

Quick Start Guide for Dreamcatcher 2301 (As off: July 5, 2023 by @kenbarbi)

IN THE BOX

The new Dreamcatcher (DC) 2301 comes with a Bullseye LNB, but you must provide:

- 1 C-Type USB cable
- 1 USB power cube (2.4 amp device preferred), but you may get by with a smaller unit
- 1 F-type cable with male connectors at both ends
- 1 32 GB or smaller Micro SD Card FAT32 Formatted for file storage

Currently to make the new Dreamcatcher 2301 board work correctly, you **MUST reflash the DC and install a 32 GB (or smaller) micro SD Card FAT32 formatted.**

REFLASH THE DC PROGRAM

Every time you **reflash a new Firmware Version**, you must complete **all** the next steps.

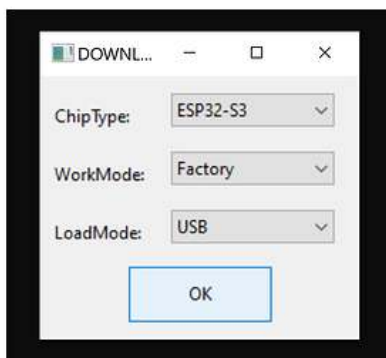
The DC's operating program was initially flashed to the board at the factory as Firmware Version 1.0.1, and must be re flashed with a July 5, 2023, Firmware Version 1.0.6 which has significant improvements. Follow Syed's guide to do it which is located at <https://forums.othernet.is/t/flashing-dreamcatcher-with-firmware-1-0-3/7794> on the Othernet Forum - - **make sure to make all the specified changes in the Flash program, and also complete resetting the Local WIFI Network.**

Here are the instructions for updating the firmware on your ESP32-based Dreamcatcher.

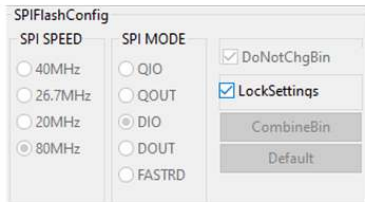
1. Connect your Dreamcatcher to your PC with a USB-C data cable.

| Name | Date modified | Type | Size |
|---------------------------|--------------------|-------------|-----------|
| bin | 2/21/2023 4:14 PM | File folder | |
| configure | 5/9/2023 8:13 PM | File folder | |
| dl_temp | 5/26/2023 10:52 AM | File folder | |
| doc | 5/9/2023 8:13 PM | File folder | |
| logs | 5/26/2023 10:54 AM | File folder | |
| flash_download_tool_3.9.4 | 5/9/2023 8:13 PM | Application | 15,501 KB |

5. Select the following parameters for the flashing tool.



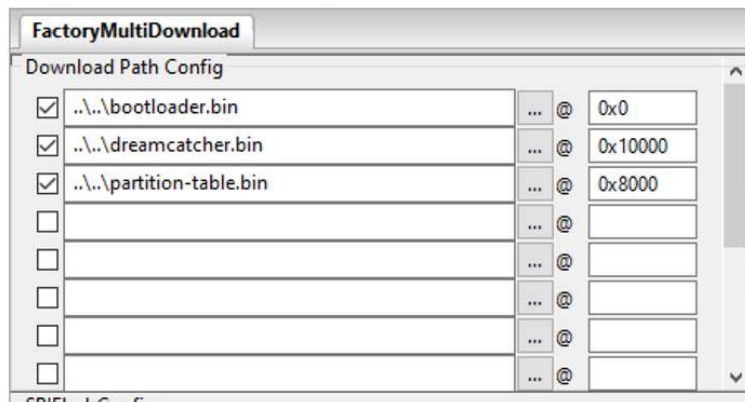
6. Uncheck the Lock Setting box.



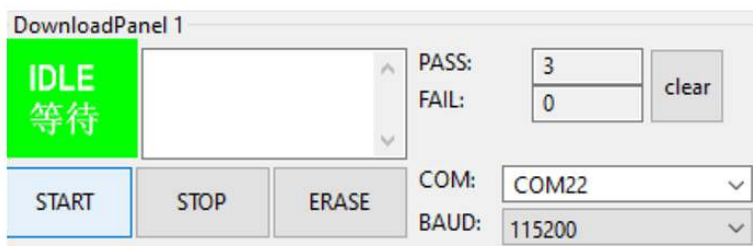
7. Click the ... to navigate to the location of each file. Enter the correct value (such as 0x0) in the following field. Make sure the check boxes to the left of the specified files are checked before you click Start. If you don't do this then nothing is loaded on the board.

