

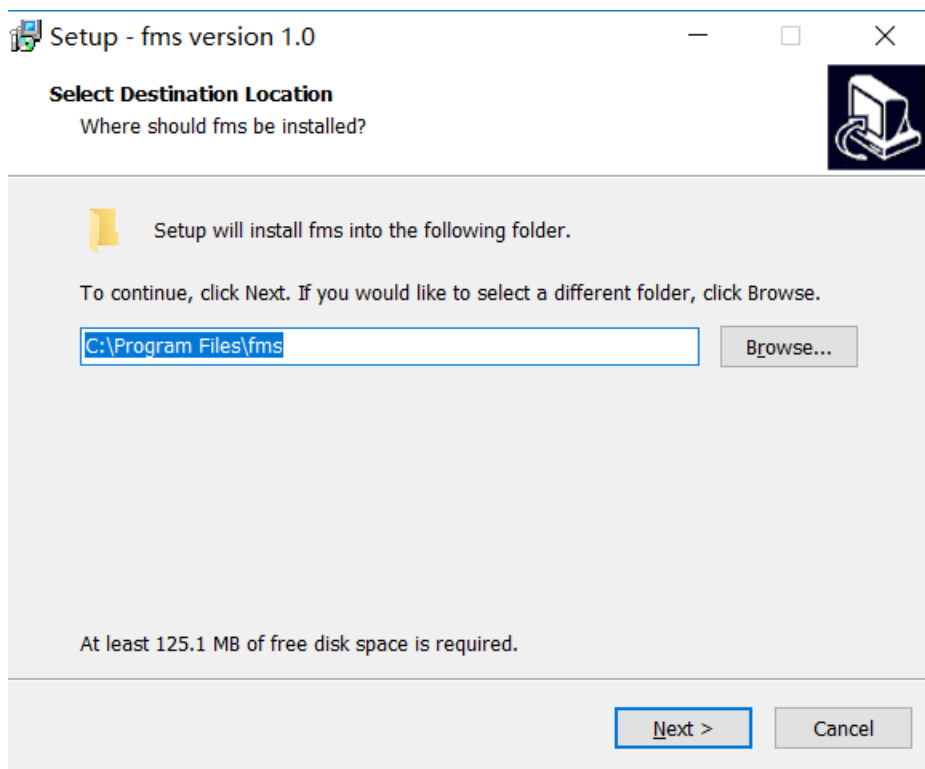
FMS 1.3 User Guide

● Installation

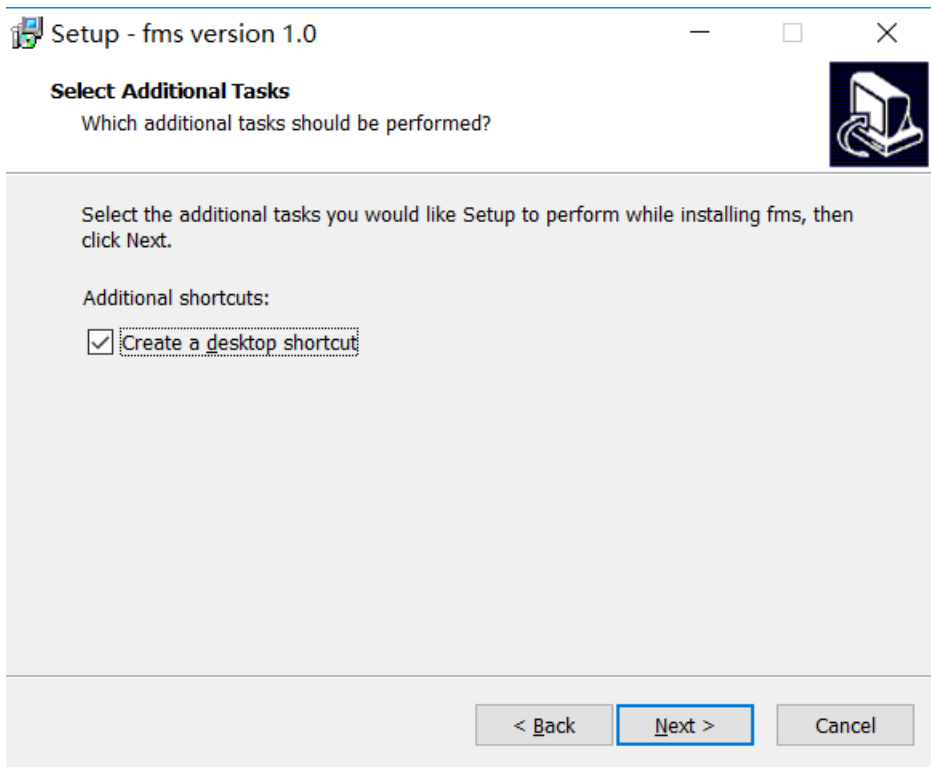
1. Double click fms.exe icon to start the installer.



