NERDQaxe+

2.5TH/S

BITRONICS

NERD MINER

Bitaxe

OPEN SOURCE MINERS UNITED

NERDQAXE+

NerdQAxe+ is a **fully open-source Bitcoin** ASIC miner equipped with 4 BM1368 ASIC chip from Antminer's S21.

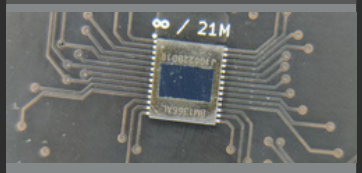
This design ensures efficient and powerful mining capabilities, achieving 2,5TH/s at an energy efficiency of ~20W/TH. It operates using a 5V DC power supply connected via a 2.1/5.5mm barrel jack connector.

At the core of NerdQAxe+ is the combination of ESP-miner and AxeOS, an open-source firmware that empowers you with full control over your mining operations. The intuitive web interface simplifies setting adjustments and performance monitoring, making mining more accessible and streamlined.

NerdQAxe+ is an open-source miner based on Bitaxe project, designed to boost the hashing power of your NerdMiner.

BM1368
ASIC CHIP

700GH/s Bitmain ASIC chip working at low temperature with fan



MINER
STATS
SCREEN

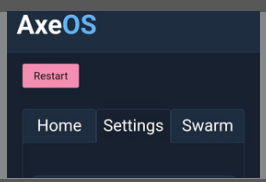
HASHRATE

BITCOIN PRICE

SETTINGS

AXEOS
WEBCONFIG

Global minery data current hashrate, miner config, logs...



FULL SETUP GUIDE

If you want to check all the Bitaxe details check the full guide scaning the QR code.
For any other question contact Bitronics team.

TUTORIAL

QUICK SETUP

Required time: 5 minutes

TOOLS NEEDED

1 - Power up your NerdQAxe with its power adapter (12V /6A). **Important**: Don't use any other power adapter.

2 - Wait until the text "**Connect to ssid: NerdQaxe_XXXX**" appears on the screen, and then from a mobile phone search for the **NerdQaxe_XXXX** wifi network and connect to it.

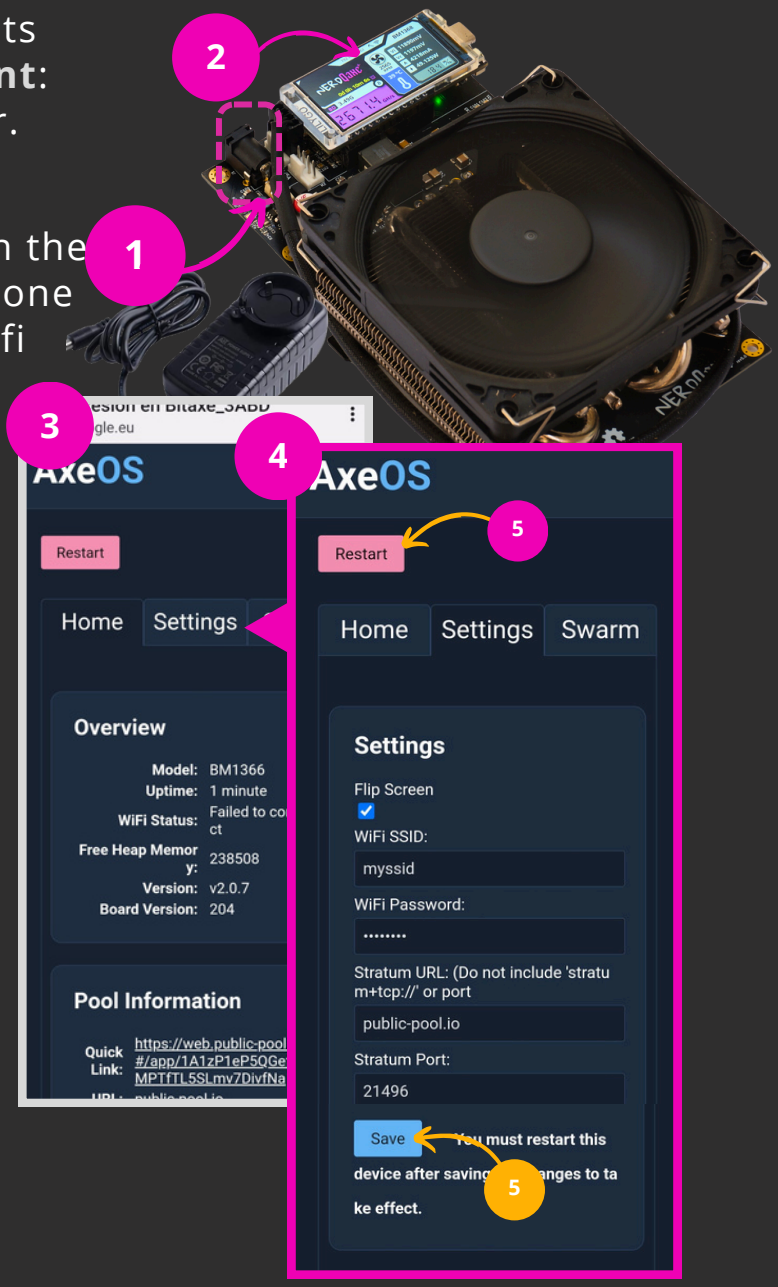
3 - Once connected, the following menu will be shown (3).
Click on ***Settings*** to setup.

