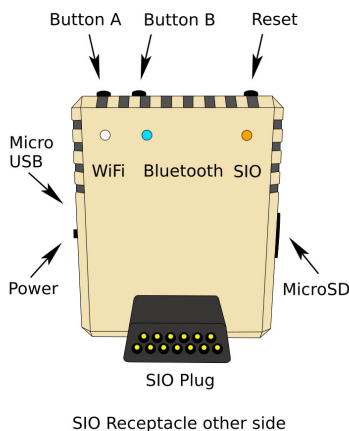# FujiNet Quickstart Guide

Bill Kendrick edited this page 7 days ago · 13 revisions

Congratulations on getting a #FujiNet! This page will briefly get you started using it. However, it focuses mostly on initial configuration and mounting disk images. Your #FujiNet can do so much more! So check out other parts of this wiki to learn all about it.

# Getting to know your #FujiNet



With the SIO plug (which connects to your Atari) facing you, you will see:

## On top

- Buttons A and B on the left
- Reset button on the right

## On the left

- Micro USB connector (power and serial connection for debugging)
  - micro USB connectors are basically shaped like an isoceles

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- [Testing Plan](#)
- [Official Hardware Versic](#)
- [Prototype Board Revisic](#)
- [SIO Commands for Devi ID $70](#)
- [CIO Commands for N Device](#)
- [Useful External Documentation](#)

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`https://github.com/Fuji`

trapedoiz; the insert with the narrow side facing you / facing the Atari

- Power switch (down=off, up=on)

## On the right

- Micro-SD card slot (local disk image and configuration storage)
  - tension-mounted (as opposed to spring-loaded)
  - insert with metal contacts facing you / facing the Atari

## On the front

- SIO plug (connects to your Atari)

## On the back

- SIO receptacle (other SIO devices connect ("daisy chain") to your #FujiNet)

# Connecting your #FujiNet

- Start with your Atari computer and #FujiNet both turned off
- Remove any cartridges from your Atari's cartridge slot
- Remove any SIO cable or device currently connected to your Atari's SIO peripheral port
- Plug the #FujiNet firmly into your Atari's SIO peripheral port
- For now, do not plug anything into the #FujiNet's SIO receptacle
- Optionally, provide power to the #FujiNet via a micro USB power cable

# Boot up and connect to WiFi

- Turn on your Atari computer
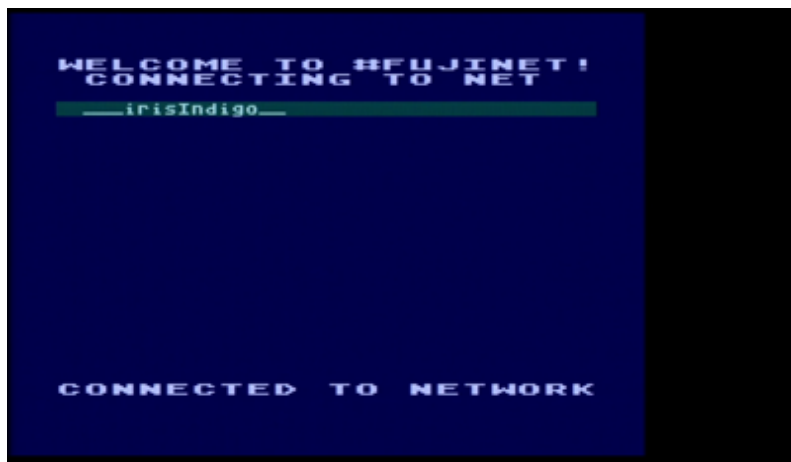- The #FujiNet CONFIG program will appear