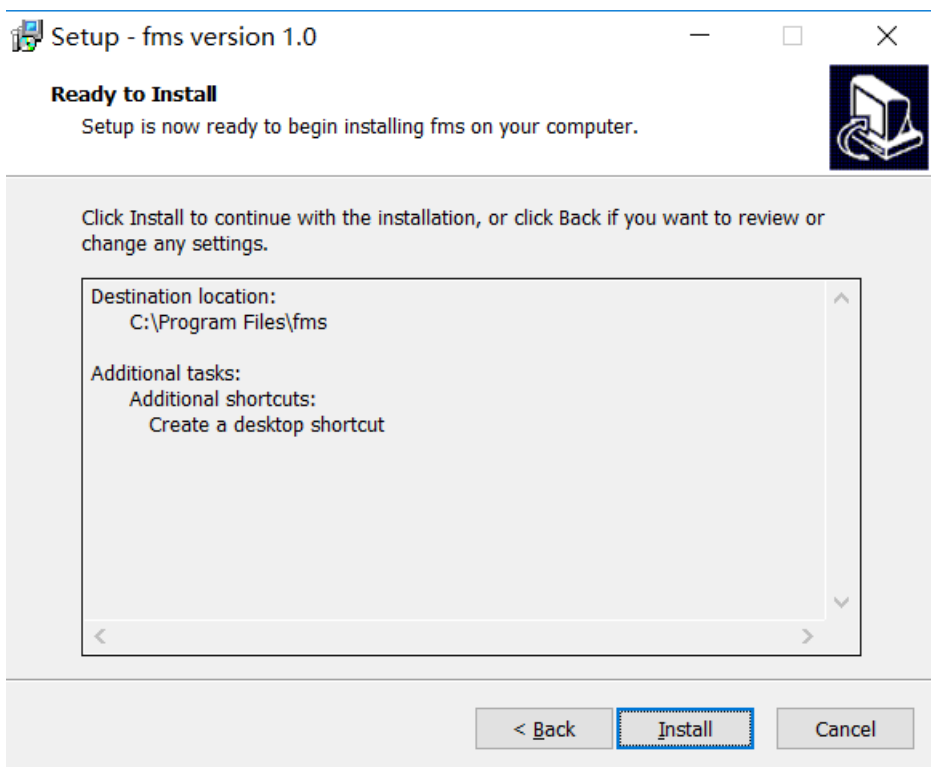
2. Specify the installation directory in the following installer window:



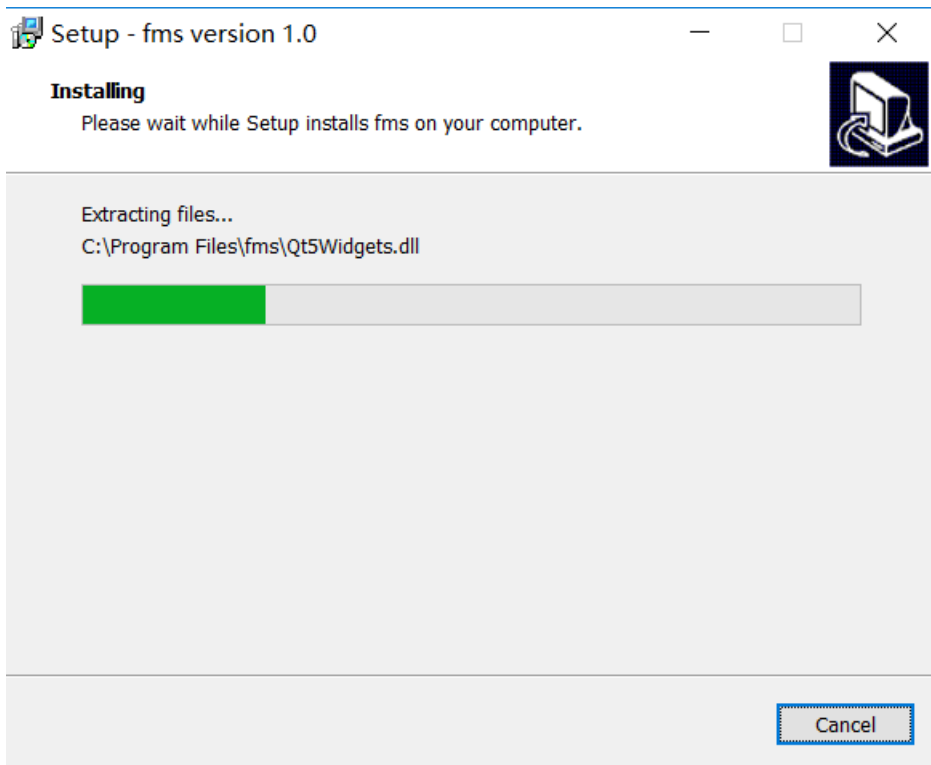
3. Click Next:



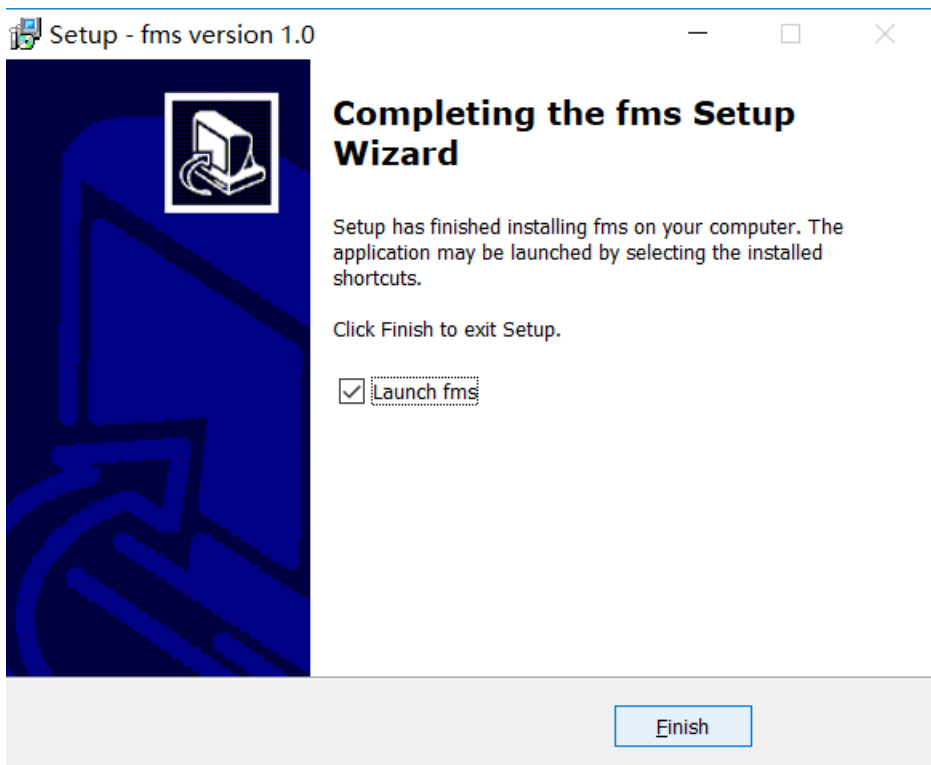
4. Click Next:



5. Click Install to start installation:



Once the progress is completed:

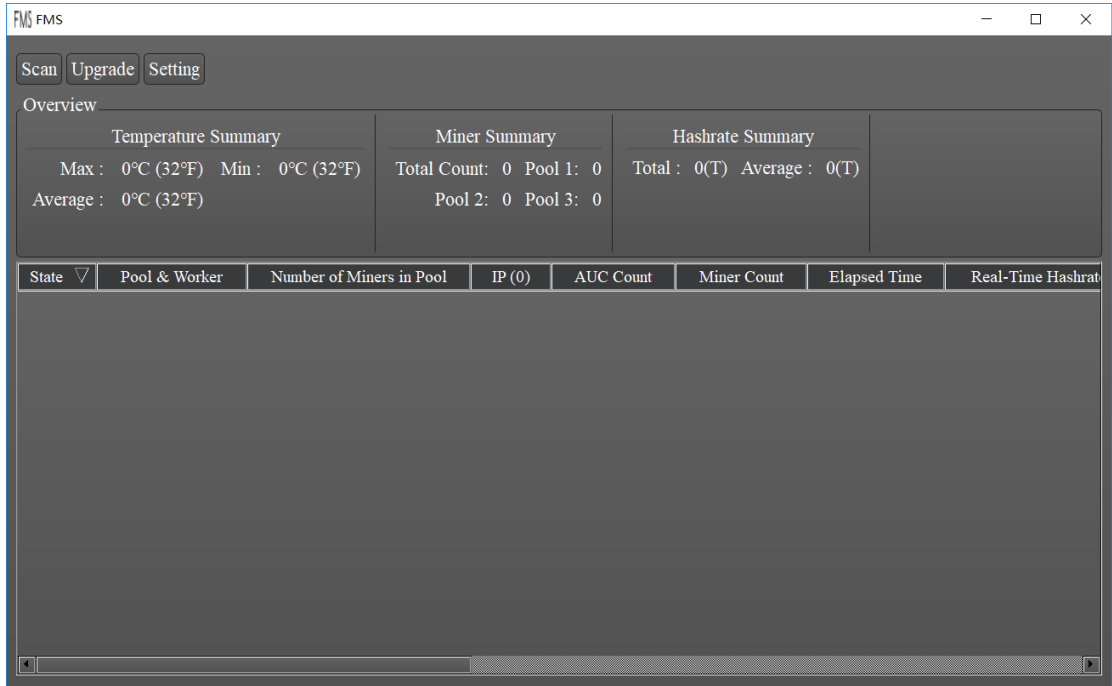


Click finish to finish the installation.

● User interface Introduction



1. Double click the desktop icon to enter FMS:



Scan		manual scanning
LED ON		Batch turn on LED
LED OFF		Batch turn off LED
Upgrade		firmware upgrade
Restart		Batch restart miners
Change Pool		Batch change pool setting
Setting		change settings
Temperature Summary Max : 0°C (32°F) Min : 0°C (32°F) Average : 0°C (32°F)		temperature monitoring

<table border="1"> <thead> <tr> <th colspan="4">Miner Summary</th> </tr> </thead> <tbody> <tr> <td>Total Count:</td> <td>0</td> <td>Pool 1:</td> <td>0</td> </tr> <tr> <td>Pool 2:</td> <td>0</td> <td>Pool 3:</td> <td>0</td> </tr> </tbody> </table>	Miner Summary				Total Count:	0	Pool 1:	0	Pool 2:	0	Pool 3:	0		miner monitoring
Miner Summary														
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<table border="1"> <thead> <tr> <th colspan="4">Hashrate Summary</th> </tr> </thead> <tbody> <tr> <td>Total :</td> <td>0(T)</td> <td>Average :</td> <td>0(T)</td> </tr> </tbody> </table>	Hashrate Summary				Total :	0(T)	Average :	0(T)		hash rate monitoring				
Hashrate Summary														
Total :	0(T)	Average :	0(T)											

The State column provides checkboxes to select or unselect each miner for other operations (like firmware Upgrade). The Pool & Worker column shows the mining pool and miner ID.