4 - Setup miner parameters:

- ***WiFi/Password:*** network credentials were you want to connect to.
- ***Pool url/port:*** introduce your pool settings or leave default
- ***BTC address:*** BTC address where you will receive prize.

4 - Press ***Save*** and ***Restart***. After this Bitaxe will start working.

For any problem check full guide or contact Bitronics team.



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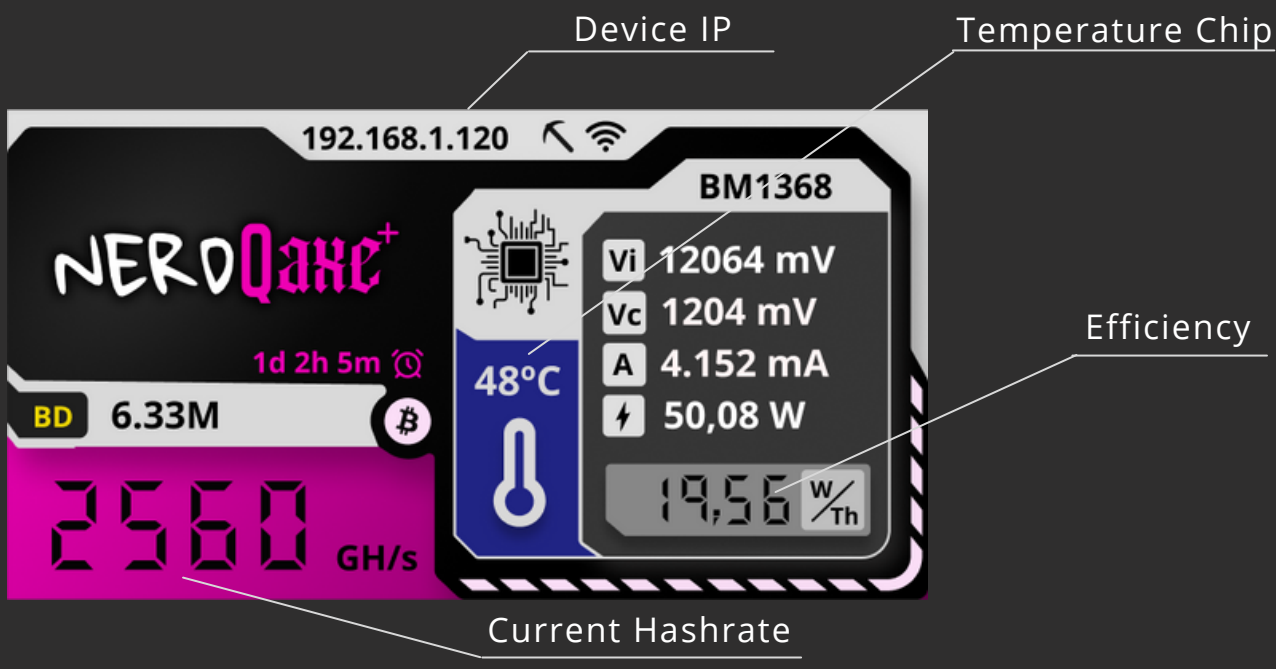
NERDQaxe+

