

KAS KS 1&2

MANUAL

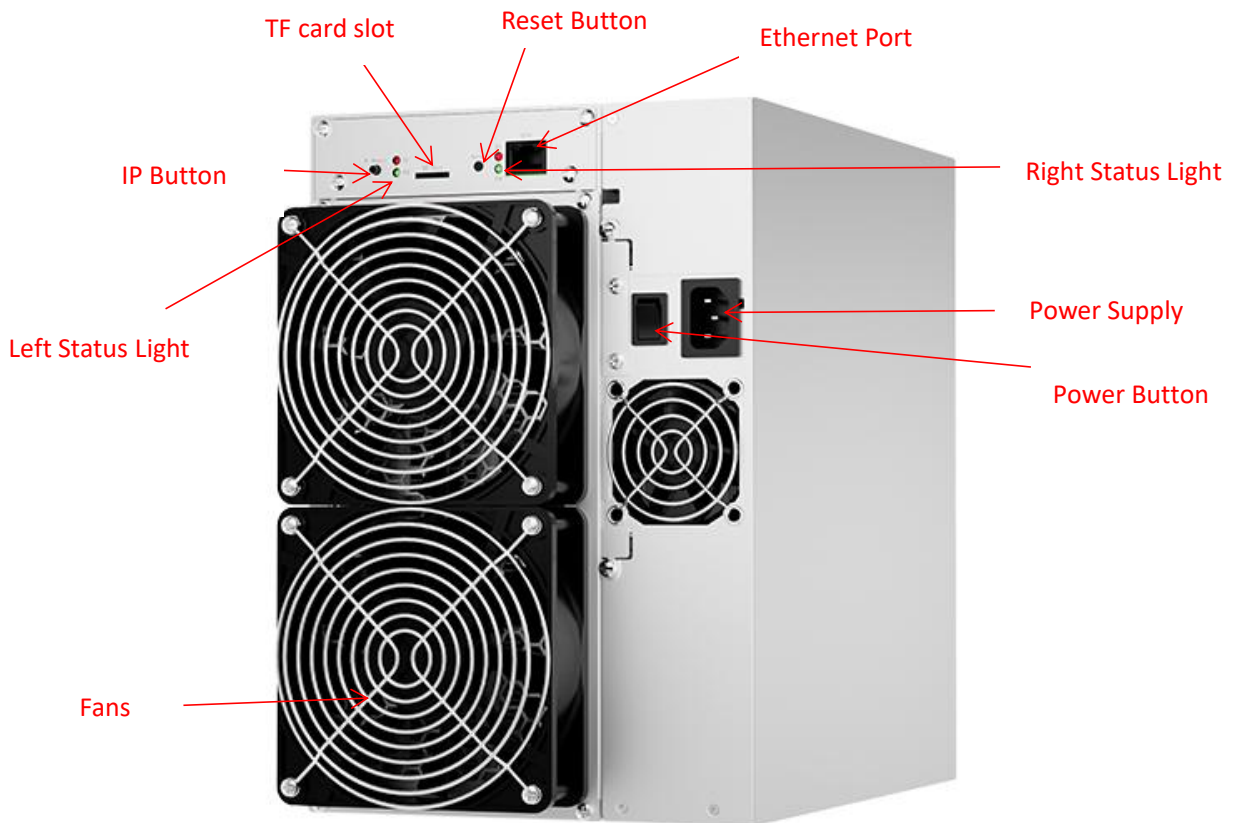
ICERIVER

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1. Product Overview

1.1 Appearance



2. Function

2.1 Start up

2.1.1 Precautions

- Check whether there is physical interference causing damage to the machine and beware of electric shock.
- Please check if the cable connection is firm before powering on, and pay attention to the safety of electricity.
- Keep the hash board and other parts away from water or exposed to moisture.
- Please make sure the ambient temperature is between 0-35° C.
- Please avoid covering the surface of the machine due to the high temperature of the machine surface during operation.
- Do not place flammable and explosive substances around the machine during operation.
- Please make sure the humidity of the environment is below 90%.
- Please keep the environment clean to prevent dust, hair, willow and other foreign objects from entering the machine and causing damage to the machine.
- Use a stable voltage.
- The machine, hash board or board parts being crushed or burned due to improper environment is not covered by the warranty.
- Customers should not disassemble the machine by themselves without permission from ICERIVER after-sales team.