- Choose your WiFi network from the list, or select `<Enter a specific SSID>` to enter it manually. (Press `Esc` to scan for WiFi networks again.)
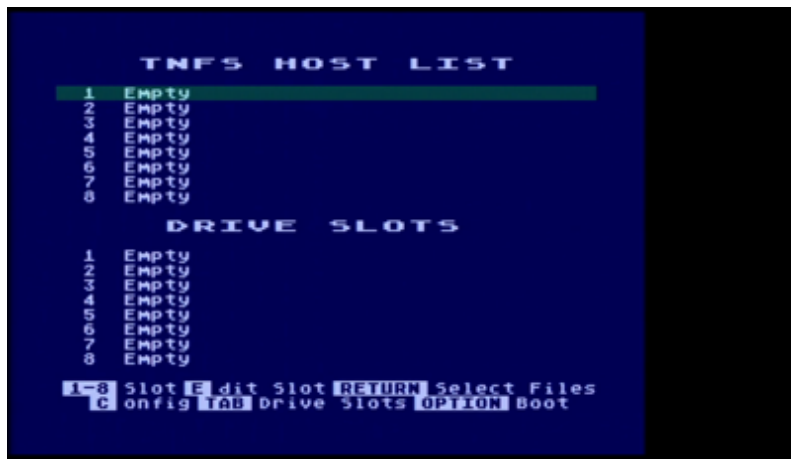


- Enter your WiFi network's password, if necessary



- If the password is correct you will see the "Connected to Network" screen

- Once the FujiNet has connected to your network you will see the Host and Slot screen:



- Now you can add hosts and then map some disk images to virtual drive slots.

# A bit about booting

When you turn on (or reboot) your Atari, it searches for devices connected to the SIO bus. Among them is any device that responds back as "disk drive #1" (generally known as " `D1:` "). If you have a real Atari floppy disk drive configured as disk drive #1, and turned on, the Atari will attempt to boot off of the floppy disk inserted into that drive. Or, if you have a virtual drive like an "SIO2SD" or "SDriveMax", with a disk image insert into it's "drive #1" slot, it will respond and the Atari will attempt to boot off of the disk image.

When a #FujiNet is connected to your Atari and powered on, if *no other device* responds as "disk drive #1" after a moment, the #FujiNet will respond, and either boot into whatever disk image is mounted into its drive slot #1, or into the CONFIG program that you saw in the steps above.

If you hold the `[Select]` key on the Atari as it starts booting, #FujiNet won't automatically connect to your WiFi, and allow you to immediately configure a network (as seen in the steps of "Boot up and connect to WiFi", above).

# Navigating CONFIG

After you have set things up -- and when you boot your Atari into the #FujiNet CONFIG tool in the future -- your #FujiNet will attempt to automatically connect to your WiFi. If it succeeds, you will be presented with its main screen, which displays a "TNFS HOST LIST" at the top (sources for your disk images and mountable files), and "DRIVE SLOTS" at the bottom (the virtual floppy disk drives the Atari will see as " `D1:` ", " `D2:` ", etc.)

Each section has 8 entries. Use the arrow keys ( `[-]` and `[=]` , with or without the `[Control]` key held), `Up` and `Down` on a joystick, or the `[1]` through `[8]` keys to move between the entries. Press `[Tab]` to switch between the TNFS host list and the drive slots.

## TNFS Host List

Sample screen, with SD card inserted:
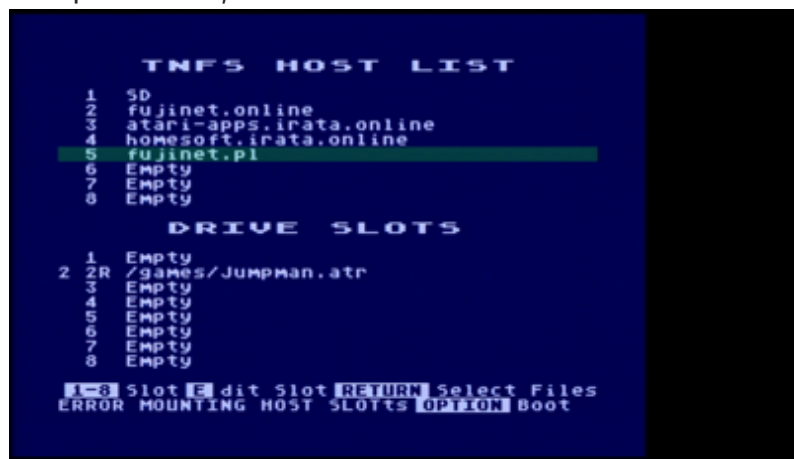
```
1  SD
2  fujinet.online
3  Empty
4  Empty
5  Empty
6  Empty
7  Empty
8  Empty
```

Press the `[E]` key to edit a slot, entering either the hostname of a TNFS server (e.g., `fujinet.online` or `atari-apps.irata.online` ), the word " `SD` " to access files on a micro-SD card inserted into the #FujiNet, or blank to leave the host slot empty.