NERDQAXE SCREENS

MAIN SCREEN

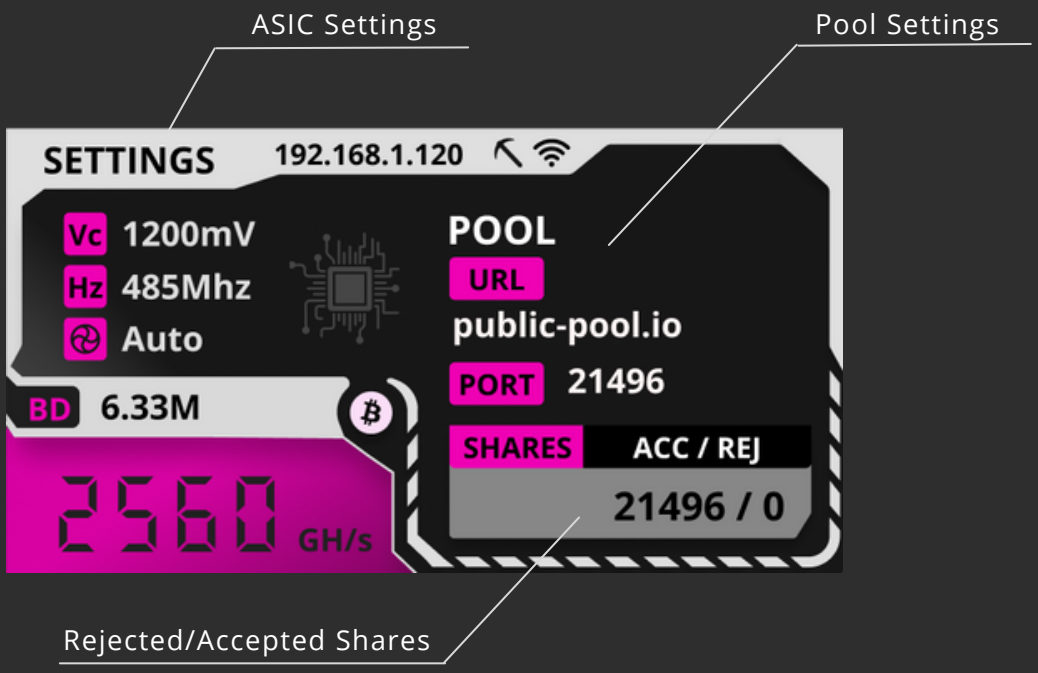
The following screen provides all NerdAxe stats, including mining values, chip temperature, and efficiency, among other details.



BD	**Best difficulty:** Best share gotten by miner
Vi	**Input voltage:** voltage of power supply
Vc	**Core voltage**: voltage readed at ASIC chip
A	**Current**: Current consumption
⚡	**Power**: total power consumption
	Fan: revolutions per minute readed

STATS SCREEN

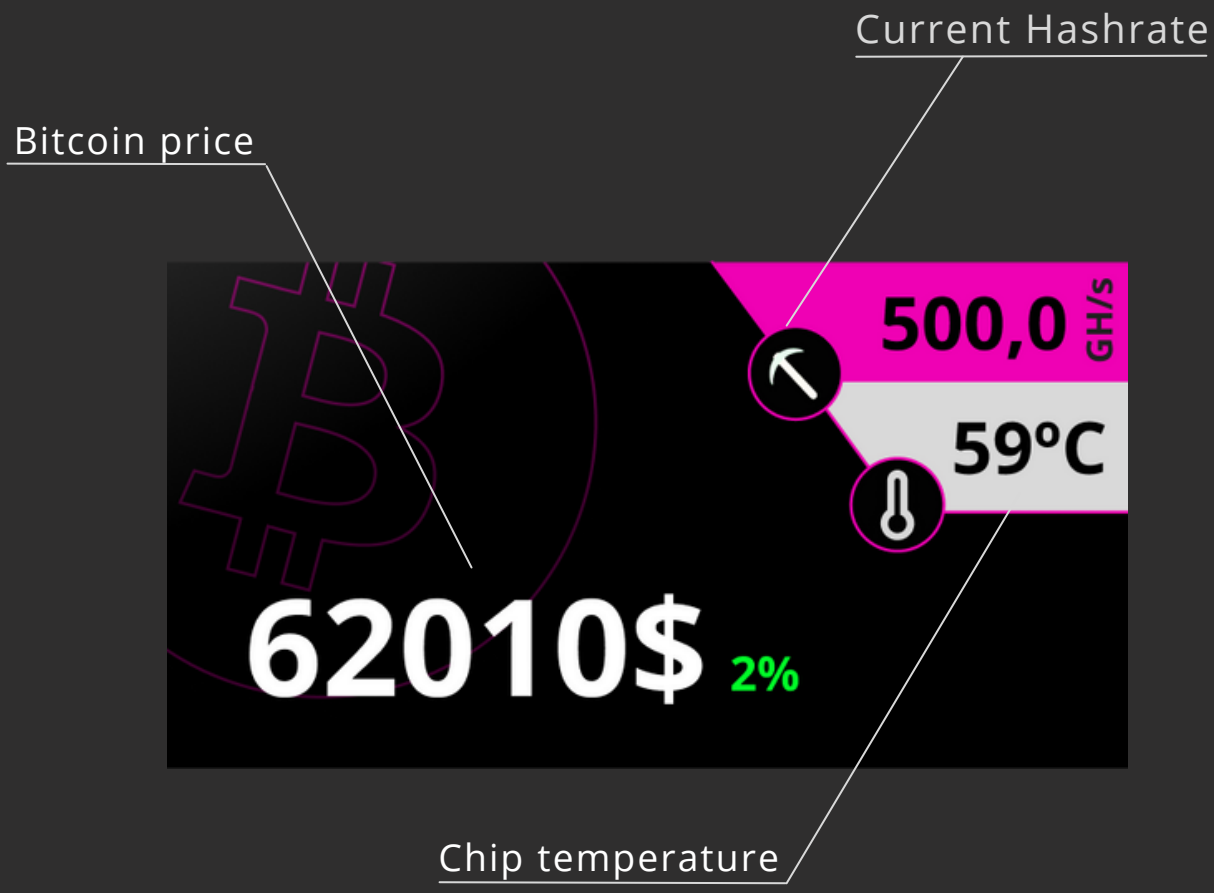
The following screen shows your configured settings, including the pool, IP address, and port for configuring axeOS.



