

Beagle User Manual

Model name : PR-B727

HW Version: V1.3

Date : 2024/10/20

(Signature)

(Date)

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VERSION CONTROL

Revision

Version	Date	Name	Remarks
Version 1.0	5 th Aug. 2024	Mark Liao	The first version
Version 1.1	7 th Aug. 2024	Daniel Kuo	Review and correction some items.
Version 1.2	14Aug, 2024	Amy Huang	Wording correction
Version 1.3	20 th Oct, 2024	Amy Huang	Update
Version 1.3.1	4 th Nov, 2024	Amy Huang	Update
Version 1.3.2	28 th Nov, 2024	Amy Huang	Update

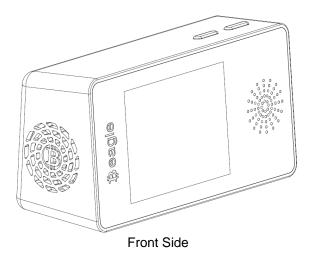
CHAPTER 1 PRODUCT INTRODUCTION

1.1 PRODUCT INTRODUCTION

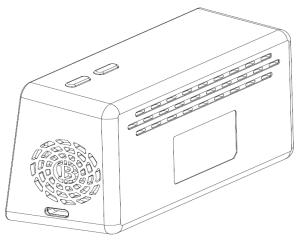
Beagle is a BTC mining machine with one ASIC of multi-cores of SHA256 CPU inside. This product is designed to mine the BTC/BCH/XEC by connecting to PPLNS or Solo mining pools. It is very easy to setup and start to mine any time.

The network connection of this device is via 2.4GHz WIFI (802.11 bgn) to connect the internet. User can also use WIFI to browse this device setting and status. However, when the device first connects, it will be in WIFI router mode. User could connect to the device via WIFI, then use browser to set up the device network setting. After the network is set up, user could use the browser UI to set up the preferred mining pools, wallet and other settings. You will see the details on the following sections.

1.2 DEVICE OUTLOOK 1.2.1 FRONT VIEW







Rear Panel

CHAPTER 2 INSTALLATION

2.1 PRODUCT INSPECTION

- Unpacking the package. Open the box and take out the device and accessories.
- In the box, there are one device and one cable (Depends on different package, its USB to USB type C or USB type C to USB Type C cable).
- Please note: no power adapter is enclosed in the package. You may use your existing cell phone power adapter. (Both USB or USB type C can be use, as long as the power supply exceeds 5V/2A.)
- Inspect equipment: check the device appearance, display, socket, connector, NO contamination, and deformation should be found.
- Checking accessories according to below shipping list.
 - Please contact the distributor if damages or lack of accessories are found.

Shipping list (except the device itself):

Accessory	Quantity	Unit
Cable	1	PCS

2.2 INSTALLATION

Before install the mining device, you should prepare WIFI connection (Only available for 2.4G) account/password and one device (it may be your laptop/desktop or tablet / cell phone) that can be connected to the WIFI router.

Prepare the mining pool you want to connect (no matter PPLNS or SOLO mining pools), and the account /password of the pool. Please notice that every mining pool has its own independent way for mining. Some will need to create an account, some are just to fill your wallet address, please check with the mining pool that you want to use for how to set up.

Plug the cable into the device and then start to set up.

CHAPTER 3 SET UP THE DEVICE

When the device is first time power on, it will be on AP mode to let user to use the browser to set up the device.

You will see the device showing the following screen (SSID Name will be different on each device):

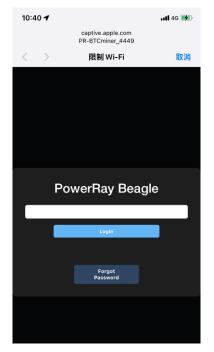


Then you could use your laptop/desktop/cell phone to connect the device, the UI will guide you to setup your WIFI SSID by your account/password. (Please notice the device is only available to connect to 2.4G 802.11bgn router)

3.1 SETUP WIFI CONNECTION& MINING POOL& OTHERS

3.1.1 DEFALUT PASSWORD:

When you first time connect to the device by the SSID, the browser will be opened automatically. The UI is requested to enter the password to get login as shown below. If the login page is not automatically pop up, you can open your browser and key in the IP address "192.168.4.1" to open the login page.



