

Baikal miner

MINI

USER'S GUIDE



<http://www.baikalminer.com>

Start Mini

Installation guide

✓ Mini Specifications

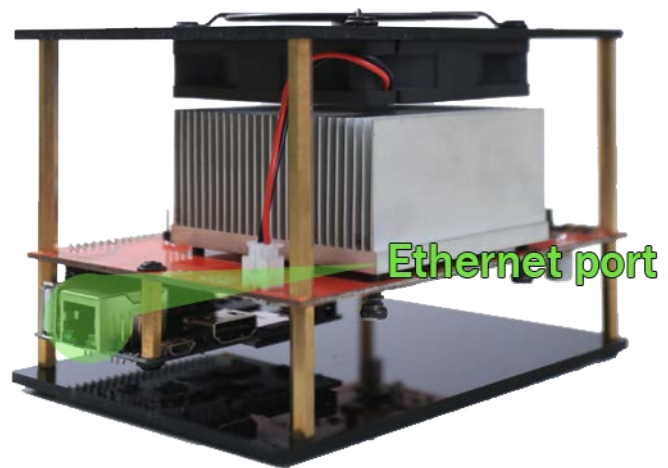


Hash Rate	150MH/s($\pm 10\%$)
Power	40W($\pm 5\%$) @ 0.27J/MH (at the wall , with 25°C ambient temp)
Input Power	12V/5A DC
Interface	Ethernet
Operation Temp	0 ~ 40 °C
Dimension	140mm(L) x 100mm(W) x 95mm(H)
Weight	475g