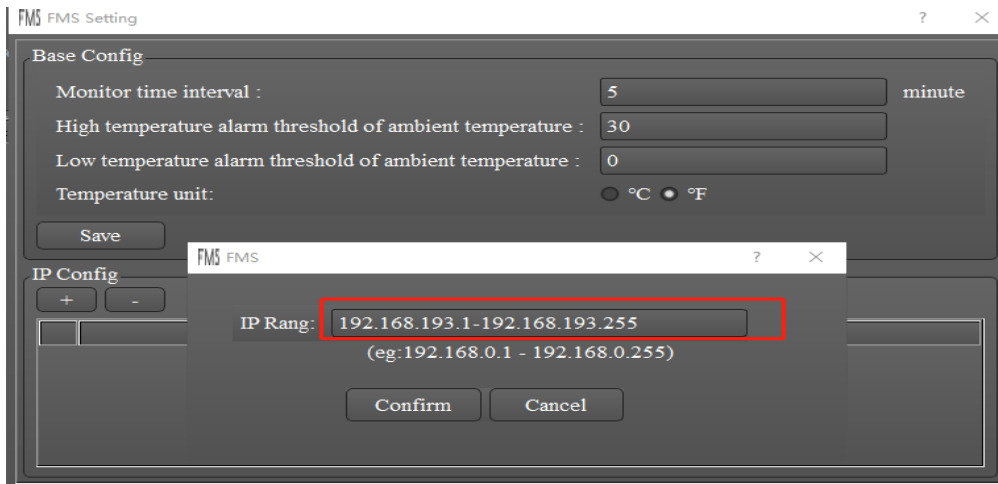
● Usage

1. Miner Discovery

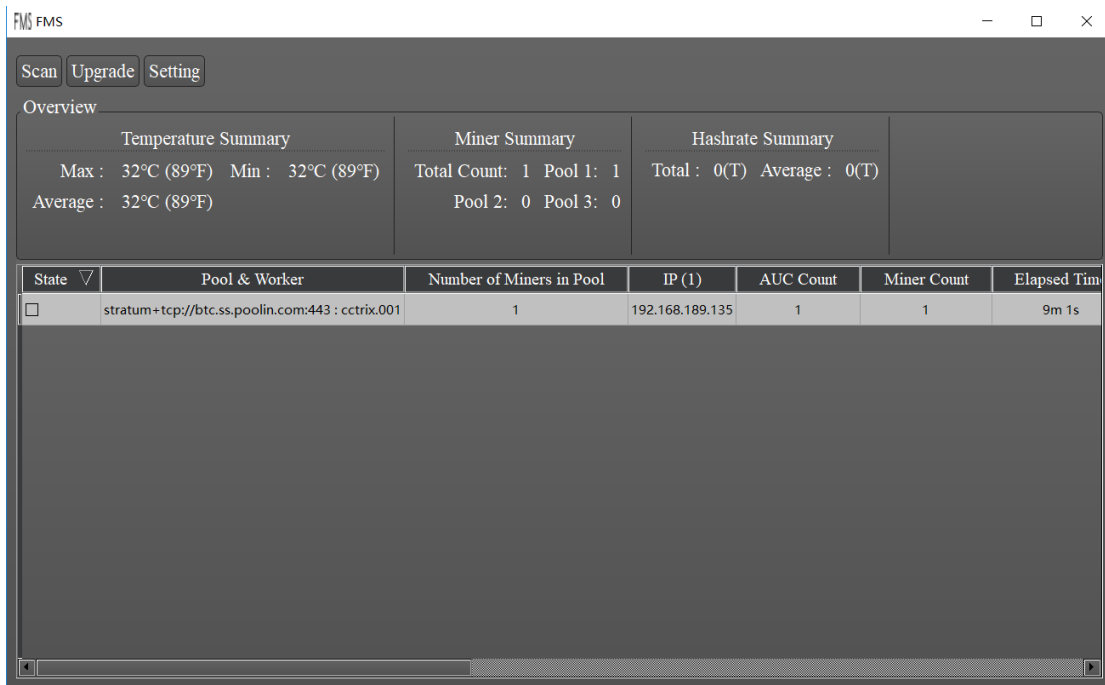
If the miners and the management PC are in the same network, use the following procedure to discover the miners. Click Settings to bring up the Base Config window:



Click "+" button and enter the subnet IP range for the miners (e.g. 192.168.193.1-192.168.193.255), and click Confirm to auto-discover the miners.