The default password is the device serial number on the label shown below. Enter the device serial number to login the Web UI. After you login the UI, you can follow the section 3.1.5 to change the password.

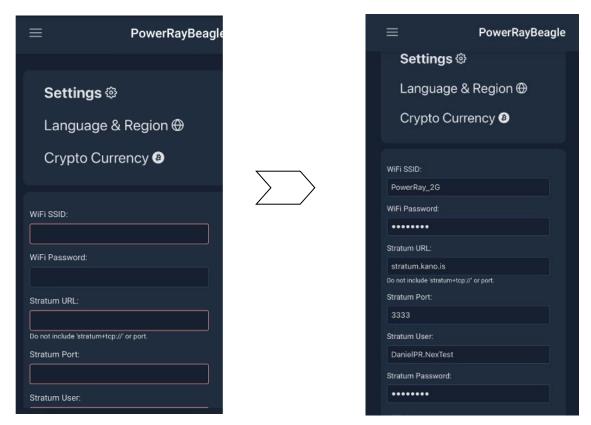
螺鏡 (含設備所有相	關的標誌):
agle	產品型號: PR-B727 產品名稱:區塊鏈處理器 電源輸入: DC 5V/2A
ğ	Э ^{D32275} А1ВА243200012
ш	生產商:玖銳有限公司PowerRay Co., LTD. 地址:新北市新店區中興路二段190號7F-1

3.1.2 SETTINGS

After you connect to the device by the SSID, the browser will be opened automatically and going to the setup page, then you can see the following on the web page.



Please press the TOP Menu button (pointed by the red arrow) and go to set up page as following



Fill in your WIFI router account/password to the device, here is an example by setting up the SOLO mining in KANO mining pool. (You can see more available pools in Section 3.3. You can also try to look for different mining pools on the internet. Please notice that KANO pool default mining is PPLNS not SOLO. If user wants to mine SOLO mode, please refer to KANO help/solo (https://kano.is/index.php?k=soloinfo))

3.1.2.1 ABOUT MINING POOLS

Please notice that every mining pool has different mining account setting ways. Most of the BTC mining pools need to go to their web site to create account, and setup the account/password on the mining device locally. Some mining pools only need to setup the wallet address on the local device, the wallet address will be account for these mining pools.

Please check the details on the mining pool that you like to mine.

Here is the example of KANO mining pools setting.



Stratum URL : Please fill the mining pool link URL on the row.

Stratum Port :Depends on the mining pool ,KANO pool is assigned by port 3333

Stratum User : The name of this device , you can also use "." to add more device as the same account name with different works.

Stratum Password : As KANO pool requests, you can put anything but NO blank for the password.

3.1.2.2 MINING POOLS URL REFERENCE

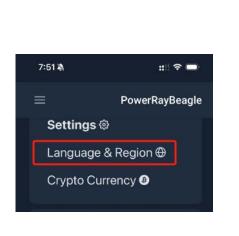
Here are the reference mining pools for SOLO mining pools

No	Pool URL	Port	Website
1	Stratum.kano.is	3333	https://kano.is/index.php
2	Pool.vkbit.com	21496	https://web.public-pool.io
3	Pool.tazmining.ch	33333	https://tazmining.ch/#btc2
4	Solo.ckpool.org	3333	https://solo.ckpool.org
5	Btc.zsolo.bid	6057	https://zsolo.bid/en/btc-solo-mining-pool
6	Eu.stratum.slushpool.com	3333	https://braiins.com/pool
7	btc.luckymonster.pro	7112	https://luckmonster.pro
8	Btc.millpools.cc	4567	https://millpool.cc/btc-pool
9	Stratum.solomining.io	7777	https://btc.molepool.com
10	Aminingpool.com	3004	https://aminingpool.com/#btc
11	Pool.mynewmining.com	3333	https://pool.mynewmining.com/#btc2
12	Pubilc-pool.io	21496	https://web.public-pool.io

You can also refer to <u>https://miningpoolstats.stream/bitcoin</u> to see more pools information.