✓ Introduction



front



back

✓ Package Contents

- 1 Mini Miner
- 1 4-pin USB cable



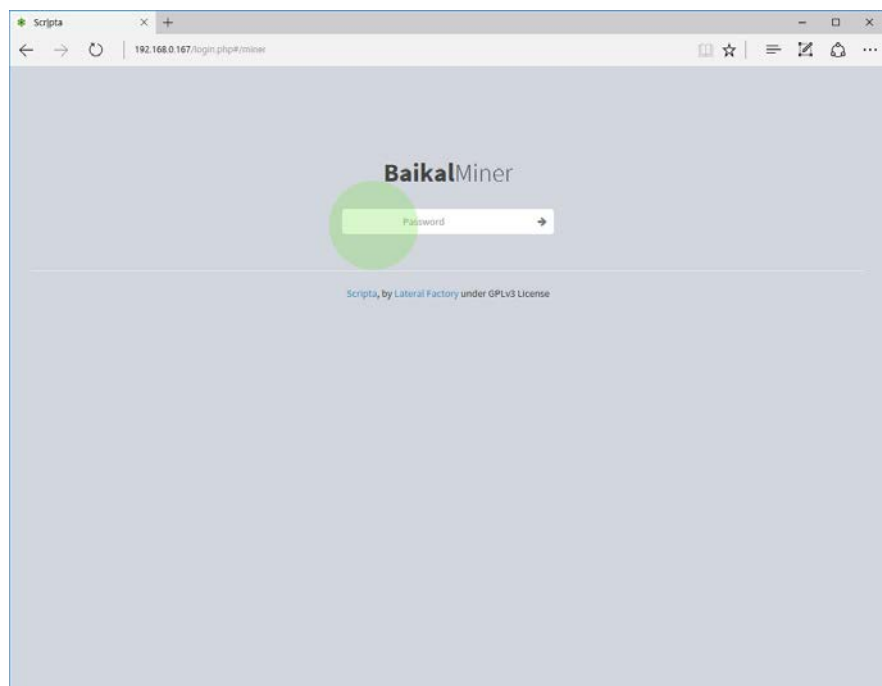
4-pin USB cable

✓ Connection Guide

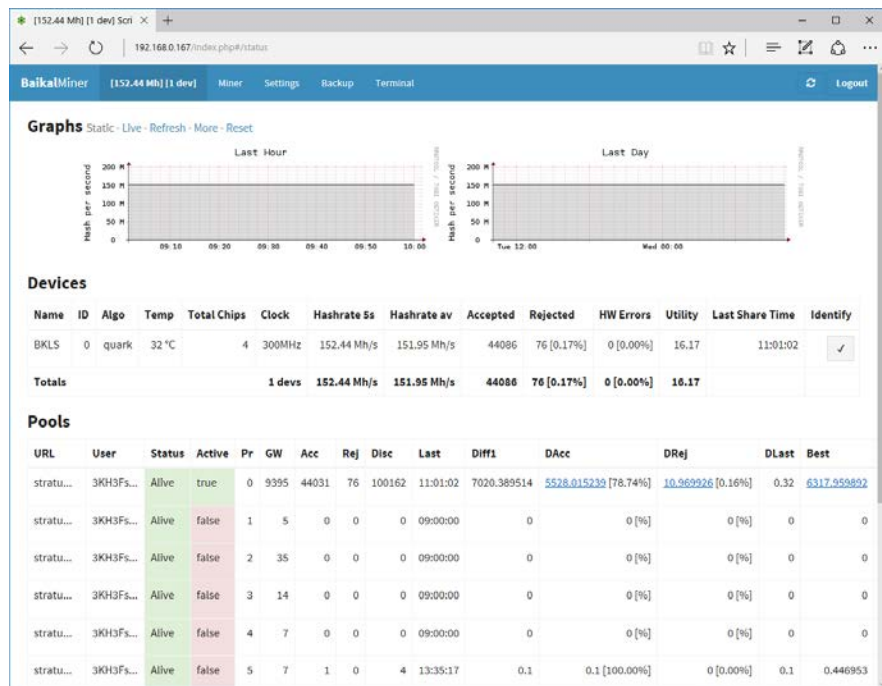
1. Connect Mini to Ethernet with Ethernet cable.
2. Plug power cable to 12V 5A DC port and to the power outlet as well.
Make sure the switch is off when plugging in.
3. Turn the switch on and check if you have blinking lights on at the Ethernet Port.

✓ Pool setting

1. Enter Mini IP address on your web browser to access pool setting page and log in with 'baikal' as password.
(IP address can be found either on setting page of your internet router or by using our program from [download link](#))



2. First page you'd see if you log in successfully.



3. Go to Miners tab to set pool lists and give them mining details.

The screenshot shows the BaikalMiner web interface, specifically the 'Miner' tab. The page is divided into two main sections: 'Available pools' and 'Pools'. The 'Available pools' section lists several pools: Dash P2Pool, SuprNova, SuchPool, and Colmine. The 'Pools' section is a table with columns: URL, Algo, User, Pass, and Priority. The table lists several pools with their respective URLs, algorithms, user names, passwords, and priorities. Below the table, there are buttons for 'Reload pools' and 'Add pool'. At the bottom, there is a section for 'SGMINER Options' with a table for 'Options' and 'Value'. The table has columns: Options, Value, and Description. The options listed are 'api-port' and '4028'.

URL	Algo	User	Pass	Priority
stratum+tcp://quark.eu.nicehash.com:3	quark	3KH3Fs7r2JHV2	x	10
stratum+tcp://x15.eu.nicehash.com:333	x15	3KH3Fs7r2JHV2	x	11
stratum+tcp://x11.eu.nicehash.com:333	x11	3KH3Fs7r2JHV2	x	20
stratum+tcp://x13.eu.nicehash.com:333	x13	3KH3Fs7r2JHV2	x	30
stratum+tcp://qubit.eu.nicehash.com:3	qubit	3KH3Fs7r2JHV2	x	40
stratum+tcp://x11.hk.nicehash.com:333	x11	3KH3Fs7r2JHV2	x	50
stratum+tcp://x13.hk.nicehash.com:333	x13	3KH3Fs7r2JHV2	x	60
stratum+tcp://qubit.hk.nicehash.com:3	qubit	3KH3Fs7r2JHV2	x	70
stratum+tcp://quark.hk.nicehash.com:3	quark	3KH3Fs7r2JHV2	x	80
stratum+tcp://x15.hk.nicehash.com:333	x15	3KH3Fs7r2JHV2	x	90

Options	Value	Description
api-port	4028	

- 1 – Pool links for your information
- 2 – Server urls from each pools
- 3 – Select Algorithm type
- 4 – Your wallet address
- 5 – Pool password (normally setted as x)
- 6 – Give priority with your own numbers; the system counts lowest number as first and the next as second regardless how big are the numbers.

Note

For P2Pool you should add **/+0.08** at the end of your account to manage the hashrate for the best outcome.