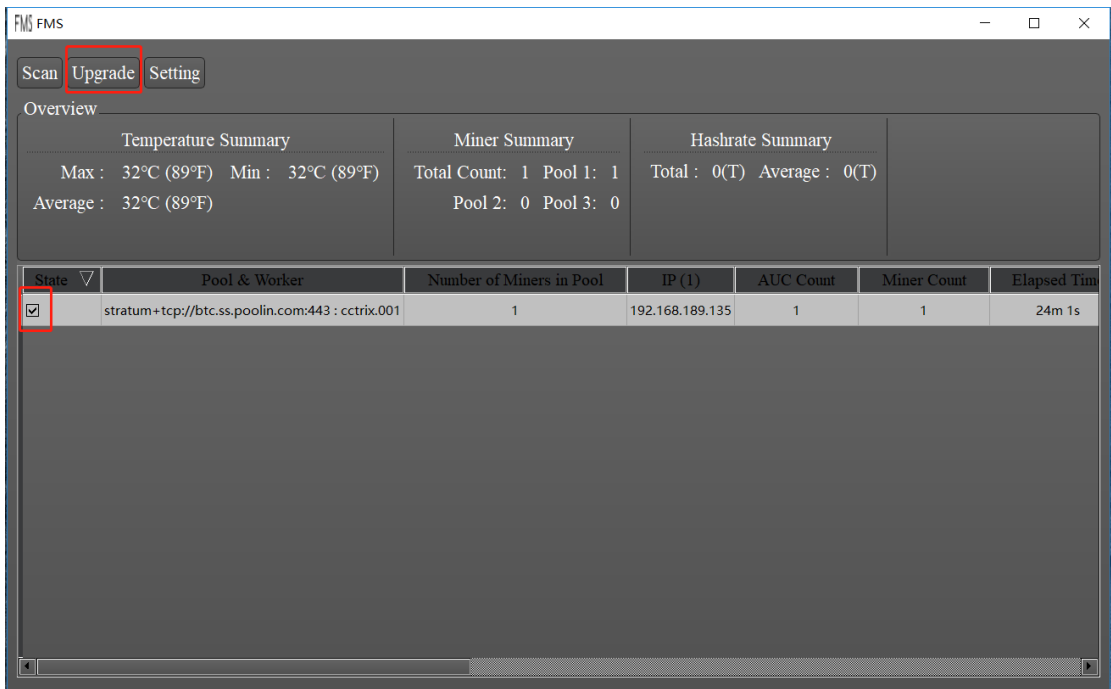


Select miners and click **Save**, the discovered miner IP addresses will be shown in the main window:

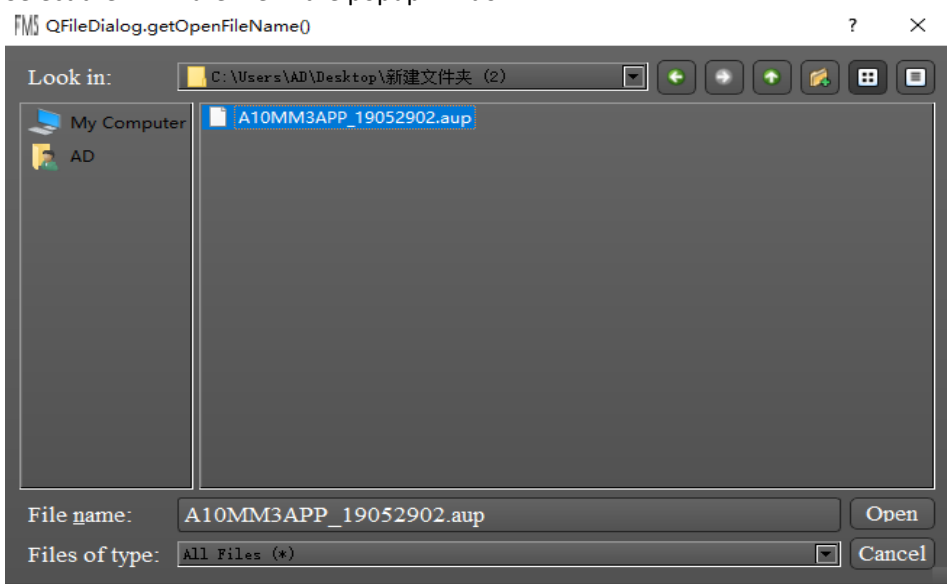


2. Firmware Upgrade

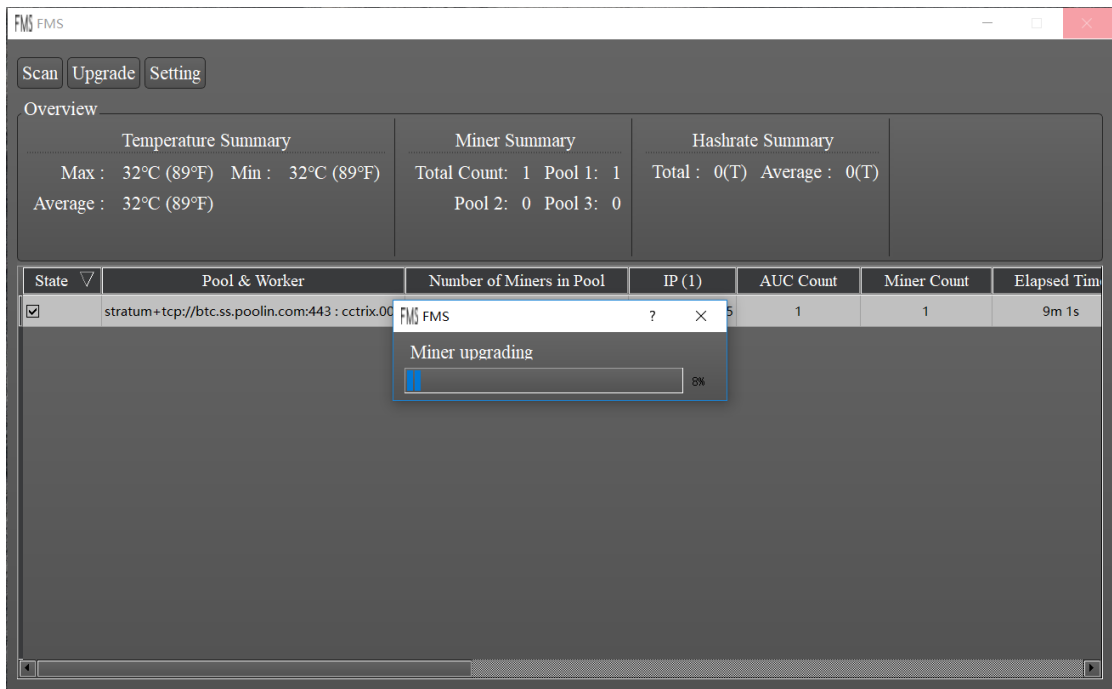
Select the miner to be upgraded in the main window, and click Upgrade



