



# Visionman Prospector 200

## Quick Start Instructions

Congratulations on the purchase of your new Visionman Prospector 200 Bitcoin mining system. These instructions are intended to get you up and mining quickly.

### What You Will Need

1. Visionman Prospector 200 Mining System
2. Surge protected power outlet with one available plug capable of providing 5 Amps @ 220v AC or 10 Amps @ 110v AC.
3. Ethernet Cable.
4. Active Internet connection.
5. Computer with available Ethernet port and browser to access the configuration interface.
6. Network switch, hub or router to connect the system to your LAN.
7. Membership in a mining pool, and at least one worker account for each mining pool you plan to use.

### Preparing to Mine

1. Before you configure your system, you will need to have a Bitcoin wallet to store your coins.
2. You will also need to join a Bitcoin mining pool or configure your own pool for solo mining. For more information on pools and solo mining, visit: <http://bitcoin.org/>.
3. When joining a pool, you will create accounts called "workers" which are used to access a mining pool and divide the labor between one or more mining rigs. Configure your worker accounts, remembering to never use the same password for a worker as your master password for your pool. Make a note of each worker ID and password. You will need this information along with the URL and port number for your mining pool when configuring your system.

4. Because mining pools occasionally become unavailable, it is a good practice to join more than one pool. You will be able to set up more than one pool connection, which allows your system to fail over to other pools if your preferred pool goes offline. When joining pools, always use a unique password for each pool you join and never use the same password/username combination twice. This protects you and your coins in the event that a pool gets hacked by limiting your risk only to the pool that was compromised.

## **Setting Up Your System**

This system requires a cool room with adequate ventilation. The cooling fans run at a very high RPM, so the system generates a lot of noise. Place the system in an area where the sound will not be a nuisance.

Unpack your system and plug it into a surge protected power outlet using either 110v or 220v AC power cable.

Plug one end of your Ethernet cable into the LAN port on the Prospector, and the other end of the Ethernet cable into the port on your computer system.

Power up the Prospector 200 by turning on the power switch below the AC power plug. The system should light up, and the fans should begin running.

## **Configuring Your System for Mining**

1. There is a label on the back of your system which contains the network/IP address for this system. This is the address you will use to log into the system using your Internet browser. This address will be configured in the following format: 192.168.1.xxx where "xxx" will be three numbers which must be unique to this system when you connect it to your network or Internet router. This address can be changed later if you require a different address format for your network, but you will need to use this factory default address the first time you connect to the system.
2. Change the IP address on the computer you are using to connect to the mining system so that it conforms to the format of the Prospector 200. This address must start with "192.168.1." and end with three unique numbers. Make sure these unique numbers are greater than 0 and less than 254. For example, if your Prospector 200 has a label on it with "192.168.1.102" give your computer the address "192.168.1.101" BEFORE CHANGING THE NETWORK SETTINGS ON YOUR COMPUTER BE SURE TO MAKE A NOTE OF THEM. YOU WILL CHANGE THEM BACK LATER.
3. Save the changes to the network settings you just made on your computer so your IP address is changed to match the network range of your Prospector 200 mining system.

4. Open your favorite Internet browser.
5. In the address box enter the address of the Prospector 200. This is the address from the label on the back of your Prospector 200 (ie. 192.168.1.xxx)
6. Press Enter
7. In a few moments you will be taken to the login page for the system.
8. Username is root.
9. Password is blank. You can add one later.
10. Click the Login button.
11. Click the Status menu tab, then click the Cgminer Configuration sub-tab
12. Cgminer supports up to three pools. Enter the pool address/port number, worker id and worker id password for each pool you wish to use.
13. If you wish to use more than one pool, you can select one of the following:
  - a. Balance (default): will divide the hashing power between each of the pools you have selected equally.
  - b. Load Balance: will use an adaptive algorithm to apply hashing power to each pool in a manner which maximizes the overall performance of the system.
  - c. Failover: will apply all hashing power Pool 1, then use Pool 2 in the event that Pool 1 is not available, Pool 3 will be used if Pool 1 and Pool 2 are both unavailable.
14. The following default settings should NOT be modified by the user. Changing these settings could cause damage to your system, rendering it unusable. We provide the default values, in the event one or more values are changed by mistake. Before operation, please verify these settings are as follows:
  - a. Avalon Chip: 55nm
  - b. Chip Frequency: 1300
  - c. Miner Count: 16
  - d. API Allow: W:127.0.0.1
  - e. Target Temperature: 60
  - f. Overheat Cut Off Temperature: 70
  - g. More Options: --quiet

