Bitcoin Miner Coordinator

User Manual

Version 1.0.37

BTC MINER TOOLS

Bitcoin Miner Coordinator connects compatible Mac and Linux Workers to a Stratum V1 mining pool. It assigns every selected Worker a separate ExtraNonce namespace, receives returned shares and submits valid shares to the pool.

The Coordinator is not a wallet and does not promise mining income. Pool fees, payout thresholds, account requirements and payout rules are defined by the pool you select.

Before you begin

You need:

- Bitcoin Miner Coordinator on the Mac that will manage the pool connection.
- One or more current Bitcoin Miner Workers on this Mac, another Mac on the LAN, or a private WireGuard network.
- A pool login or payout address where required by the chosen pool.
- WireGuard only for Workers that are not available through the local network.

If all Workers are on this Mac or the same LAN, skip WireGuard. If any Worker is remote, complete the Bitcoin Miner WireGuard Hub Guide first. Its worked example assigns `.1` to the Linux Hub, `.2` to this Mac Coordinator, `.3` to a remote Mac Worker and `.11` to the first Linux Worker. The Coordinator Setup Assistant validates an existing tunnel and Worker endpoint; it does not create WireGuard keys, peers or firewall rules.

Never expose Worker port 38473 directly to the public Internet. Remote Workers should be reached through WireGuard.

First-time setup

The Setup Assistant opens automatically the first time the Coordinator launches. You can reopen it with Help › Setup Assistant or the Setup button above the Worker list. Always continue through all four steps; connecting to a pool or adding a remote Worker is optional during the assistant.

The assistant has four steps:

1. Welcome explains the available network paths and offers iCloud synchronization for Worker registrations and non-secret pool settings.
2. Mining Pool checks the selected pool profile and lets you connect immediately.
3. Workers refreshes Bonjour discovery and can test a WireGuard endpoint before it is registered.
4. Ready summarizes the connected and selected Workers.

The TCP test is deliberate: the Add button is enabled only after the entered Worker endpoint answers on TCP port 38473.

Recommended order

1. For remote Workers, follow the WireGuard Hub Guide in this order: Linux Hub, Linux Workers, one WireGuard tunnel per Mac, then activate the Coordinator tunnel.
2. Start each Mac Worker once and complete its one-time calibration.
3. Run the Worker Setup Assistant to confirm Bonjour or the private WireGuard endpoint.
4. Run this Coordinator Setup Assistant, complete all steps, then select Workers and connect the pool.

Connecting a mining pool

Choose a pool preset or Custom, then enter the host, port and login exactly as provided by that pool. Click Connect when the profile is complete.

The Coordinator stores a separate profile for each pool. Switching presets ends the active session before loading the other profile.

- OCEAN requires a valid mainnet Bitcoin payout address. A worker suffix may be appended when supported by the pool.
- Braiins Pool uses its documented Stratum V1 endpoint.
- Custom supports a host, port, login and optional password. If the pool supports TLS, enable it in the profile.

For built-in pools that do not need a password, the Coordinator uses the conventional Stratum placeholder automatically. A Custom-pool password is stored in iCloud Keychain when sync is enabled; it is not written to ordinary preferences.

Adding Workers

Same Mac

If Bitcoin Miner and Bitcoin Miner Coordinator run on the same Mac, the Worker appears as Local · Mac. No additional address is needed. If that Mac uses WireGuard to reach other remote Workers, both apps share the same tunnel; do not create separate Worker and Coordinator tunnels.

Another Mac on the LAN

A Worker on the same local network is found automatically through Bonjour and appears as Bonjour · Mac. Both Macs must be able to reach each other on the LAN, and macOS must be allowed to accept the Worker's incoming connection.

Bonjour does not cross the Internet. A Mac that is already found through Bonjour does not need WireGuard merely to mine for this Coordinator.

A remote Mac or Linux Worker

For a Worker outside the LAN, bring both devices into the same private WireGuard network first. The supported product topology uses the Linux WireGuard hub described in the WireGuard Hub Guide. Enter the Worker's private address in this form:

```
10.20.0.3:38473
```

Use Test first. A successful test proves that the Coordinator can make a TCP connection to the Worker. Then click Add.

A WireGuard hub

The hub is an Ubuntu/Debian Linux system and the supported rendezvous point for remote Mac and Linux Workers. Hub installation does not enable mining. To let the Hub mine and supply the named Linux Worker registry, run the normal Linux Worker installer on the Hub; it detects and reuses the existing Hub interface.

