KAS KSO/PRO MANUAL





Table of Contents

1. Product Overview	2
1.1 Appearance	2
2. Function	6
2.1 Start up	6
2.2 Access Machine	8
2.3 Language Switch	9
2.4 Change Password	0
2.5 Configuring mining pools and wallets1	1
2.6 View Hashrate Chart	4
2.7 Network Settings	5
2.8 Firmware Upgrade10	6
2.9 Factory Reset1	7
2.10 Shutdown/Reboot	8
3 Common Faults and Solutions	9
3.1 Faults Solutions19	9



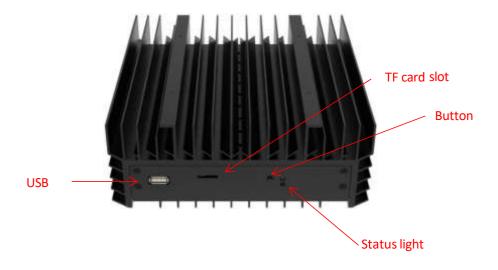
1. Product Overview

1.1 Appearance

KSO:







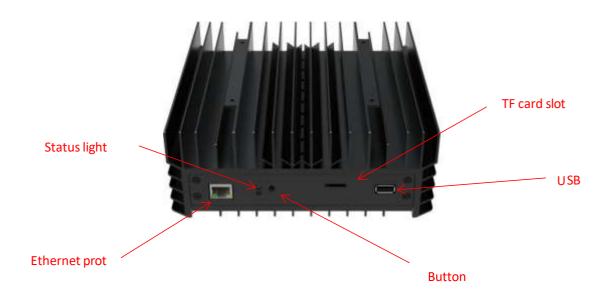
Interface specifications:

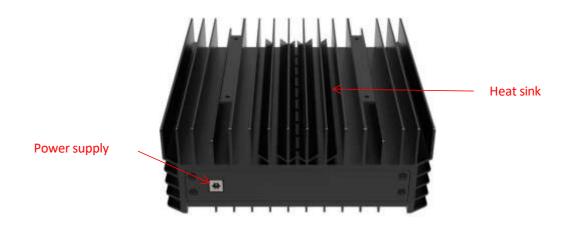
	DC power supply interface: 65w, 19v = 3.42A
Power supply input interface	USB Type-C power supply interface: Protocol: PD2.0 Input: 65w (max), 20v = 3.25A
USB output interface	5V==0.5A

^{*} DC power supply interface and USB Type-C power supply interface can not be powered at the same time, only by one interface.



KSO PRO:







Interface specifications:

Power supply input interface	DC power supply interface:
	100W, 19V=6.32V
USB output interface	5V==0.5A

*Indicator Description:

Machine Status	Indicator light status
Running Normally	Red light steady, green light blink
Network Issues	Red light blink slowly (once per second)
High-temperature Alarm	Red light blink rapidly (3 times per second).



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 0-40° C.
- Please make sure to be in an air convection environment.
- 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.
- Please place the machine horizontally.
- 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 machine 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**

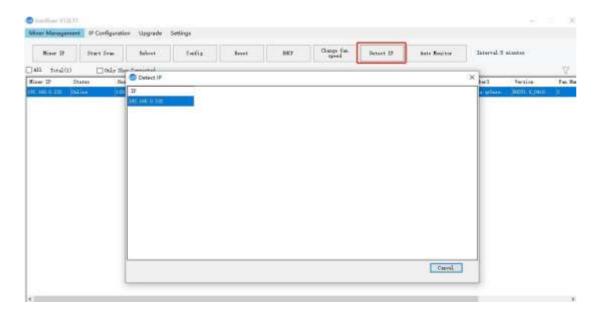
Please connect the machine to the Ethernet first, and then plug in the power cord. During the startup process, the red and green status lights will be constantly on. After approximately 1 minute, the green status light will start blinking, indicating that the miner has successfully started.



2.2 Access Machine

2.2.1 Obtain Machine IP

- 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://iceriver.eu/pages/product-manuals-tools
- 2. Click the [Detect IP] button and long press the machine's 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.

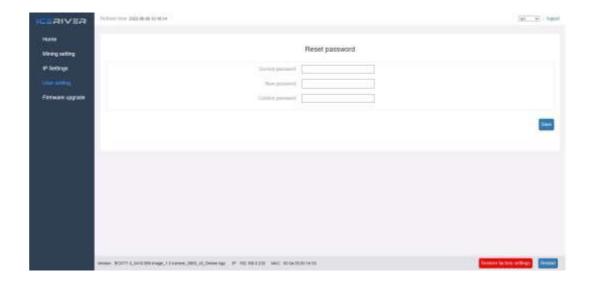




2.4 Change Password

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.



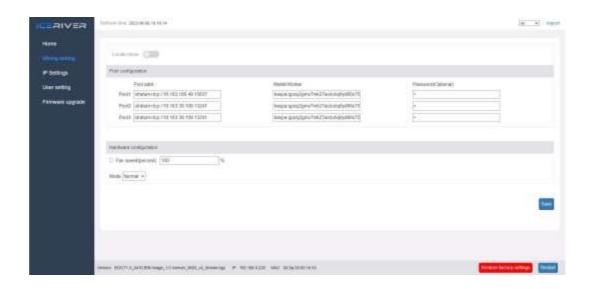
2. After the password change is completed, you need to log in again with the new password.