3.1.3 SETUP LANGUAGE & REGION

Click the language & Region then you can set up your language / region and alarm clock information.



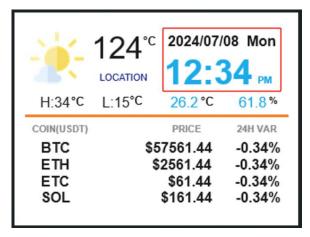




 Choose the available language and county on the list. After choosing the country, you will be able to select your location, please follow the UI to choose the location you are. The weather information will be shown on the LCD as the following screen depending on the location you have selected.

	124 °C location L:15°C	2024/07/ 12:3 26.2 °C	
COIN(USDT) BTC ETH ETC SOL		PRICE 57561.44 52561.44 \$61.44 \$161.44	24H VAR -0.34% -0.34% -0.34% -0.34%

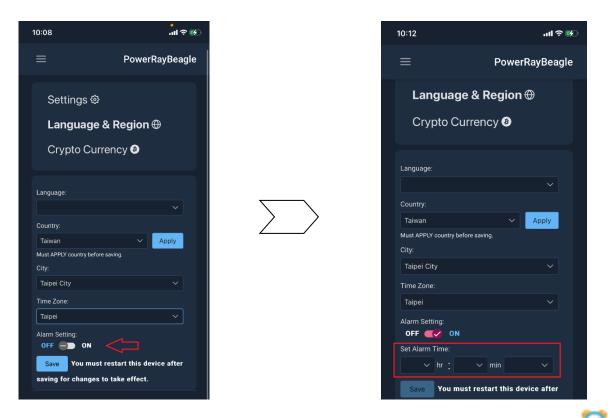
2) After the time zone is set, the time and date will be set up automatically. The LCD shows as the following screen.



3) The device also has temperature and humility detection function. The information will be detected and shown as the following screen.

H:34°C	124 °C location L:15°C	2024/07/ 12:3 26.2 °C	
COIN(USDT)		PRICE	24H VAR
BTC		57561.44	-0.34%
ETH		52561.44	-0.34%
ETC		\$61.44	-0.34%
SOL		\$161.44	-0.34%

4) Once the alarm clock is switched to "On" on the web setting page, the user will be able to set up the desired alarm clock time.



After user set up the alarm clock time and save the setting, the LCD will have the icon 💟 to remind the alarm clock is to be set, like below screen.

H:34°C	124 °C LOCATION L:15°C	2024/07/ 12:3 26.2°C	
COIN(USDT)		PRICE	24H VAR
BTC		57561.44	-0.34%
ETH		\$2561.44	-0.34%
ETC		\$61.44	-0.34%
SOL		\$161.44	-0.34%

When the alarm clock time is up, the device will make alarm beep sound. User can press left button to stop the beep sound.

3.1.4 SET UP CRYPTO CURRENCY

There are 4 crypto currencies can be selected to show on the LCD. The device will provide some of the major crypto currencies real time price for device user.

You can go to the web page of the device to set up what you like to show on the LCD.

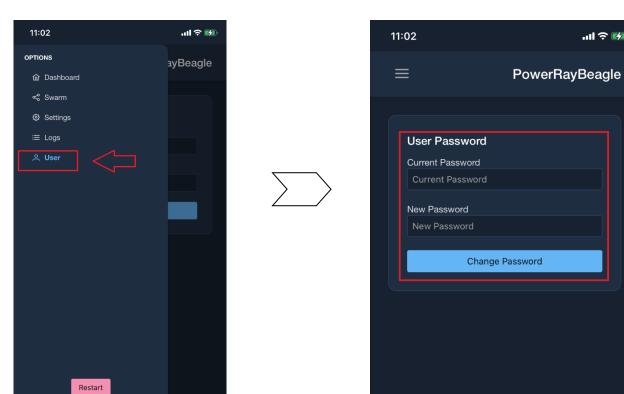
2:24 🔌	::: ? 🗩
≡	PowerRayBeagle
Luiguuy	je a negion w
Crypto	Currency 🛿
Select you Currencie	
Bitcoin (BTC)	
Ethereum (ETH)	
Ethereum Classi	c (ETC) 🗸 🗸
4:	
Binance Coin (Bl	NB) V
Apply You n after applying c	nust restart this device hanges.