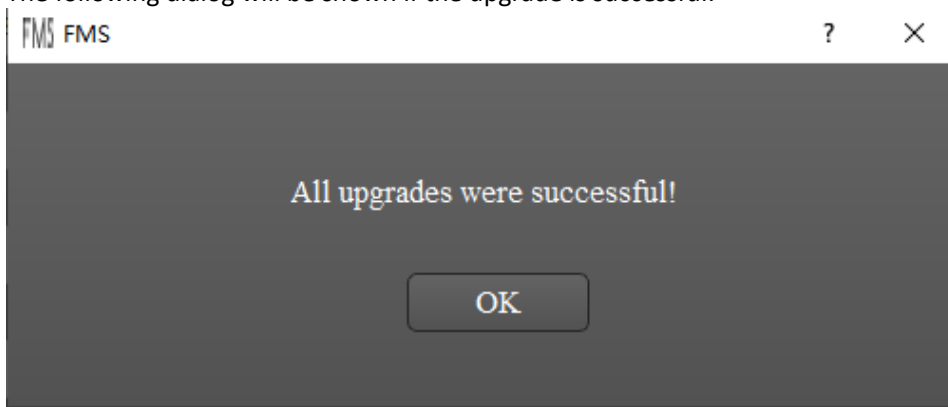
Select the firmware file in the popup window:



Click Open to begin the upgrade process.



The following dialog will be shown if the upgrade is successful:



3. Batch Turn On/Off LED

First select one or multiple miners from table by clicking the checkbox of state column. Then click LED ON or LED OFF button to switch LED for selected miners. During the process, a progress dialog will popup. When the progress dialog finish, it means LED switching operation finish and a result dialog will popup.

4. Batch Restart

First select one or multiple miners from table by clicking the checkbox of state column. Then click Restart button to restart all selected miners. During the process, a progress dialog will popup. When the progress dialog finish, it means restart operation finish and a result dialog will popup. After restarted, these miners need some time to initialize and probably don't appear in FMS until they begin mining.

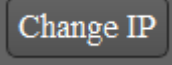
5. Batch Change Pool

First select one or multiple miners from table by clicking the checkbox of state column. Then click Change Pool button to change pool setting for all selected miners. A pool setting dialog will popup to allow users choose which pool they want to use. After conform, FMS will start to change pool setting for selected miners and restart them. During the process, a progress dialog will popup. When the progress dialog finish, it means changing operation finish and a result dialog will popup. After restarted, these miners need some time to initialize and probably don't appear in FMS until

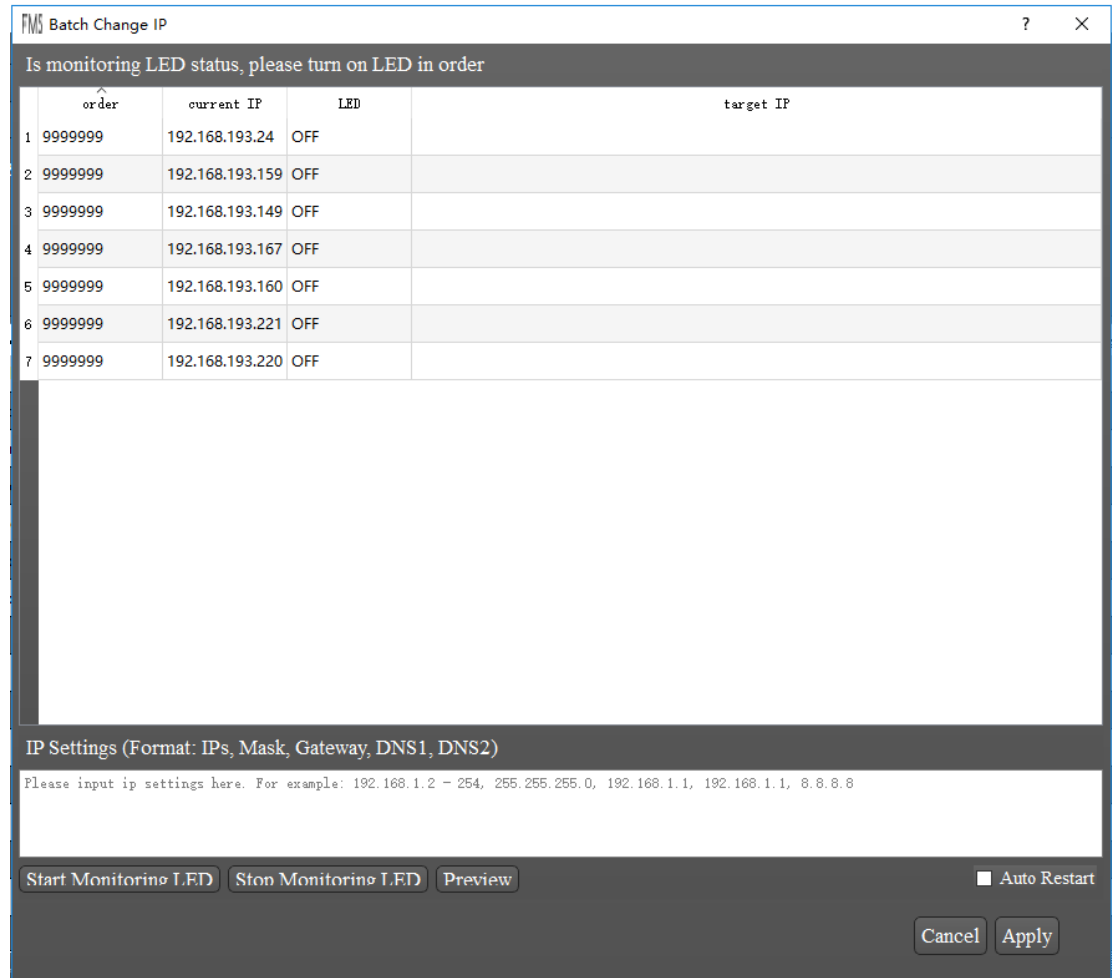
they begin mining.