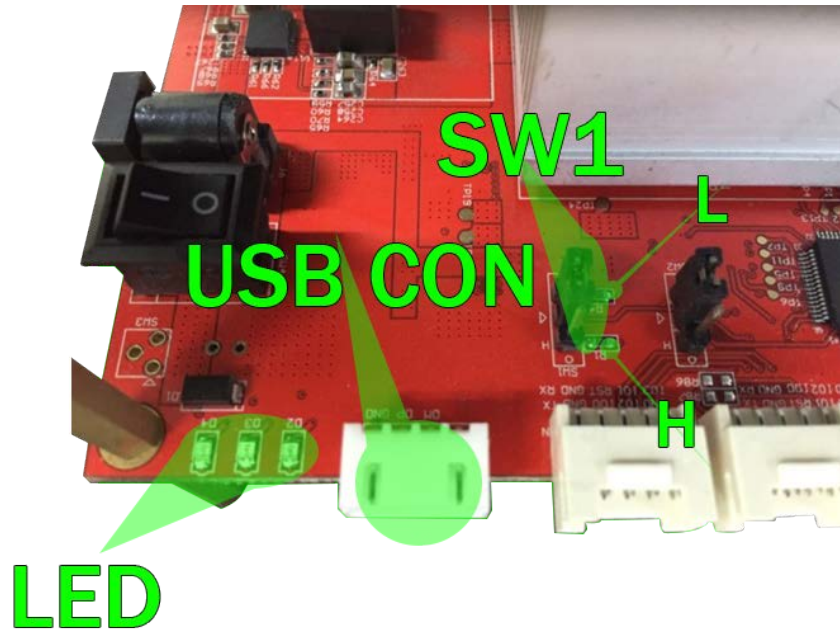
Example)

Pools				
URL	Algo	User	Pass	Priority
stratum+tcp://quark.eu.nicehash.com:3333	quark	3KH3Fs7rzJhVZ	x	10
stratum+tcp://211.99.224.206:7903	x15	3uQ1WkP/+0.08	x	90

Keep Mini Up-to-date

Upgrade guide

✓ Configuration



	Description
SW1	Boot mode setting. H : DFU boot mode , L : Normal
USB CON	4-pin USB connector. Use Baikalteam made 4pin USB Cable.
LED	Show DFU boot mode enter in 'H' of SW1. RGB is blinking one by one.
4-pin USB cable	USB A plug to 4-pin connector converter cable

✓ Firmware Update

01 Before the installation

1. Power off Mini.
2. Switch SW1 to H.

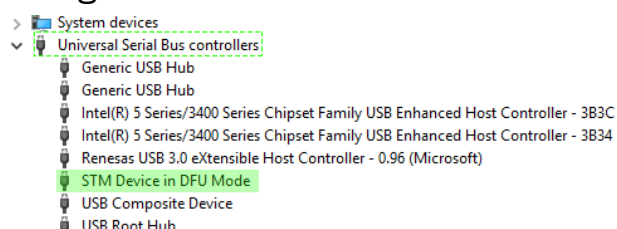


3. Connect 4-pin USB cable provided in the product package into USB CON.
4. Turn Mini on. LED at installation mode would glow one by one as waves go through.
5. Download following list of updating tools available from [here](#) :

Name	Description
dfu-util.exe	USB DFU(Device Firmware Utility) utility.
update_firmware_mini.bat	Firmware update batch file.
zadig_2.1.2.exe	USB Driver Installer
baikal_mini.bin	Firmware binary image.