2.1.2 Check before start up

Preliminary inspection of the miner before operation:

- Check the appearance of the package for deformation.
- Check the appearance of the machine for deformation and breakage. Also check the fan and cable.
- Check if there is any strange sound in the machine and observe if the heat sink is off.

***Note: Please do not disassemble the machine by yourself. The machine will not be covered by the warranty if the user disassembles the machine without permission.**

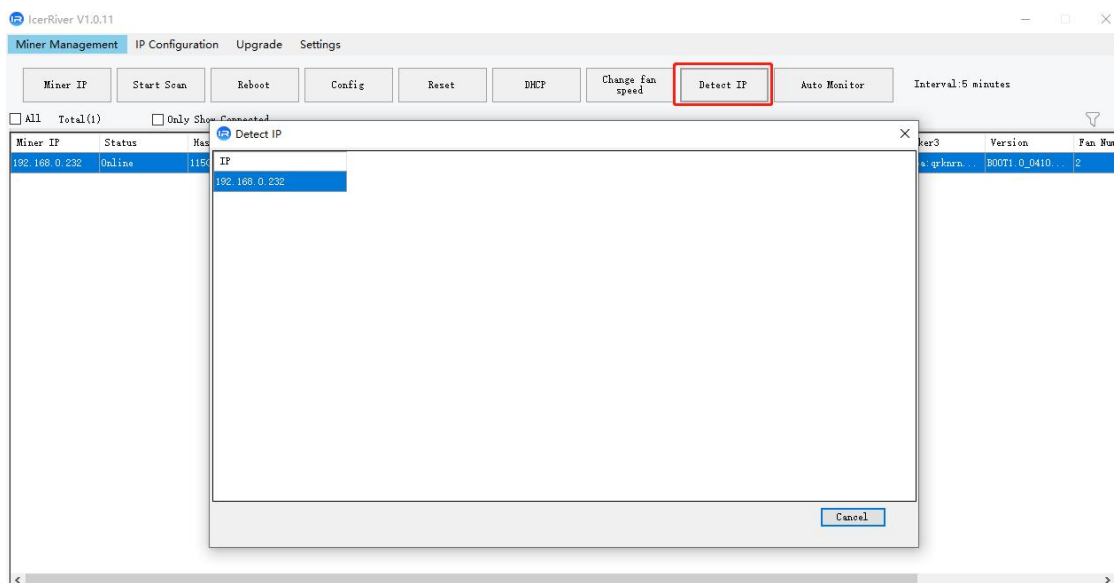
2.1.3 Boot

Please connect the machine to the Ethernet first, and then plug in the power cord. Turn on the machine, during the startup process, both of the right and left red and green status lights will be constantly on. After approximately 1 minute, the right status green light will start blinking, indicating that the miner has successfully started.

2.2 Access Machine

2.2.1 Obtain Machine IP

1. Obtain the IP address of the machine through download and unzip the **batch processing tool** provided by our company (please refer to the official website to download: <https://www.iceriver.io/tutorial/>).
2. Click the [Detect IP] button and long press the machine's IP button for 1-2s after the pop-up window to get the machine IP.



2.2.2 Access Machine

1. Open your web browser (Chrome browser is recommended) and enter the machine's IP address in the address bar. You will see the following interface.
2. Use the default username "admin" and the default login password "12345678" to log in to the machine.



