

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

It is necessary to install an image from the T21 series to install the VNISH firmware, the archive contains images from T21 amlogic and cvitek control boards

1. You must use a flash drive or SD card with a capacity of up to 16GB 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 **HASHCORE TOOLKIT** following the manual located in the archive with utility in step 8, you need to choose manually in the field "MINER MODEL" (Antminer L9) 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.

Official Vnish firmware: <https://vnishfirmware.in/>