



D3 Server Installation Guide

Document Version 0.1 Aug 2017

© Copyright Bitmain Technologies Holding Company 2007 – 2022. All rights reserved. Bitmain Cayman (hereinafter referred to as 'Bitmain') reserves the right to make corrections, modifications, enhancements, improvements, and other changes to its products and services at any time and to discontinue any product or service without notice.

Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All products are sold subject to Bitmain's terms and conditions of sale supplied at the time of order acknowledgment.

Bitmain warrants performance of its products to the specifications applicable at the time of sale in accordance with Bitmain's standard warranty. Testing and other quality control techniques are used to the extent Bitmain



deems necessary to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

Bitmain assumes no liability for third-party applications assistance. Customers are responsible for their products and applications using Bitmain components. To minimize the risks associated with customer products and applications, customers should provide adequate design and operating safeguards.

Bitmain does not warrant or represent that any license, either express or implied, is granted under any Bitmain patent right, copyright or other Bitmain intellectual property right relating to any combination, machine, or process in which Bitmain products or services are used. Information published by Bitmain regarding third-party products or services does not constitute a license from Bitmain to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from Bitmain under the patents or other intellectual property of Bitmain.

Resale of Bitmain products or services with statements different from or beyond the parameters stated by Bitmain for that product or service voids all express and any implied warranties for the associated Bitmain product or service and is an unfair and deceptive business practice. Bitmain is not responsible or liable for any such statements.

All company and brand products and service names are trademarks or registered trademarks of their respective holders.

All text and figures included in this publication are the exclusive property of Bitmain, and may not be copied, reproduced, or used in any way without the express written permission of Bitmain. Information in this document is subject to change without notice and does not represent a commitment on the part of Bitmain. Although the information in this document has been carefully reviewed, Bitmain does not warrant it to be free of errors or omissions. Bitmain reserves the right to make corrections, updates, revisions or changes to the information in this document.

Bitmain

Tel:+86-400-890-8855

www.bitmain.com



Table of Contents

1. Overview	4
1.1 D3 Server Components	5
1.2 Specification	6
2. Connecting the Power Supply	
3. Setting Up the Server	<u>C</u>
4. Configuring the Server	11
4.1 Setting Up the Pool	11
4.2 Modifying the Frequency	
5. Monitoring Your Server	
6. Administering Your Server	14
6.1 Checking Your Firmware Version	14
6.2 Upgrading Your System	14
6.3 Modifying Your Password	
6.4 Restoring Initial Settings	15



1. Overview

1. Overview

The D3 server is Bitmain's newest version in the D3 server series. It boasts a state-of-the-art BM1760 custom-made chip using 28nm technology. All D3 servers are tested and configured prior to shipping to ensure easy set up.







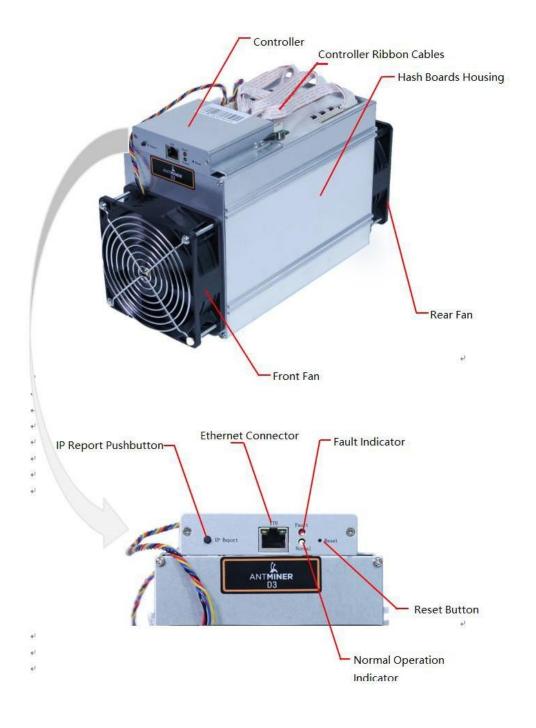
Power supply unit is **not included**. Please provide your own ATX power supply.