15. Once you have completed the Cgminer configuration, click the Save & Apply button.

### **Configuring the Network/IP Address for LAN/Internet Access**

The Prospector 200 system comes with a factory default Network/IP address which must be used initially to configure the device. However, many users have a network which uses a different address range. For devices to work together and access the Internet on a simple network, they must all be connected to a switch or wireless router and each device must be assigned the same Subnet and have an IP address in the same range as the other devices. To access the Internet each device must have the IP gateway address of the Internet router as well. If you do not know how your network is configured, please consult your network administrator.

Please make a note of these essential items by looking at the network settings on another device you use to connect to your network.

1. Your Subnet, ie. 255.255.255.0
2. Your IP address range: ie. 192.168.1.xxx where "xxx" is a unique value greater than 0 and less than 254 for each device on the network.
3. Your Internet gateway address: ie. 192.168.1.1

From the browser-based interface you used to configure Cgminer perform the following steps to view and/or change the network settings on your Prospector 200 system.

1. Click the Network menu tab.
2. Click the Interfaces menu sub-tab.
3. Under Actions, click the Edit button.
4. Change the IP address, netmask (subnet) and gateway address to match those required by your network. BE SURE TO GIVE A UNIQUE IP address to your device.
5. When you are finished making changes click Save & Apply.

**\*\*IF YOU CHANGED THE IP ADDRESS OF YOUR SYSTEM, BE SURE TO MAKE A NOTE OF THE NEW IP ADDRESS. YOU WILL NEED THIS ADDRESS TO ACCESS THE SYSTEM IN THE FUTURE.**

### **Start Mining**

Now that you have configured the Prospector 200 system you are ready to start mining.

1. Disconnect the computer you used to access the system.

2. Connect the Ethernet cable to your network router or switch.
3. Change the IP address of your computer back to its original settings.
4. Connect your computer back to the network using an Ethernet cable or over Wifi.
5. Connect to the Prospector 200 by opening your browser and typing in the IP address you assigned to the system.
6. Log in to the Prospector using the root user account. The password is blank, unless you assigned a password during configuration. Click the Log In button.
7. Click the Status menu tab.
8. Click the Cgminer Status menu sub-tab.
9. On this screen, you will see the status of the mining system. This screen breaks the system performance down in three main sections:
  - a. Summary: shows the history for this mining session.
  - b. Pools: each individual pool is summarized.
  - c. Avalon: shows the status of the ASIC cards in the system.

### **Advanced Configuration**

The Prospector 200 Bitcoin mining system uses an embedded operating system which uses a special Linux kernel which manages the Avalon ASIC chips. For more information, including advanced configuration visit our Wiki page at: [https://en.bitcoin.it/wiki/Avalon#User\\_Guide](https://en.bitcoin.it/wiki/Avalon#User_Guide)

The Avalon dev team also moderates an IRC channel where you can chat with engineers and other users at: #avalon @freenode.net

### **Technical Support**

All Visionman products include free LIFETIME technical support. We will support your systems as long as you own it.

Visionman Technical Support is available Monday through Friday from 8:30AM to 5:30PM Pacific Time. You may reach us by phone or email.

Toll-Free Tech Support (US ONLY): 1-800-690-6771, choose option 3 for Support

Outside United States: +1-408-457-8588

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