2.3 Language Switch

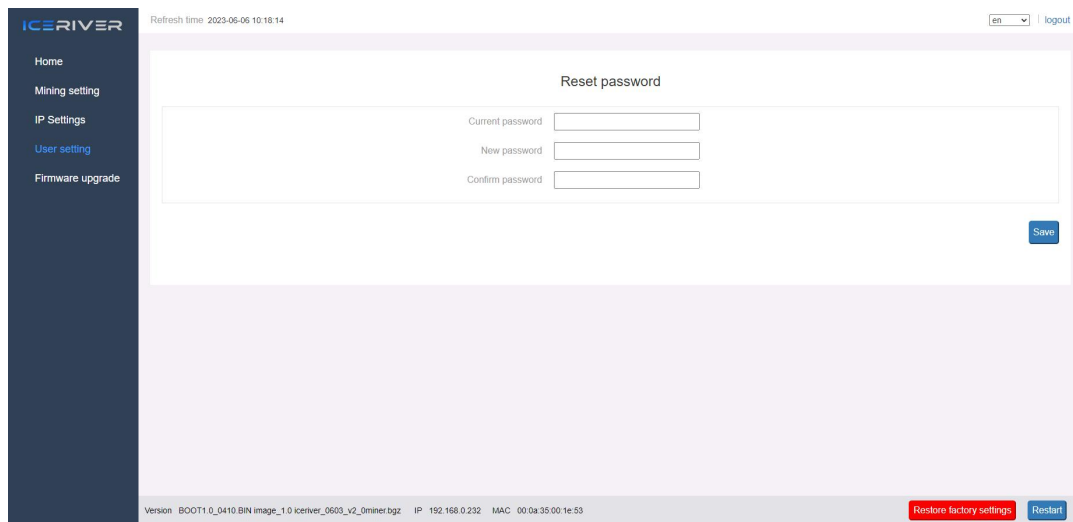
1. Click [\[Language\]](#) in the upper right corner of the page to switch between Chinese or English.



2.4 Change Password

To protect your property security, please change the miner password after the first time you turn on the machine.

1. Click [\[User Settings\]](#), enter the current password and the new password as shown below, and click the [\[Save\]](#) button.



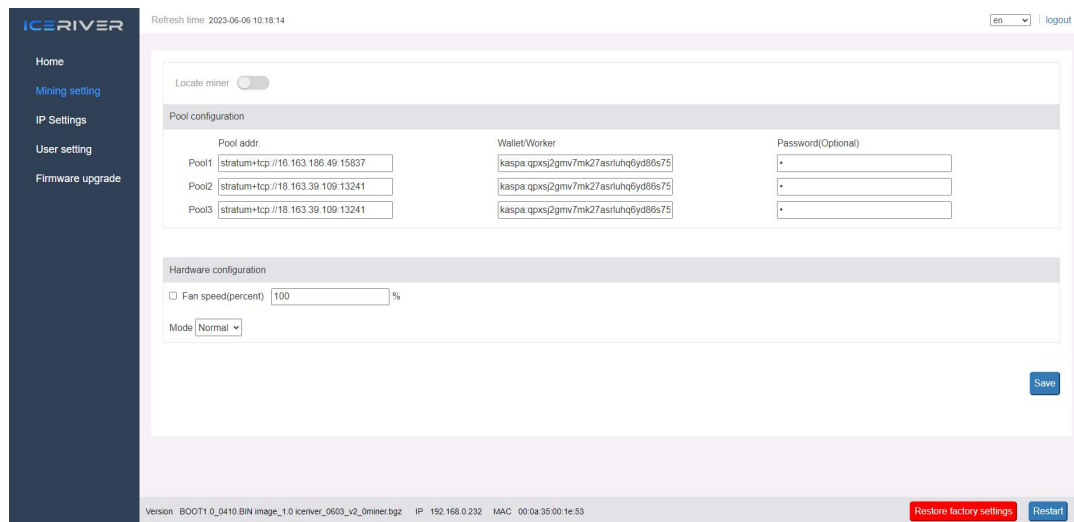
The screenshot displays the ICERIVER web interface. On the left is a dark blue sidebar with navigation links: Home, Mining setting, IP Settings, User setting (highlighted in blue), and Firmware upgrade. The main content area is titled 'Reset password' and contains three input fields: 'Current password', 'New password', and 'Confirm password'. A blue 'Save' button is located at the bottom right of the form. At the top right of the page, there is a language dropdown menu set to 'en' and a 'logout' link. At the bottom of the page, a footer contains version information, IP address (192.168.0.232), MAC address (00:0a:35:00:1e:53), and two buttons: 'Restore factory settings' (red) and 'Restart' (blue).