1. Overview

1.1 D3 Server Components

The D3 server main components and controller front panel are shown in the following figure:





1.2 Specification

Hash Rate	17 GH/s±5%
Rated voltage	11.60 ~ 13.00V
Frequency	487M
Estimated wall outlet power consumption (with	
APW3, 93% efficiency, 25°C ambient temperature)	970W + 7%
Estimated wall outlet power efficiency (with	
APW3, 93% efficiency, 25°C ambient temperature)	57mJ/MH + 7%
Dimensions (L x W x H)	320mm*130mm*190mm
Net weight without packaging	4.2kg
Operating ambient temperature	0 ~ 40°C



The server does not contain a DC/DC converter; therefore, higher input voltage will cause higher Mining efficiency.



2. Connecting the Power Supply

2. Connecting the Power Supply

Ten PCI-e connectors are located at the top of the D3 server for connecting the PSU as follows:

- Nine PCI-e connectors for the hash boards. Each hash board has a set of three PCI-e connectors.
- One PCI-e connector located on the controller.



Each hashboard must be powered by the same PSU on both connectors to prevent

Possible damage and instability.

To connect the power supply:

1. Connect PSU power cable connectors to each of the nine PCI-e connectors on the top of the D3 server, ensuring that each hash board is powered by the same PSU.



- 2. Connect a PSU power cable connector to the D3 server PCI-e connector on the controller.
- 3. Connect the network cable to the ETH port. (WIFI is unavailable for servers)
- 4. To power up your D3 server, connect the PSUs to the power wall outlet.



If you are using more than one PSU, power up the PSU connected to the controller AFTER you have powered up the other PSU(s).



2. Connecting the Power Supply



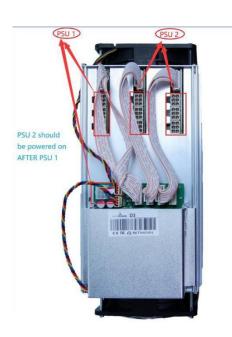




Figure 2-2. PCI-E Connectors - Incorrect Connection



3. Setting Up the Server

3. Setting Up Server

To set up the server:



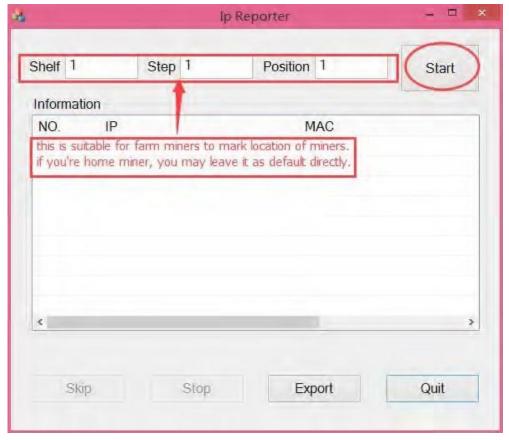
The file IPReporter.zip is supported by Microsoft Windows only.

- 1. Go to the following site: https://shop.bitmain.com/support/download
- 2. Choose 'Others' and download the file: IPReporter.zip
- Extract the file.



The default DHCP network protocol distributes IP addresses automatically.

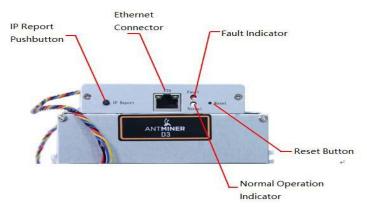
- 4. Right-click **IPReporter.exe** and run it as Administrator.
- 5. Select one of the following options:
 - Shelf, Step, Position suitable for farm servers to mark the location of the servers.
 - Default suitable for home servers.
- 6. Click Start.