Go the Crypto Currency page, choose any item from the drop box menu. After the 4 currencies are chosen, press the Apply button to make it affected. Please notice it will take few seconds device reflash its LCD display.

3.1.5 SET UP PASSWORD

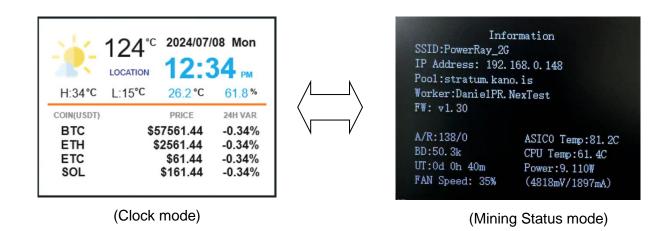
Go the User page to enter the current password and new password. Press " Change Password" then the password would be changed successfully. Simply reflash the web page, then the UI requires the new password to login.

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CHAPTER 4 OPERATION GUIDE

Press the right button to switch LCD to different mode of display. The LCD will switch to another mode for display for every click.



Once the device is setup ready and starts to work, you will see the screens showing by turns as the following. (Here are the reference values on it)

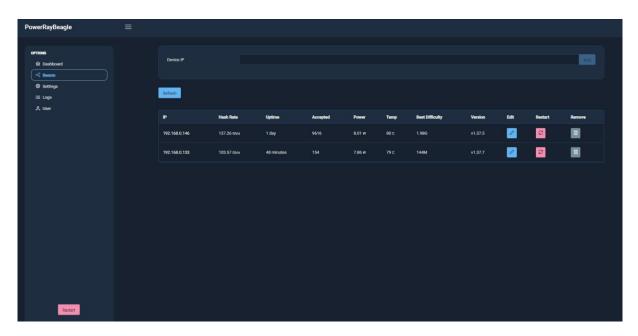
↓ 1つ1°C 2024/07/08 Mon	This Screen shows weather information, location time and
	temperature/humility and real time crypto currency price
	information.
H:34°C L:15°C 26.2°C 61.8%	1) Above the orange line, the left side is current weather
COIN(USDT) PRICE 24H VAR BTC \$57561.44 -0.34%	information of the location you have selected. H/L
ETH \$2561.44 -0.34% ETC \$61.44 -0.34%	means today`s highest /lowest temperature.
SOL \$161.44 -0.34%	The weather ICON shows the current weather status.
	2) Above the orange line, the right side is date/time and
	the device detected temperature and humidity.
	Once the 🔯 icon is shown, it means the alarm
	clock was set; if the alarm clock was not set, the icon
	will not be shown.
	3) Below the orange line, these are real time crypto
	currency prices. Please notice it will be reflash every
	1~5 minutes.

Information SSID:PowerRay_2G	This Screen shows the device information for mining and settings.
IP Address: 192.168.0.148 Pool:stratum.kano.is Worker:Danie1PR.NexTest	SSID : Shows what wifi router is connecting to.
FW: v1.30	IP Address: The device's IP address
A/R:138/0 ASIC0 Temp:81.2C	Pool : The device connected mining pool
BD:50.3k CPU Temp:61.4C UT:0d Oh 40m Power:9.110W	Worker : The device worker name
FAN Speed: 35% (4818mV/1897mA)	A/R:138/0: Accept shares are 138, and reject share is 0
	FW: FW version
	UT: 0d 0h 40m: From turn on, it is 0 day 0 hour and 40
	minutes.
	BD:50.3K: Best difficulty is 50.3K
	FAN Speed:35%: current fan maximum RPM is 35%
	ASIC0 temperature is 81.2C
	CPU temperature is 61.4C
	Power: 9.110W (input 4818mV, consumed 1897mA)

You can also use your smart device (such as cell phone, tablet, laptop/desktop) to browse the device for the setting.