2. After the password change is completed, you need to log in again with the new password.

2.5 Configuring mining pools and wallets

2.5.1 Add

1. Go to the [\[Mining Setting\]](#) page and find [\[Pool Configuration\]](#).



You can configure three mining pools with the following reference example:

Pool1: stratum+tcp://eu1.kaspa-pool.org:4444

Wallet/Worker:

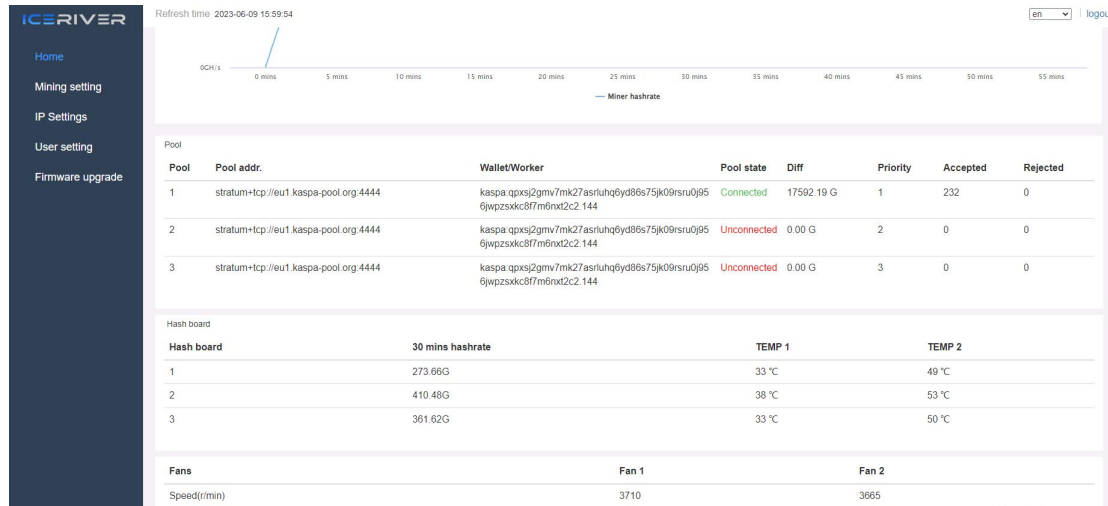
[kaspa:ndm9t1sgdmrcha4pg83lwwrka0gjya38teh0g5qc4prapavmh7rkyxuzd6w2w.worker](#)

↓
Wallet address

↓
Worker name

* The password is optional and can be set or not, it does not affect mining.

2. Click Save and a configuration success window will pop up.
3. After successful configuration, click [\[Reboot\]](#) and wait for the machine to reboot (do not power off during the reboot process).
4. The information on the home page shows that the pool is " connected ", which means the pool is successfully connected.



*The default pool configuration is the configuration of our company when testing, please configure your own mining wallet address before you start mining, please do not use the default configuration.

*If pool 1 is not connected, the machine will automatically connect to pool 2. If pool 2 is not connected, the machine will automatically connect to pool 3.

* If the configuration fails you can configure it again and restart it.

The following mining pools are known to be compatible, and will be continuously updated:

Kaspa-pool	PPLNS	stratum+tcp://eu1.kaspa-pool.org:4444
	SOLO	stratum+tcp://eu1.kaspa-pool.org:4441
Woolypooly	PPLNS	stratum+tcp://pool.eu.woolypooly.com:3112
	SOLO	stratum+tcp://pool.eu.woolypooly.com:3113
Herominers	PPLNS	stratum+tcp://ru.kaspa.herominers.com:1208
	SOLO	stratum+tcp://ru.kaspa.herominers.com:1208
K1pool	PPLNS	stratum+tcp://eu.kaspa.k1pool.com:23112
	SOLO	stratum+tcp://eu.kaspa.k1pool.com:23114
Accpool	PPLNS	stratum+tcp://acc-pool.pw:16061
F2pool	PPLNS	stratum+tcp://kas-euro.f2pool.com:1400
Kryptex	PPLNS	stratum+tcp://kas.kryptex.network:7777/6666