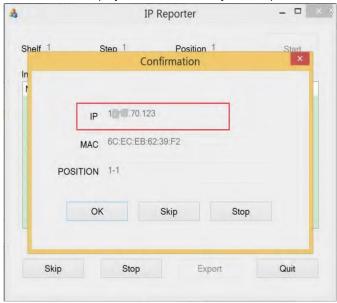


3. Setting Up the Server

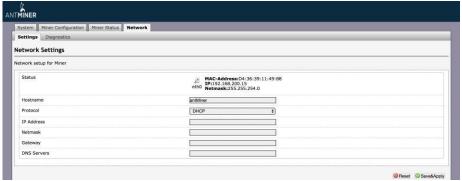
7. On the controller board, click the IP Report button. Hold it down until it beeps (about 5 seconds).



The IP address will be displayed in a window on your computer screen.



- 8. In your web browser, enter the IP address provided.
- 9. Proceed to login using root for both the username and password.
- 10. In the Network section, you can assign a Static IP address (optional).
- 11. Click Save & Apply.





4. Configuring the Server

4. Configuring the Server

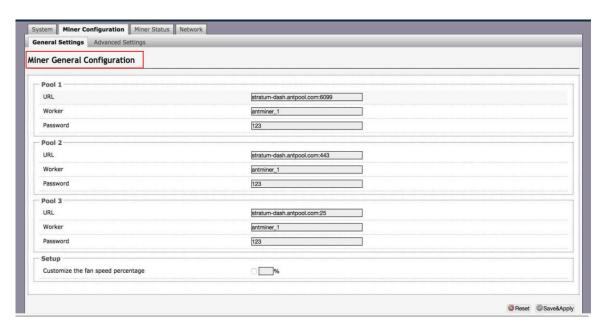
4.1 Setting Up the Pool

To configure the server:

- 1. Click General Settings.
- 2. Set the options according to the following table:

Option	Description			
Pool URL	Enter the URL of your desired pool. The D3 server can be set up with three mining pools, with decreasing priority from the first pool (pool 1) to the third pool (pool 3). The pools with low priority will only be used if all higher priority pools are offline.			
Worker	Your worker ID on the selected pool.			
Password	The password for your selected worker.			

3. Click Save & Apply.





4.2 Modifying the Frequency

You are able to modify the frequency value through 'Configuration —>Advanced Settings'.



Bitmain recommend a default frequency of D3 server , and Overlocking the server will void the warranty immediately.





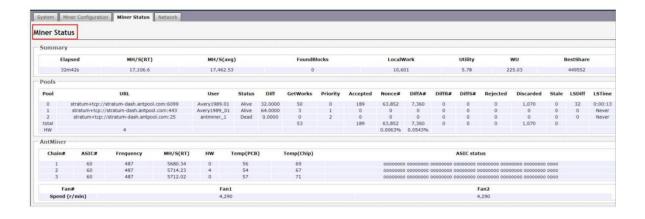
5. Monitoring Your Server

5. Monitoring Your Server

To check the operating status of your server:

- 1. Click the status marked below.
- 2. Monitor your server according to the descriptions in the following table:

Option	Description				
ASIC#	Number of chips detected in the chain.				
Frequency	ASIC frequency setting.				
GH/S(RT)	Hash rate of each hash board (GH/s)				
Temp(PCB)	Temperature of each hash board (°C).(Applied only to server with fixed frequency)				
Temp(Chip)	Temperature of the chips on each hash board (°C).				
ASIC status	One of the following statuses will appear:				
	O - indicates OK				
	• X - indicates error				
	indicates dead				





Note: The D3 server will stop running when the Temp(PCB) exceeds to 85°C, there will be an error message "Fatal Error: Temperature is too high!" shown in the bottom of kernel log page.



