, beacons will be sent when the device is started

Start SSID

The Wi-Fi Name to send if send Wi-Fi on Startup is enabled

Vibrate on API Calls

To get noticed by the device, that an API call got received, you can enable “Vibrate on API calls”.

If active, the device will vibrate if an API call got received and was valid.

API Reference

With Version 5 and above of the Firmware for HACKER the API has two new call functions:

To send a Text:

[http://192.168.4.1/send?word=.Ace of Spades"](http://192.168.4.1/send?word=.Ace%20of%20Spades)

Possible responses:

200 → everything went well

422 → Word Parameter is missing or empty

409 → There is already an attack running

The word will be sent as it is. So the caller have to take care of the dot in front and encryption if needed.

To stop sending:

<http://192.168.4.1/stopSending>

Possible responses:

200 → everything went well

409 → There is already no attack running

Check if device is sending:

<http://192.168.4.1/isSending>

Possible responses:

200 → everything went well, Response text is “true” if the device is sending and “false” if not

To stop sending:

<http://192.168.4.1/getSSID>

Possible responses:

200 → everything went well, the response text contains the SSID including all the Whitespaces. You have to trim them like

```
replace(/^\s\u200B-\u200D\uFEFF]+|\s\u200B-\u200D\uFEFF]+\$/g,  
'');
```

409 → There is already no attack running

Update of the Device, if OTA Fails

Download the latest [update](#)

Via Browser

- Go to this link on your computer (no tablets): <https://esp.huhn.me>
Open it MANDATORILY with Chrome, Edge, or Opera
- Click on "CONNECT"
- Plug your HACKER into the computer. Select the option that appears
- Click on "SELECT", then choose the file you downloaded
- Click on "ERASE" and wait for the word "FINISHED" to display
- Then click on "PROGRAM" and wait
- Unplug and turn on your HACKER. Connect to the WIFI and go to the IP address: 192.168.4.1

If the online update doesn't work

If you have a Mac OS

- Download the flasher by clicking on this link: [ESPHome-Flasher-1.4.0-macOS.tar](#)
- Open the flasher you just downloaded
- If it doesn't open, click on the  at the top left of your screen.
- Select "System Preferences". Go to "Security & Privacy" and click on "ALLOW ANYWAY" or a similar option

THEN...

- Open the flasher you just downloaded
- Insert the bin file into the flasher
- Plug your HACKER into the computer. Click on the "refresh button" (two arrows)
- Click on "FLASH"

If you have Windows

- Download the flasher by clicking on this link:
[ESPHome-Flasher-1.4.0-Windows-x64.exe](#)
- Open the flasher you just downloaded
- Plug your HACKER into the computer. Click on the "refresh button" (two arrows)

- Pick the COM Port your HACKER is connected (Should be something with CP210 in the name)
- Insert the HACKER_final_v4.5.2.bin file into the flasher
- Click on "FLASH ESP"