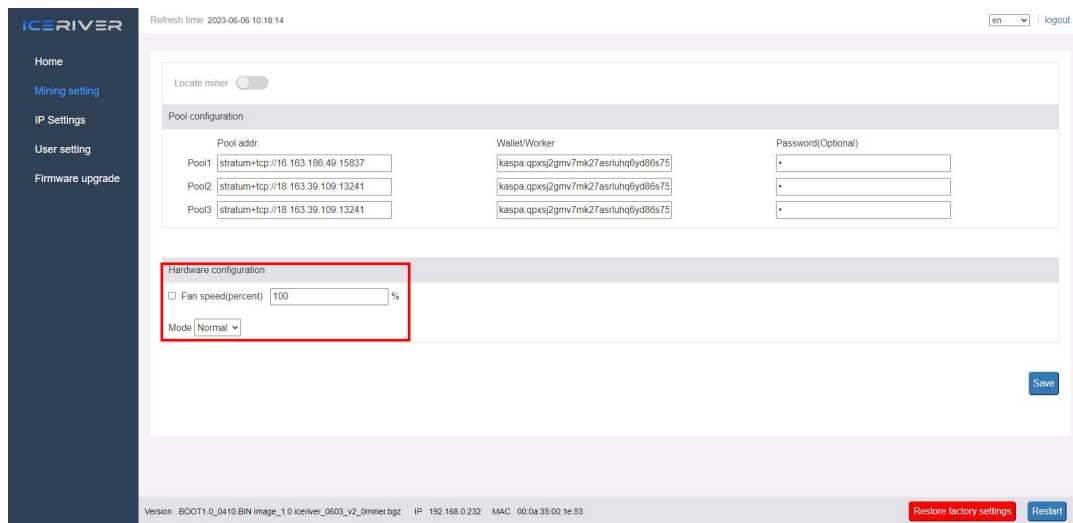
* The above mining pool information is the mining pool address we used for testing purposes. Before connecting to the mining pool, please log in to the respective mining pool's official website and check if the mining pool address has changed.

2.5.2 Remove

1. Clear the information in [\[Pool Configuration\]](#) and click [\[Save\]](#) to remove the mining pool.

2.5.3 Adjusting fan speed

1. Find [\[Hardware Configuration\]](#) in [\[Mining Setting\]](#).
2. Check [\[Fan Speed\]](#).
3. Select the fan mode, or manually adjust the speed, click [\[Save\]](#) after modification.



* After power on, the fan will run at low speed, and only after successfully connecting to the mining pool and mining program starts, the fans will start at full speed. The fans default speed is full speed.

* The machine will stop mining in sleep mode.

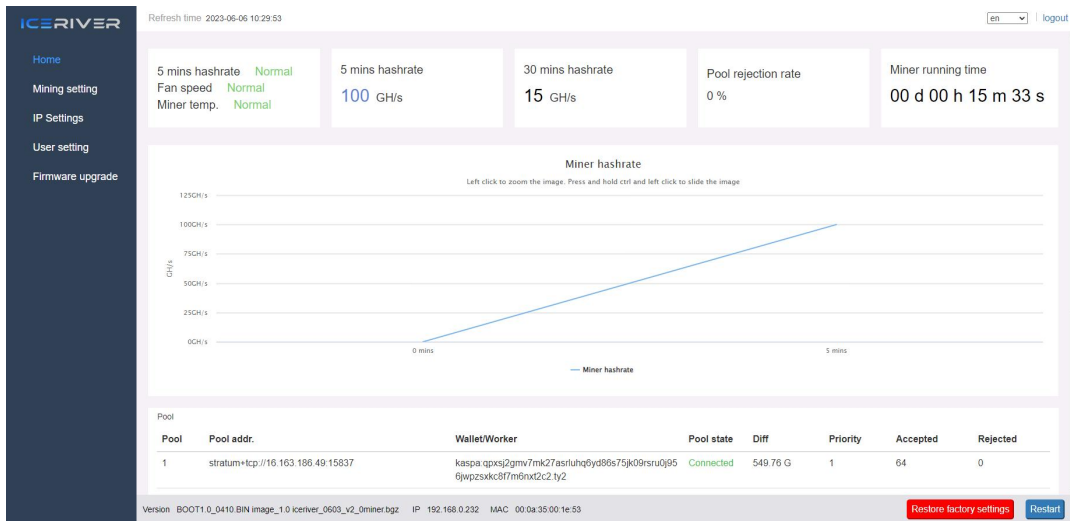
* After manually changing the fan speed, the fan speed in [\[Hardware Configuration\]](#) will still show 100%.

2.6 View Hashrate Chart

1. Click [\[Home\]](#) to view the Hashrate Chart.

* After 5 minutes of connecting to the pool, you can view the miner's hashrate and hashrate chart, the chart is updated every 5 minutes.

* Under Hash board, you can view the machine temperature and fan speed, which can monitor the working status of the machine in real time.



2.7 Network Settings

The factory default is DHCP mode, users can set the IP mode according to their needs.

