

Tutorial for installing the VNISH firmware on the BITMAIN L9 factory firmware

Check the stock firmware date. Which stock firmware versions can VNISH be installed on using toolkit: February 2024 and older and from December 2024 and newer. Which stock firmware versions **CANNOT** be installed on VNISH: March-November 2024 inclusive and from September 2025 and newer. if you have BITMAIN firmware from March 2024 till December 2024 and you cant find stock update file before September 2025 you can downgrade the stock firmware date using recovery image for your model and control type

1. You must use a flash drive or SD card with a capacity of up to 32GB and must format it in FAT32 format. It is not recommended to use an SD card with an OTG adapter for AMLOGIC control boards instead of a flash drive.
2. Unpack the archive for your type of control board into the root of the flash drive (SD card).
3. Connect an SD card or OTG adapter with a flash drive to the turned off miner.
4. Turn on the power of the miner and wait for the green LED on the front panel to light up (and remain constantly lit) miner This will mean that the firmware process was completed successfully. This process takes no more than one minute.
5. Turn off the power of the miner and remove the SD card or OTG adapter with a flash drive from the control board.
6. Turn on the power of the miner and wait for it to load, the firmware should be changed to T21 and then use **VNISH TOOLKIT** following the manual located in the archive with utility in step 8, you need to choose manually in the field "MINER MODEL " indicate the model of your miner . If the required model is not available, then you must leave DETECT AUTOMATICALLY and the firmware for T21 will be installed. In this case, it will be necessary to additionally update the Vnish firmware for your model and type of control board via the Web interface using **WEB NAND UPDATE** version, you can download web version from our web page <https://vnish.us/vnish-l9>