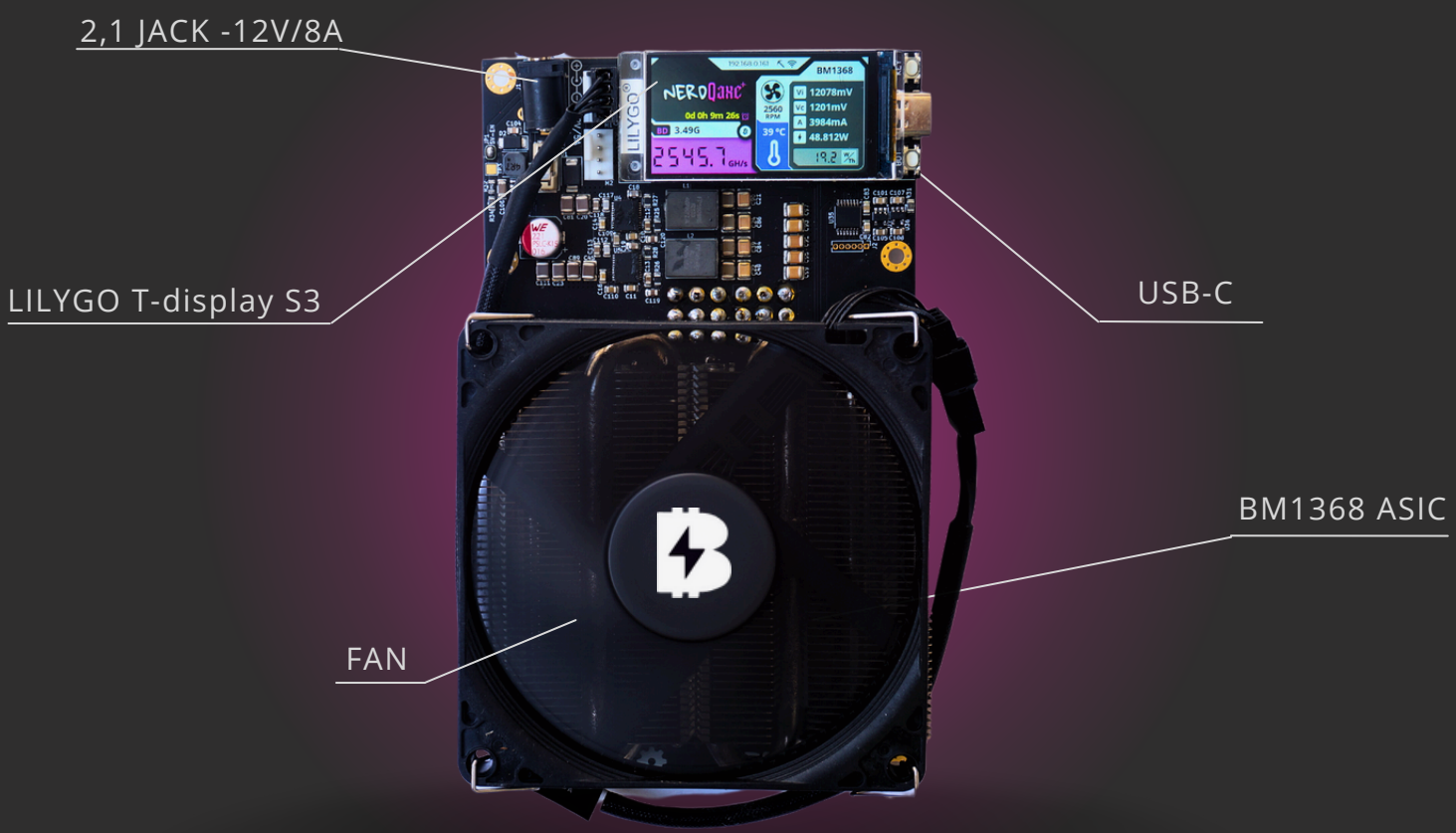
Vc	**Core voltage set:** Configured ASIC core voltage
Hz	**Freq set:** ASIC frequency configured
	Fan: configured fan behaviour
URL	**URL**: Pool configured URL
PORT	**Port**: Pool configured Port
SHARES	**Shares**: Accepted/rejected found shares