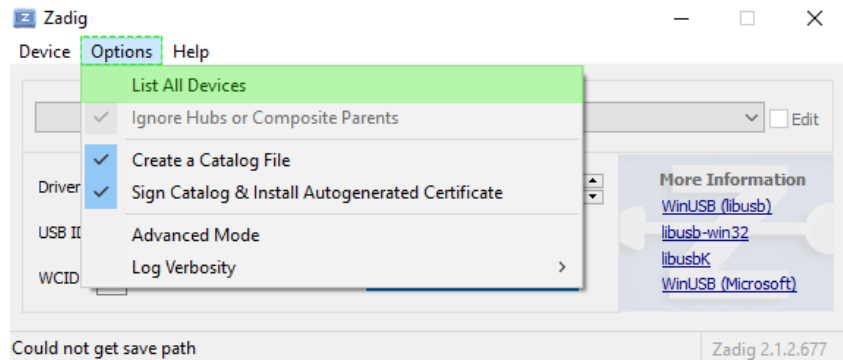
02 Install DFM Utility driver

1. Connect the other end of 4-pin USB cable to your PC.
2. Check if you have STM Device in DFU Mode on device manager.

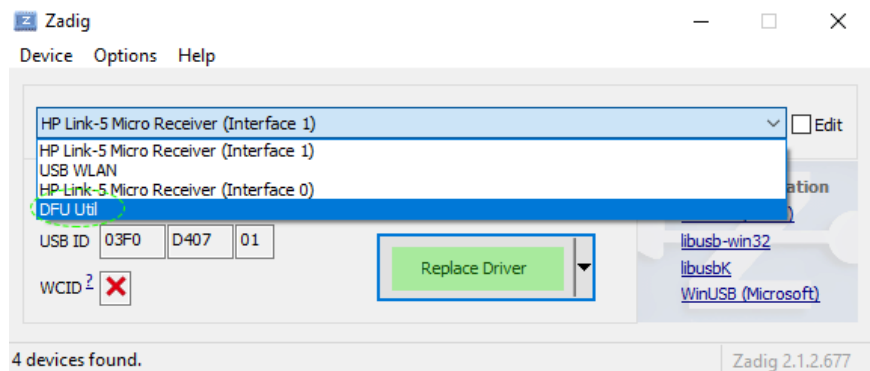


3. Run zadig_2.1.2.exe

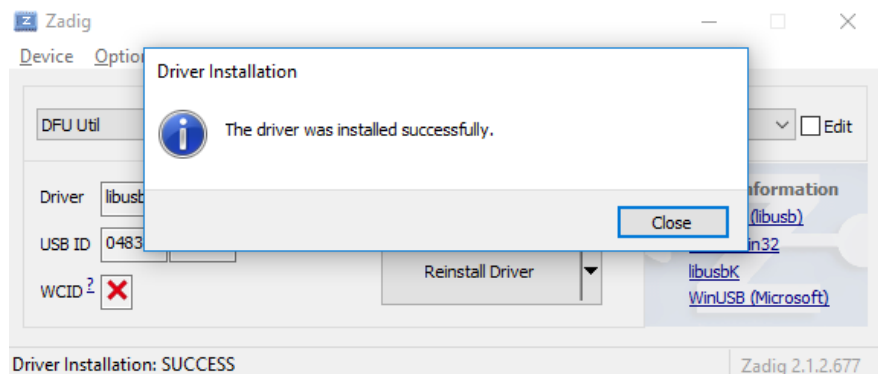
4. Select Options>List all devices.



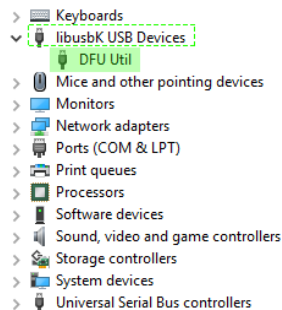
5. Select 'DFU Util' on USB device list, then replace driver.



6. It should be followed by pop-up message below.



7. DFU Util would appear as a replacement of STM Device in DFU Mode on Device Manager if installed successfully.



03 Update firmware

1. Run **update_firmware_mini.bat** and console window would pop up.

```
C:\Windows\system32\cmd.exe
C:\Users\Baikal\Downloads\Baikal_MINI_V2.1_0712\Baikal_MINI_V2.1_0712\Baikal_MINI_V2.1_0712>dfu-util -a 0 -d 0483:df11 -
s 0x08002000 -leave -D baikal_mini.bin
dfu-util 0.9

Copyright 2005-2009 Weston Schmidt, Harald Welte and OpenMoko Inc.
Copyright 2010-2014 Tomod Volden and Stefan Schmidt
This program is Free Software and has ABSOLUTELY NO WARRANTY
Please report bugs to dfu-util@lists.gnumonks.org

Invalid DFU suffix signature
A valid DFU suffix will be required in a future dfu-util release!!!
Opening DFU capable USB device...
ID 0483:df11
Run-time device DFU version 011a
Claiming USB DFU Interface...
Setting Alternate Setting #0 ...
Determining device status: state = dfuIDLE, status = 0
dfuIDLE, continuing
DFU mode device DFU version 011a
Device returned transfer size 1024
DFUSe interface name: "Internal Flash"
Downloading to address = 0x08002000, size = 38764
Download [=====] 44% 17408 bytes
```