6. Batch Change Static IP Settings

Step 1: Launch Batch Change IP Dialog



Click check box to select all the miners needed to set new static IP. Then click button to launch Batch Change IP Dialog:



Its topmost line will show operation result or error info or any hint. Below it is a table to show info about all selected miners. The 'order' column means the order number this miner's LED is turned on manually. The default 999999 indicates it has not been turned on yet. The 'current IP' column means current miner IP address. The 'LED' column means LED status of miner. Please note that 'turn off LED' only means LED is not white color. In fact LED will always be on in some other color. The 'target IP' column means which IP address will be set into this miner.

Step 2: Turn On LED in Order

When LED status are all OFF in the table, topmost line usually will show:

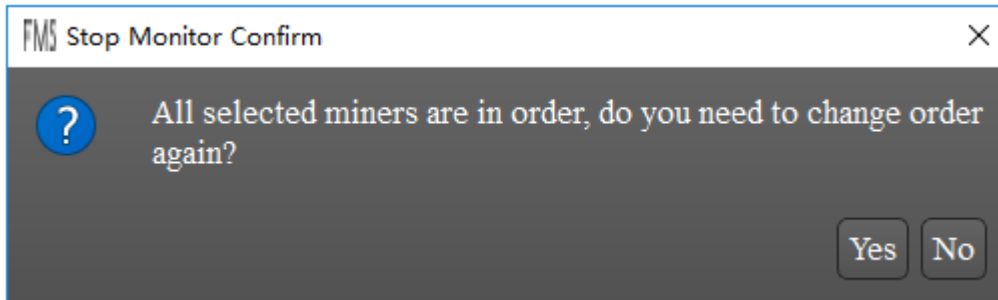
Is monitoring LED status, please turn on LED in order

Then it's time to turn on LED of selected miners one by one in the order you want. To turn on LED, please short press FUNC button of miner. Please note that there is another RESET button, DO NOT press it by mistake. And please DO NOT long press FUNC button, or the miner will be rebooted. When the LED turns to white color, then automatically turns to original color by AMF, it means AMS has known this miner's order and next one can be turned on. If white LED is still there, please wait for several seconds, it's possible AMS has some delay. But if white LED don't be turned off in 10 seconds, it probably indicate this miner lost connection or some other issue. If so, please try to reboot this miner and wait, or find some other help.

In AMS side, when any LED has been turned on, AMS will update the miner's LED column and then turn off it. Message like below will show in topmost line:

192.168.193.167 has been turned on in order 1

When all selected miners have been turned on at least one time, a dialog will be popped out:



If select 'No', LED status monitor will be stopped to avoid affections of later LED on operation. If monitor has been stopped and you want to change order again, please press

Start Monitoring LED

button. Anytime you can press

Stop Monitoring LED

button to stop monitor.

If any order is wrong, please turn on the first wrong miner again to clear all order numbers after it.

Step 3: Edit IP Settings

After all miners have their order number, it's time to edit IP settings.

Just below the table is IP Settings edit box. Every line in it means an static IP range/group.

Every line should includes 5 parts: IP range/group, subnet mask, gateway IP address, primary DNS address, second DNS address. They should be separated by a comma like:

192.168.193.2-5,255.255.255.0,192.168.193.1,8.8.8.8,202.106.0.20

This example means IP range is from 192.168.193.2 to 192.168.193.5, which contains 4 IP addresses. Subnet mask is 255.255.255.0 gateway is 192.168.193.1, primary DNS is 8.8.8.8 and second DNS is 202.106.0.20.