PRICE SCREEN

The following screen shows the actual bitcoin price,also the current hashrate and the chip temperature.



ATTRIBUTES



Vcc: 12V ***Imax***: 6A ***P***: 55W ***USB type***: USB-C	***Wifi:*** only 2.4GHz ***MCU***: ESP32-S3R8 Dual-core LX7 microprocessor ***ASIC***: BM1368

FEATURES

HIGH PERFORMANCE	Powered by the S21 BM1368 ASIC chip
PLUG PLAY	Easy to setup, fully assembled, configure and play
ASIC TUNNING	ASIC Tunning via config portal, find your work
CONFIG PORTAL	Web config portal to setup your mining data

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NERDQaxe+

FULL SETUP GUIDE

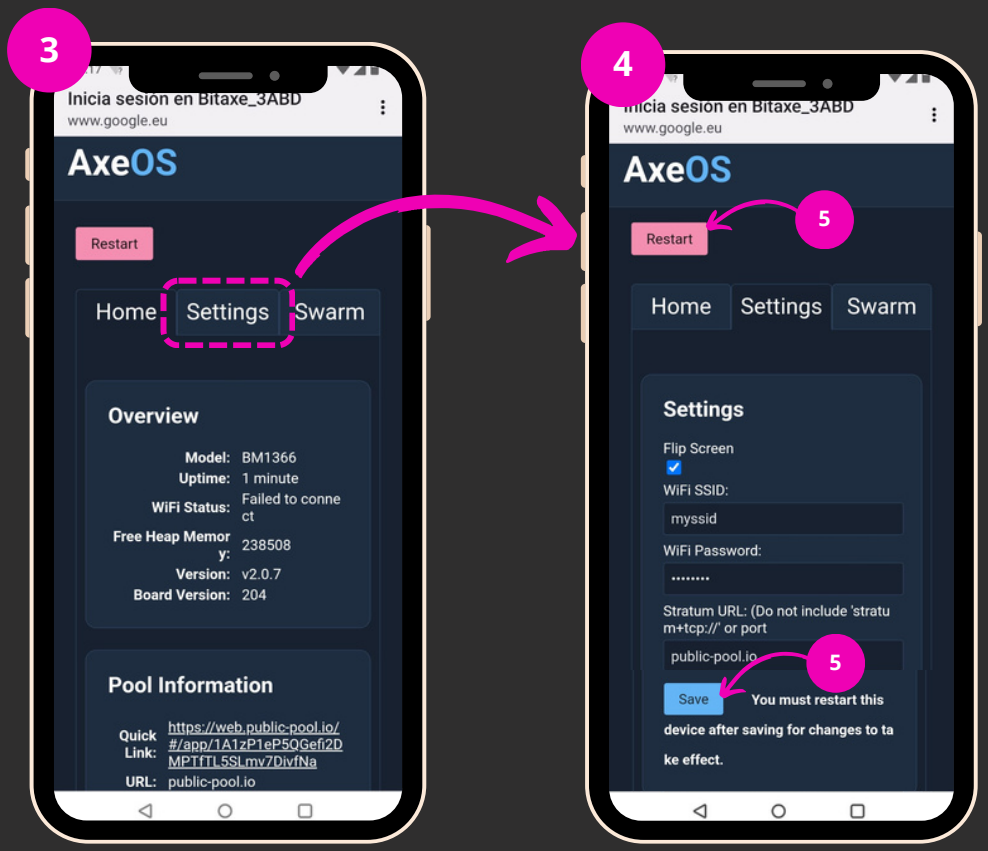
TOOLS NEEDED

1 - Power up your NerdAxe with its power adapter (12V /6A). **Important**: Don't use any other power adapter.