Set static IP:

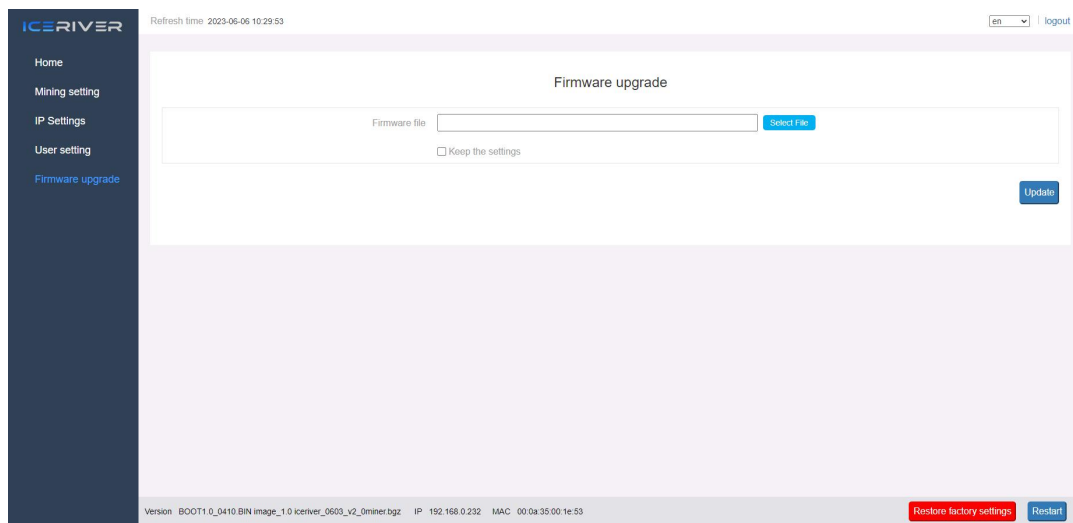
1. Click [\[IP Settings\]](#), select *Static* in [\[Protocol\]](#), fill in the IP information according to the user, and then click [\[Save\]](#) button.
2. After saving the configuration, click [\[Reboot\]](#) and wait for the machine to reboot (do not power off during the reboot).

The screenshot shows the ICERIVER web interface for IP configuration. The page title is "IP configuration". On the left, there is a navigation menu with options: Home, Mining setting, IP Settings (highlighted), User setting, and Firmware upgrade. The main content area shows network information for eth0: MAC: 00:0a:35:00:1e:53, IP: 192.168.0.232, and Subnet mask: 255.255.255.0. Below this, there are input fields for Host name (petalinux_config13), Protocol (Static), IP (192.168.0.232), Subnet mask (255.255.255.0), Gateway (192.168.0.1), and DNS server (192.168.0.1). A "Save" button is located at the bottom right of the configuration area. At the bottom of the page, there is a footer with version information: "Version: BOOT1.0_0410 BIN image_1.0 iceriver_0603_v2_0miner.bgz IP: 192.168.0.232 MAC: 00:0a:35:00:1e:53" and two buttons: "Restore factory settings" and "Restart".

2.8 Firmware Upgrade

When the official website releases a new upgrade package, download it and upgrade it via Web.

1. Click [\[Firmware Upgrade\]](#), select the official upgrade package and click [\[Upgrade\]](#).
2. Wait for the pop-up window to show success and then click [\[Reboot\]](#) and wait for the machine to reboot (do not power off during the reboot process).
3. After reboot, the firmware upgrade is successful.



2.9 Factory Reset

When the machine has abnormal conditions, you can restore the factory settings through the **Rest Button** on the machine.

1. After the right green status light starts blinking following the power-up (1 minute after power on), press and hold **Rest Button** for 20 seconds until the right red status light starts blinking. Waiting until the right red status light stops blinking and wait for the machine to reboot (**do not power off the machine during the reboot process**).
2. After the machine reboot, reconfigure the mining pool and wallet to resume mining.