The screen will be as following:

PowerRayBeagle	
ornovs ि Dashboard ् Swarn @ Settings	Hauh Rate 🔗 Shares <table-cell> Best Diffoulty 😒 102.47 Give 146 144M</table-cell>
≡ Logs	i tabate
A ther	122 0 099 122 0 099 122 0 099 123 0 090 123 0 000 123 0 0000 123 0 0000 123 0 0000 123 0 000000000000000000000000
Restant	Power Heat Performance 7,3W 5.2V Power 5.2V Input Voltage OU'l Temperature ASIC Temperature
	Pool Information URL stratum Jano is Port: 3333 Lawr: DanielW NotTrat



PowerRayBeagle	=							
T Une may be ugit								
ортномс 197 Dashboard		Settings 🕸 La	inguage & Region 🕀	Crypto Currency 🛛				
<\$ Swarm <table> Settings</table>		WiFi SSID:	PowerRay_2G					
≡ Logs A User		WiFi Password:						
∠ user		Stratum URL:	stratum.kano.is Do not include istratum+tcp:// or port.					
		Stratum Port:	3333	3333				
		Stratum User:	DanielPR.NexTest	Daniel@R.NexTest				
	Strafum Password: Temperature Setting: <u>Spre</u> You must restart this dev	Stratum Password:						
		10 💼 1F						
		Save You must restart this de	vice after saving for changes to take effec	t				
		SW Version: v1. DSN: A1BB2424		Update Firmware + Browse (Repintment Sol)	Update Website + Itouse (metail) Referentive Webpager offer Lipstering			
Restart								

PowerRayBeagle	≡
ornoes @ Deaboard < Searn @ Setings () Logs & Uar	Overview Model: Beagle Uptime: 50 minutes Will Statuat: Commended Free Heage Momory 56112 Version: v1.37.7 Board Version: 1
	Realtime Logs Stor Logs
Restart	

PowerRayBeagle	≡	
ортюнs ओ Dashboard		User Password
ter Dashboard ≪ Swarm		Current Password Current Password
≈ swarm		
⊕ Settings		New Password New Password
, ≡ cogs		
		Change Password
Restart		

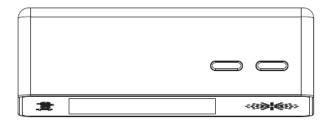
CHAPTER 5 SPECIFICATION

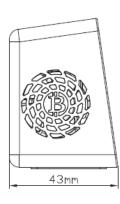
5.1 SPECIFICATION

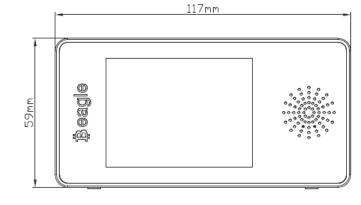
Item	Max	Typical	Min	Unit
Average hash rate in 24H	-	110	-	G H/s
Average power consumption in 24 H.	-	9.8	-	W
Efficiency of ASIC normally	-	65	-	J/T
ASIC Temperature@Env. 25 degree C	95	85	-	°C
Noise	-	<40	-	dB

5.2 MECHANICAL

THE DEVICE SIZE IS :117 X 59 X 43 MM











5.3 ENVIRONMENTAL

ITEM	Normal range
Ambient temperature	0°C~ +40°C
Environment humidity	10~80%, no condensing
Storage temperature	-10°C~+60°C

5.4 DECLARATION OF THE PRESENCE CONDITION OF THE RESTRICTED SUBSTANCES MARKING

Equipment name: Blockchain Processor Model no: PR-B727						
Unit	Restricted substances and its chemical symbols					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr ⁺⁶)	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
PCB	0	0	0	0	0	0
Components	0	0	\bigcirc	0	0	0
Housing	0	0	0	\bigcirc	0	0
LCD Module	0	0	0	0	\bigcirc	0
Note 1 : "Exceeding 0.1 wt %" and "exceeding 0.01 wt %" indicate that the percentage content of the						
restricted substance exceeds the reference percentage value of presence condition.						
Note 2 : "o" indicates that the percentage content of the restricted substance does not exceed the						
percentage of reference value of presence.						
Note 3 : The "	Note 3 : The "-" indicates that the restricted substance corresponds to the exemption.					