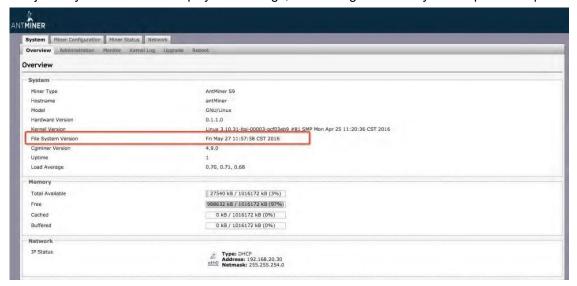
6. Administering Your Server

6. Administering Your Server

6.1 Checking Your Firmware Version

To check your firmware version:

- 1. In System, click the Overview tab.
- 2. **File System Version** displays the date of the firmware your server use. (Screenshot below of S9 server just for your reference to display the message, the message shows on your computer shall prevail.



6.2 Upgrading Your System



Make sure that the D3 server remains powered during the upgrade process. If power fails before the upgrade is completed, you will need to return it to Bitmain for repair.

To upgrade the server's firmware:

1. In System, click Upgrade.

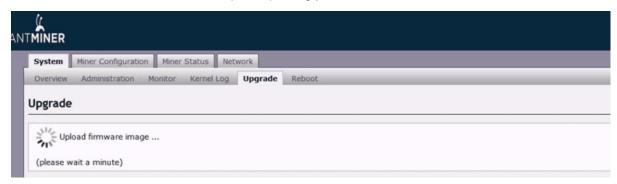


2. For Keep Settings:

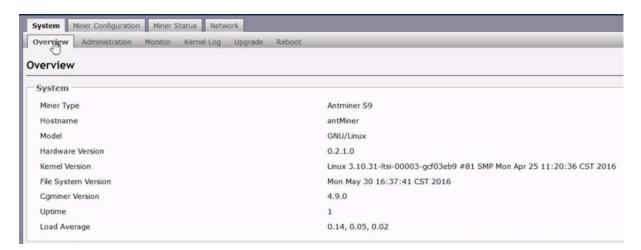
- Select the check box to keep your current settings (default).
- Clear the check box to reset the server to default settings.
- 3. Click the 选择文件 (Browse) button and navigate to the upgrade file. Select the upgrade file, then click Flash image. A message appears notifying you if the D3 server firmware can be upgraded and if yes, will then



proceed to flash the image. (Note: Please do not extract the update file and keep the power on during updating firmware or otherwise the server needs to be returned to the factory to repair. And around two minutes will be needed to complete updating.)



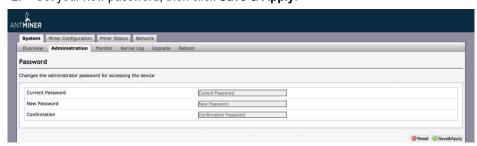
When the upgrade is completed successfully, the following message will appear: (Screenshot below of S9 server just for your reference to show the message, the message shows on your computer shall prevail).



6.3 Modifying Your Password

To change your login password:

- 1. In System, click the Administration tab.
- 2. Set your new password, then click Save & Apply.



6.4 Restoring Initial Settings

To restore your initial settings, two methods below for your reference.

- 1. Turn on the server and let it run for 5 minutes.
- 2. On the controller front panel, press and hold the **Reset** button for 10 seconds.



Resetting your server will reboot it and restore its default settings. The red LED will automatically flash once every 15 seconds if the reset is operated successfully.



Regulation:

FCC Notice (FOR FCC CERTIFIED MODELS):

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

EU WEEE: Disposal of Waste Equipment by Users in Private Household in the European Union



This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handling it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information

about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where your purchased the product.

台湾 ROHS:

		設備名稱	í:	, 型號:		
單元		有害物质				
	鉛 (Pb)	汞 (Hg)	鍋 (Cd)	六價鉻 (Cr+6)	多溴聯苯 (PBB)	多溴二苯 醚 (PBDE)
外殼	0	0	0	0	0	0
電路板組 件	_	0	0	0	0	0
其他線材		0	0	0	0	0

備考 1. "超出 0.1 wt %"及"超出 0.01 wt %"係指限用物質之百分比含量超出百分比含量基準

值。

備考 2. "○"係指該項限用物質之百分比含量未超出百分比含量基準值。

備考 3. "一"係指該項限用物質為排除項目