2. When the progress reaches 100% window will close itself.

04 Finish

1. Power off Mini.
2. Remove 4-pin USB cable from USB CON.
3. Set SW1 to 'L'.
4. Power on Mini-ready-to-mine.

✓ SD Card Update

OrangePI SD Card setup guide

01 Download files

1. Download the OrangePI image from the following link :

File : OrangePI-PC_8G_V2.1_0712.img

[Download Link 1](#) : Google drive

2. Download Win32diskImager Utility.

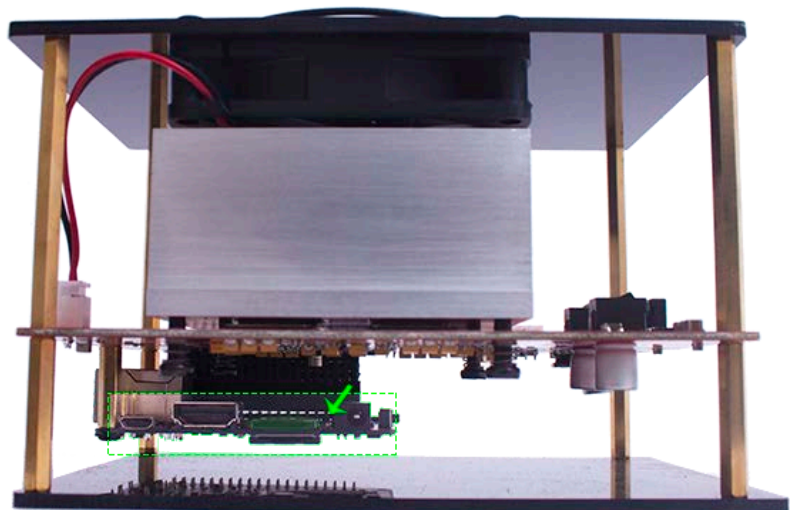
File : Win32DiskImager-0.9.5-binary.zip

[Download Link 1](#) : Google drive

02 Update OrangePI SD Card

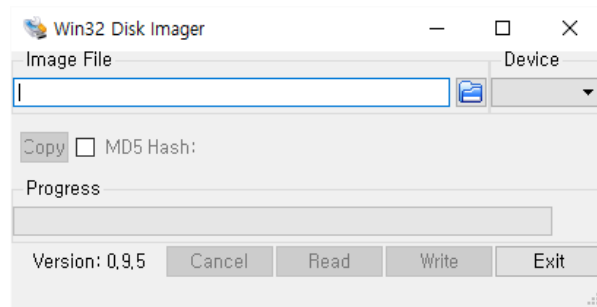
1. Turn Mini off.

2. Remove the SD Card from the OrangePI Controller.

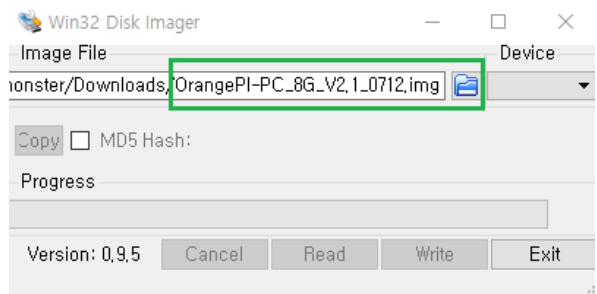


3. Read the SD card on your computer and check which drive letter it assigned.

4. Run the win32diskImager utility.

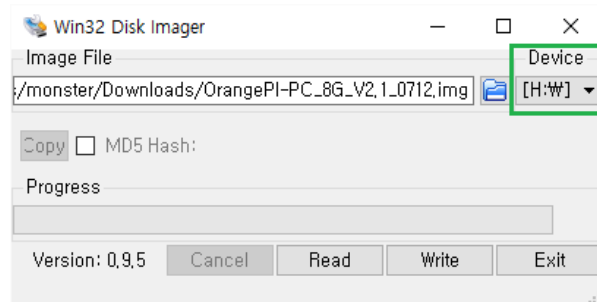


5. Select the OrangePI-PC_8G_V2.1_0712.img



6. Select the driver letter of the SD card in the device box.

7. Be careful to select the correct drive; if you get the wrong one you can destroy your data on the computer's hard disk!



8. Click Write and wait for the write to complete.

9. You are now ready to plug the card into your OrangePI.