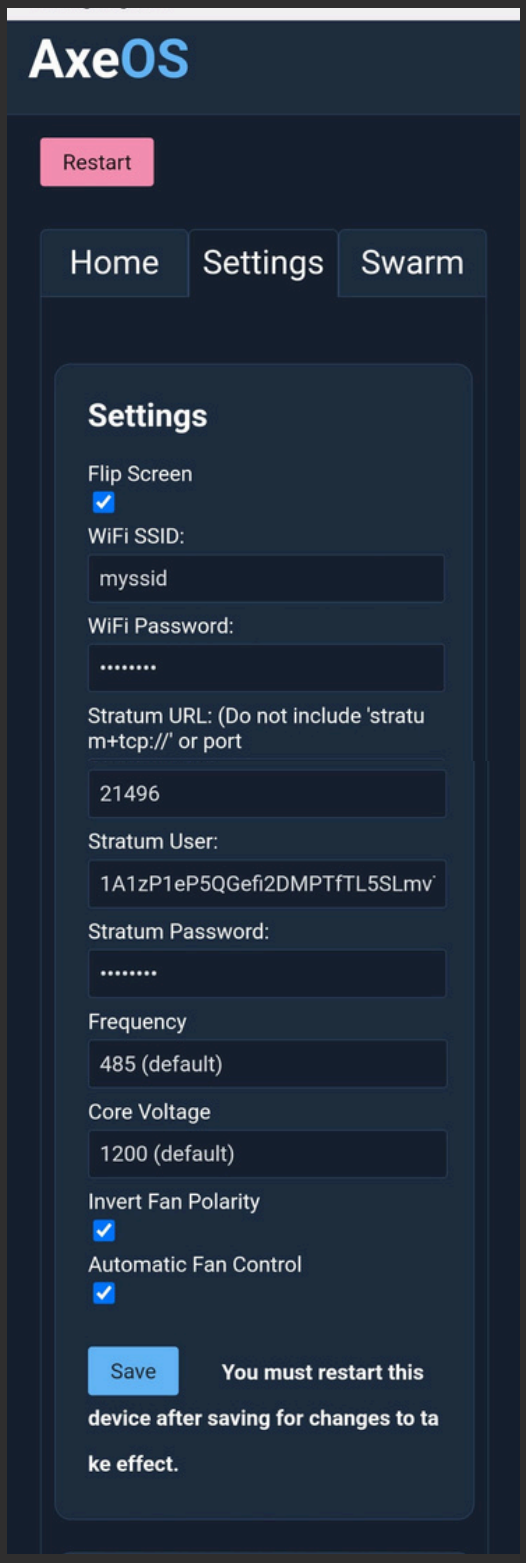
2 - Wait until the text "**Connect to ssid: Nerdqaxe+_XXXX_XXXX**" appears on the screen, and then from a mobile phone search for the **Nerdqaxe+_XXXX** wifi network and connect to it.

3 - Once connected, the following menu will be shown (3).
Click on ***Settings*** to setup.

4 - Set your mining settings and then (5) press ***Save*** and ***Restart***. After this Nerdaxe will start working.



NERDQAXE+ SETTINGS



Setup miner parameters:

- ***WiFi/Password:*** network credentials were you want to connect to. Get your home Wifi name and password and add it there.
- ***Stratum url/port:*** introduce your pool settings or leave default ones. Check compatible pools at bitaxe.org. Standard ones:

URL	Port
public-pool.io	21496
pool.ckpool.com	3333

- ***Stratum user:*** set your BTC address followed by your worker name. *<btcAddress>.<workerName>*
- ***Stratum password:*** left default value or specify one for pools who require.
- ***Frequency:*** ASIC work freq.
- ***Core voltage***: ASIC core voltage.

ASIC TUNNING METHODOLOGY

Playing with frequency and core voltage let you find the best working point with your ASIC. Increasing or reducing hashrate or power consumption. **Be carefull to not force it too much**. Default values are the recommended ones.