2.10 Shutdown/Reboot

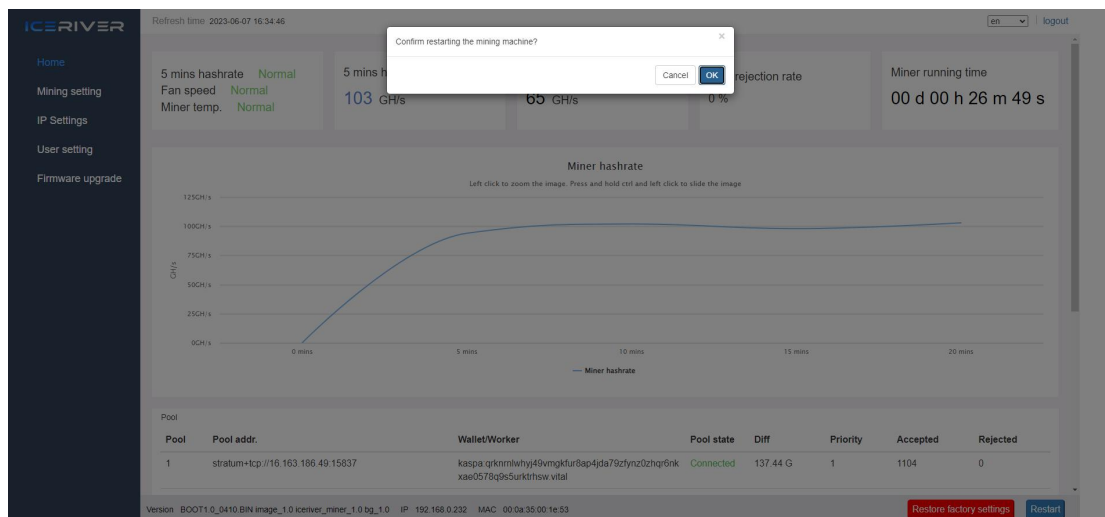
2.10.1 Shutdown

1. Turn off the machine via the miner power button.

2.10.2 Reboot

1. Click [\[Reboot\]](#) in the bottom right corner of the home page, then click [\[OK\]](#) to confirm, then reboot the machine.

*** Note: do not power off the machine during the reboot process.**



The screenshot shows the ICERIVER miner control interface. A modal dialog box is open, asking "Confirm restarting the mining machine?" with "Cancel" and "OK" buttons. The background interface displays the following information:

- Refresh time: 2023-06-07 16:34:46
- 5 mins hashrate: Normal
- Fan speed: Normal
- Miner temp.: Normal
- 103 GH/s
- 65 GH/s
- rejection rate: 0.0%
- Miner running time: 00 d 00 h 26 m 49 s
- Miner hashrate graph showing a curve rising from 0 GH/s at 0 mins to approximately 100 GH/s at 20 mins.
- Pool settings table:

Pool	Pool addr.	Wallet/Worker	Pool state	Diff	Priority	Accepted	Rejected
1	stratum+tcp://16.163.186.49:15837	kaspa:qknrmwhj49vmgktur8ap4jda79zfyhz0zhrq6nk xae0578q9s5urktfhsu vital	Connected	137.44 G	1	1104	0

At the bottom right, there are buttons for "Restore factory settings" and "Restart". The footer shows version information: "Version: BOOT1_0_0410.BIN image_1_0 iceriver_miner_1_0 bg_1_0 IP: 192.168.0.232 MAC: 00:0a:38:00:1e:53".

3 Common Faults and Solutions

3.1 Faults Solutions

3.1.1 Power Supply

- Cannot be turned on the machine after connecting power and turning on the power button:
 1. Check whether the power connector is loose or off, and whether the power cord is inserted tightly.
 2. Verify that the power supply input voltage is within the specified operating voltage range (AC 170V - 300V).

3.1.2 Network

- Network port light does not light up:

Check if the network port is plugged in.

3.1.3 Fan

- The fan does not turn after power is applied:
 1. Check the appearance of the fan and whether the metal mesh is extruded and deformed.
 2. Check if the mining pool is successfully connected.

3.1.4 High Temperature

- Machine temperature is too high:
 1. Check that the machine is not covered with.
 2. Check if the machine is placed in an environment with air convection.

3.1.5 Hashrate does not up to the target hashrate

- Hashrate does not up to the target hashrate:
 1. Check whether the machine fan is working properly, if the fan speed is abnormal, it will cause

the machine temperature is too high will trigger high temperature protection.

2. Short-term hashrate fluctuations, please observe the 12-hour average hashrate.

- The difference between the Web hashrate and the mining pool hashrate is large:

Check whether the network connection is normal.

3.1.6 Unable to enter the Web operation page

- The browser displays 404 after entering the miner IP:

Reboot the machine and re-enter the Web operation page.