After the Coordinator's WireGuard tunnel is active, add the Hub endpoint only when that optional Hub Worker is installed:

```
10.20.0.1:38473
```

The WireGuard · Linux row for `10.20.0.1` is the optional Hub Worker. Select Use if the Hub should mine. Its connection also returns the named Linux Worker registry; Refresh then adds those Workers with their individual WireGuard addresses. With a pure non-mining Hub, do not add `.1`; add each Worker endpoint individually. Direct peer-to-peer WireGuard configurations can work at the network layer, but are not generated, discovered or supported by the current Setup Assistant.

Connection types in the Worker list

Connection	Meaning
Local · Mac	Coordinator and Worker are running on the same Mac.
Bonjour · Mac	A Mac Worker was found on the same LAN.
WireGuard · Mac	A Mac Worker is reached through its private WireGuard address.
WireGuard · Linux	A Linux Worker is reached through WireGuard.
WireGuard · Unknown	An endpoint is registered but the Worker has not completed its handshake yet.

Offline registrations remain in the list so that they reconnect automatically after the machine or tunnel returns.

Selecting Workers and starting work

Enable Use for every online Worker that should receive mining jobs. A selected Worker receives the current pool job only after the Coordinator has connected to the pool.

The Coordinator gives each Worker a distinct ExtraNonce namespace. This prevents selected Workers from searching the same coinbase namespace for a given pool job.

If a row says Update needed, install a newer Worker version before selecting it. The current protocol requires `share-target-v1` support.

Click a column heading to sort the list. The Network name is the Worker name. Model is the hardware model, such as `iMacPro1,1` or `Linux x86_64`.

Reading the Worker columns

The CPU and GPU columns include live settings from current Mac Workers:

- The CPU detail shows physical/logical cores, active mining workers and the selected performance profile.
- The GPU detail shows whether Metal mining is off or active, the requested miner load and the selected profile.
- Linux Workers report their own adaptive CPU policy, for example `CPU only · adaptive 85%`.

These settings are live Worker telemetry. A Mac Worker from an older version can still mine but will show only its hardware description until it is updated.

Session statistics

Metric	Meaning
Hashrate	Current sum of selected active Workers. It can fluctuate when a job changes or a Worker reports a new sample.
Session Hashes	Total hashes reported by selected Workers since the current pool session began.
Session Runtime	Time since the current pool connection began. It stops on disconnect.
Expected Share	Statistical estimate based on the current pool difficulty and reported hashrate. It is not a promise.
Accepted / Rejected Shares	Responses from the pool after the Coordinator submits a valid share.
AVG TH/H	Average tested work per hour, shown after one hour of the current session.

A hashrate is a local, short-term measurement. The pool may display a different average because it uses its own sampling interval and only sees submitted work.

iCloud synchronization

Open Settings and enable Sync Settings with iCloud to keep Worker registrations, selection state and non-secret pool profiles consistent across your Macs.

The first synchronization merges existing registrations rather than replacing them. Custom-pool passwords are stored in iCloud Keychain. No atec-systems cloud account is involved.

Troubleshooting

A LAN Mac does not appear

1. Open the Worker app on that Mac.
2. Confirm both Macs are on the same LAN/VLAN.
3. Choose Allow if macOS asks whether Bitcoin Miner Worker may accept incoming network connections.
4. Click Refresh in the Coordinator.

A WireGuard Worker is offline

1. Confirm the Linux hub, the Coordinator tunnel and the Worker tunnel are active and use unique private addresses.
2. Test the endpoint in the Setup Assistant.
3. On the Worker, confirm that port 38473 is listening on its WireGuard address.
4. Check the local firewall on the Worker and the forward policy on the WireGuard hub.

From a terminal on the Coordinator Mac, a direct test is:

```
nc -vz 10.20.0.3 38473
```

The Coordinator is connected but no Worker mines

Confirm that at least one compatible online Worker has Use enabled. Also check the Worker window: it must show Mining, not Paused, and the chosen pool must be providing jobs.

Security notes

- Use WireGuard for remote access; do not publish port 38473 on a public IP.
- Verify the payout address and pool rules before connecting.
- Keep the Coordinator and Workers updated together when possible.
- Mining consumes electricity and can produce heat and fan noise. Choose a Worker performance profile appropriate for the machine and its environment.