IP range/group part supports several format:

- 1) Contiguous range: a hyphen between two number indicate a contiguous range.
For example:
192.168.1-3.5
Means 4 IP addresses: 192.168.1.5, 192.168.2.5, 192.168.3.5, 192.168.4.5.
Range can be used in multiple parts of IP address. For example:
192.168.1-2.5-6
Means 4 IP addresses: 192.168.1.5, 192.168.1.6, 192.168.2.5, 192.168.2.6.
- 2) Multiple group: in any part of IP address, slash can be used to union multiple range or individual number. For example:
192.168.1.3/6/7
Means 3 IP addresses: 192.168.1.3, 192.168.1.6, 192.168.1.7.
It can be mixed with range. For example:
192.168.1-2.4-5/8/10/14-15
Means 12 IP addresses: 192.168.1.4, 192.168.1.5, 192.168.1.8, 192.168.1.10, 192.168.1.14, 192.168.1.15, 192.168.2.4, 192.168.2.5, 192.168.2.8, 192.168.2.10, 192.168.2.14, 192.168.2.15.
- 3) Default prefix: if IP address doesn't contains 4 parts, the omitted parts will be filled with current IP address same position parts. For example, if all current IP addresses belong to 192.168.3.0, then 5.7-10 means 192.168.5.7-10.

Please edit IP settings according to above format. After that, you can go to next step.

Step 4: Preview

Preview

Press **Preview** button will let AMS show setting results about which miner will have which new IP address. AMS fill target IP column in order with IP address series extracted from your IP settings.

If any settings error, an error message will be displayed in topmost line. Please correct IP settings and press Preview button again.

Step 5: Apply Changes

Apply

After all miners have their target IP, please press **Apply** button to apply these changes to miners. If you hope AMS to automatically reboot miners after changing static IP address, please

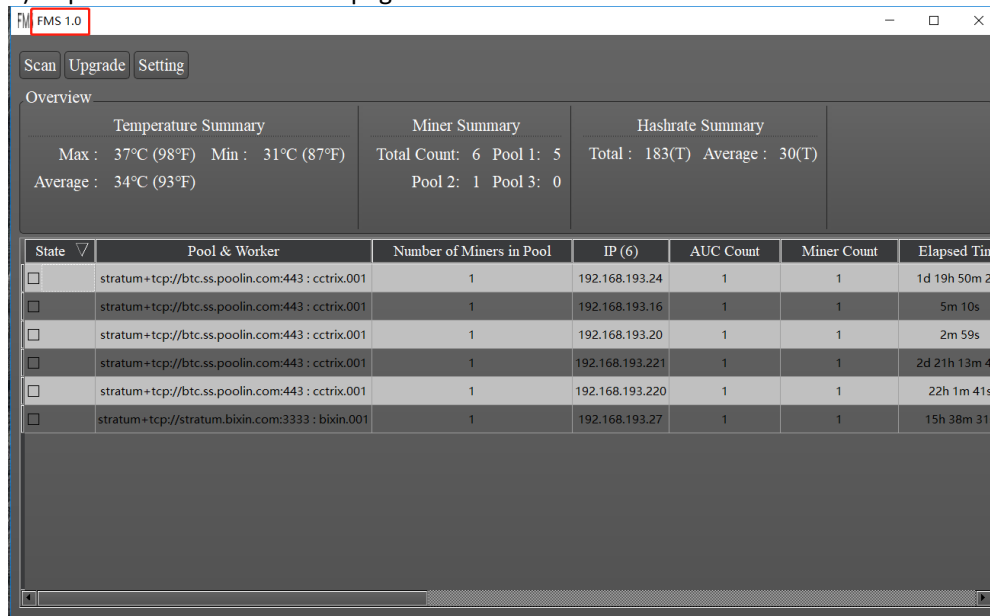
Auto Restart

check **Auto Restart**. If Auto Restart is not checked, AMS will only change IP settings and these miners will still work with current IP address until next reboot.

7. Version of FMS

Two ways to find out version of FMS:

1) top left corner of the main page



The screenshot shows the FMS 1.0 main page. The title bar of the window displays "FMS 1.0". The page has a dark theme and includes navigation buttons for "Scan", "Upgrade", and "Setting". Below these is an "Overview" section with three summary boxes: "Temperature Summary" (Max: 37°C, Min: 31°C, Average: 34°C), "Miner Summary" (Total Count: 6, Pool 1: 5, Pool 2: 1, Pool 3: 0), and "Hashrate Summary" (Total: 183(T), Average: 30(T)). A table below the summaries lists individual miners with columns for State, Pool & Worker, Number of Miners in Pool, IP (6), AUC Count, Miner Count, and Elapsed Time.

State	Pool & Worker	Number of Miners in Pool	IP (6)	AUC Count	Miner Count	Elapsed Time
<input type="checkbox"/>	stratum+tcp://btc.ss.poolin.com:443 : cctrix.001	1	192.168.193.24	1	1	1d 19h 50m 2
<input type="checkbox"/>	stratum+tcp://btc.ss.poolin.com:443 : cctrix.001	1	192.168.193.16	1	1	5m 10s
<input type="checkbox"/>	stratum+tcp://btc.ss.poolin.com:443 : cctrix.001	1	192.168.193.20	1	1	2m 59s
<input type="checkbox"/>	stratum+tcp://btc.ss.poolin.com:443 : cctrix.001	1	192.168.193.221	1	1	2d 21h 13m 4
<input type="checkbox"/>	stratum+tcp://btc.ss.poolin.com:443 : cctrix.001	1	192.168.193.220	1	1	22h 1m 41s
<input type="checkbox"/>	stratum+tcp://stratum.bixin.com:3333 : bixin.001	1	192.168.193.27	1	1	15h 38m 31s

2) details in the installation package properties