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://kas.eu1.whalepool.com:15120

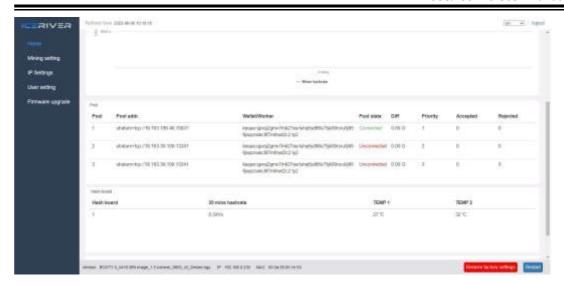
Wallet/Worker:

kaspa:ndm9tlsgdmrcha4pg83lwwrka0gjya38teh0g5qc4prapavmh7rkyxuzd6w2w.worker



- * 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.

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

Wha∎epoo∎	PPLNS	stratum+tcp://kas_eu1_whalepool_com:15120
Humpoo I	PPLNS PPLNS	stratum+tcp://kas_eu1_humpool_com:18083 stratum+tcp://eu1_kaspa-pool_org:4444
Kaspa-pool	SOLO	stratum+tcp://eu1_kaspa-pool_org:4441
Waaliyaaliy	PPLNS	stratum+tcp://pool_eu_woolypooly_com:3112
Woo∎ypoo∎y	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
KIPOO I	SOLO	stratum+tcp://eu_kaspasolo_k1pool_com:23114
Accpoo	PPLNS	stratum+tcp://acc-pool.pw:16061
F2pool	PPLNS	stratum+tcp://kas-euro.f2pool.com:1400
Kryptex	PPLNS PPLNS	stratum+tcp://kas_kryptex_network:7777/6666 stratum+tcp://stratum_tw-pool_com:10005
tw-pool_com	PPLNS	stratum+tcp://stratum2_tw-pool_com:10005
2miners	PPLNS	stratum+tcp://kas_2miners_com:2121

^{*} 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.

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

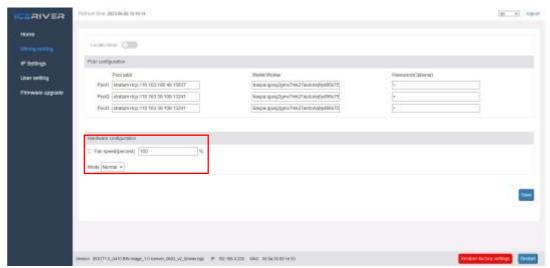


2.5.2 Remove

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.

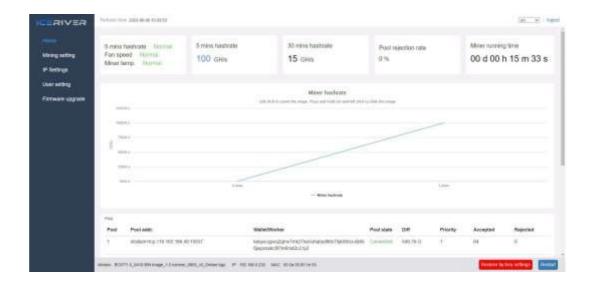


- * After power on, the fan will start only after successfully connecting to the mining pool and mining program starts, and the fan speed is full speed by default.
- * The machine will stop mining in sleep mode.
- * After manually changing the fan speed, the fan speed in [Hardware Configuration] will 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 machine'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.

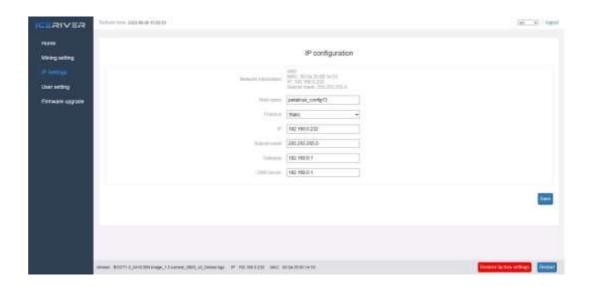




2.7 Network Settings

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).

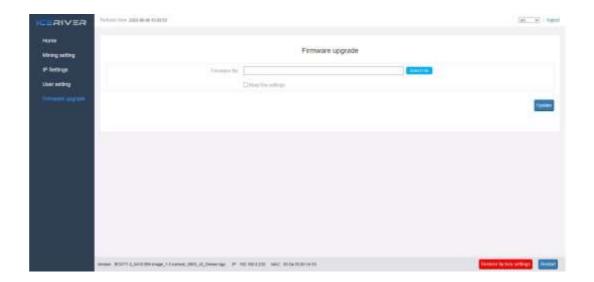




2.8 Firmware Upgrade

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 Button on the machine.

- 1. After the green status light starts blinking following the power-up (1 minute after power on), press and hold Button for 20 seconds until the red status light starts blinking. Waiting until the 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. Power off by unplugging the Power Cord.

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.





3 Common Faults and Solutions

3.1 Faults Solutions

3.1.1 Power Supply

• Connect the power supply and the red and green status lights does not light up:

Check whether the power connector is loose or off, and whether the power cord is inserted tightly.

3.1.2 Network

Network port light does not light up:

Check if the network port is plugged in.

3.1.3 Fan

• The fans does not turn after power is applied:

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. External fan of not more than 5V==0.5A for cooling via USB port.

3.1.5 Hashrate does not up to the target hashrate

- Hashrate does not up to the target hashrate:
- 1. Check whether the surface temperature of the machine is too high. High temperature will trigger high temperature protection and cause the machine to downscale, please place the machine in an air convection environment or external fan to cool down the temperature.



- 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 machine IP:

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