bootloader.bin 0x0
dreamcatcher.bin 0x10000
partition-table.bin 0x8000

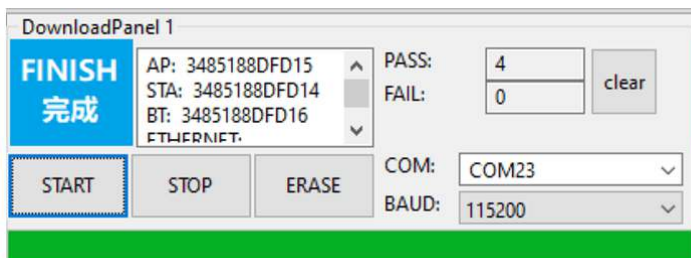
ESP32S3 FLASH DOWNLOAD TOOL V3.9.4



8. Change the COM port to the available port in the drop-down list.



9. Click START. After the green box turns blue and shows FINISH, unplug the Dreamcatcher and connect it to your LNB and power supply.



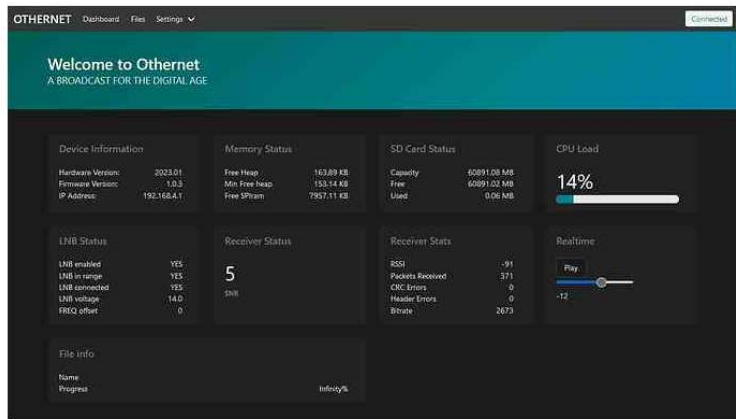
INSERT THE FAT32 FORMATTED MICRO SD CARD

Currently the DC 2301 requires the Micro SD Card to function. Then power up the DC.

CONNECT TO DC DASHBOARD THRU UNIT'S WIFI HOTSPOT

Open your computer's Wifi panel and connect to *Othernet* with password *othernet*

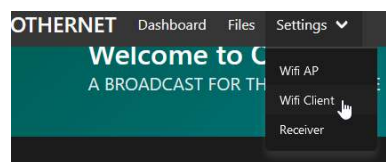
Then use your browser to open the DC Dashboard by going to 192.168.4.1 where you will see this screen (when connected to a satellite). Otherwise, the Dashboard will not have SNR or RSSI values. At this point, the DC's IP address will show as 168.192.4.1



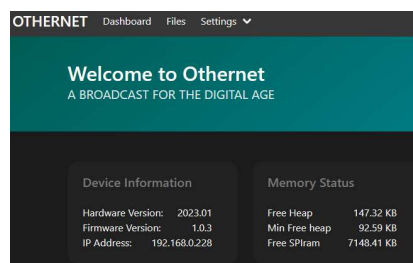
If you have not connected to the US or European satellite, follow standard practices to do that.

CONNECT TO YOUR LOCAL WIFI NETWORK

In the Settings pull-down menu you can change the Wifi Client to your own router.

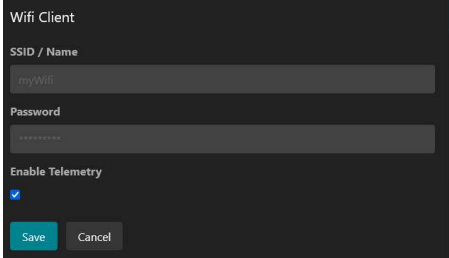


Enter your Wifi's name and password - - then click **Save**. The newly assigned IP address will now appear on the Dashboard after you refresh your browser



If you were to go back to the AP Client tab, it would appear unchanged, but in fact it did change. Make sure when your router assigns an IP address to the DC 2301, that you make sure it stays Manually assigned and not randomized by your router's DHCP protocol.

You will also find the DC 2301 does not turn off the Ethernet Wifi hotspot, but keeps it up so you can access the DC when out of range of your local Wifi.



The screenshot shows a configuration window titled "Wifi Client". It contains the following fields and options:

- SSID / Name:** A text input field containing the value "myWifi".
- Password:** A text input field containing a series of asterisks "*****".
- Enable Telemetry:** A checkbox that is checked with a blue checkmark.
- Buttons:** Two buttons at the bottom: "Save" (highlighted in blue) and "Cancel".