While the TNFS host list is in focus, press `[Return]` or joystick `Fire` to access the files and directories available on the chosen host. See the "Disk Images" section, below.

Check out a small list of example TNFS hosts to try out.

## Drive Slots

```
2 1R /games/Jumpman.atr
1 2W /blank.atr
  3  Empty
  4  Empty
  5  Empty
  6  Empty
  7  Empty
  8  Empty
```

For each drive slot, you'll see, from right to left:

- the source of the disk image -- that is, which entry from the TNFS host list the disk came from; above, `/blank.atr` is from host #1, which is the local SD card
- the drive slot ("1" through "8", corresponding to Atari disk drive devices `D1:` through `D8:` )
- whether the disk image is mounted read-only ( `R` ) or read/write ( `W` )
- the path and name of the disk image file (e.g., `/games/Jumpman.atr` )

Here you may press `[E]` to eject (unmount) a disk image from the select drive slot.

## General controls

The following controls work on the main CONFIG screen, with either the TNFS host list or the drive slots focused.

Press `[Option]` to reboot your Atari. If your Atari has built-in BASIC, you may wish to hold `[Option]` as the Atari begins to boot, if the software you're booting requires that BASIC be disabled.

You may also press `[C]` to show your #FujiNet's current configuration (WiFi details & more), and access options to reconnect to ( `[C]` ), or change ( `[S]` : change SSID), WiFi networks.

## Disk Images

Here is where you'll select disk(s) to mount in the various drive slots so your Atari can access them.

As in the main screen, the arrow keys or joystick are used to select a file or directory. Press `[Return]` or joystick `Fire` to choose a disk image (see "Mount to Drive Slot", below), or enter a subdirectory.

Press `[>]` to view the next page of files, and `[<]` to return to the previous page. Use the `[Delete/Back Space]` key to go up to the parent directory.

You can use the `[F]` key to provide a filter, to help find files within a very large directory. (e.g., enter " `star*` " to find Star Raiders, Star Trek, Star Wars, etc.)

You can also press `[N]` to create a new blank disk image ( `.atr` file). You will be prompted for the name of the new file, and then its size. Once created, you'll be asked where to mount it, which is described below.

Press `[Esc]` to return to the main screen of the CONFIG program.

## Mount to Drive Slot

After choosing a disk image from a TNFS server or your SD card, or after creating a new disk image, you will be shown the list of drive slots, 1 through 8. Any currently-mounted disk images will be shown.

Use the arrow keys, joystick, or number keys ( `[1]` - `[8]` ) to select a slot. Press `[Return]` or joystick `Fire` to mount the disk image you had selected into that slot. (Also, while you're here, you can also select a drive slot and press `[E]` to eject the disk image that's currently mounted in it.)

You'll be prompted whether you want the disk image to be mounted read-only (press `[Return]` or `[R]` ), or read/write (press `[W]` ).

At any time, you can press `[Esc]` to abort.

## Booting up

Once your drive slots are configured how you want them, press the `[Option]` key to reboot your Atari. As noted above, hold `[Option]` down for a time, if your Atari has built-in BASIC, and the software you're booting requires that it be disabled.

Each time you reboot, the same disk images should be mounted on the #FujiNet.

If you wish to return to the CONFIG program the next time you reboot, press the " `Reset` " button (the rightmost button) on the #FujiNet.

# #FujiNet physical interface

## Lights

Left-to-right, the lights visible on a #FujiNet are:

- White: WiFi enabled
- Blue: BlueTooth enabled
- Orange: SIO activity

## Buttons

Left-to-right, the buttons are:

- Button A
  - Tap: Disk swap
  - Hold: Toggle "SIO2BT" mode
- Button B
  - Tap: Print debug info to serial console
  - Hold: "Safe reset" (unmounts SD card before reboot)
  - Hold on powerup: Reset #FujiNet config
- Reset
  - Upon rebooting Atari, with #FujiNet responding as "drive #1", return to #FujiNet CONFIG (rather than disk mounted in drive slot #1)

# So CAN I use it with other devices?

The #FujiNet has a pass-through SIO receptacle on the back, so you can of course plug other devices into your SIO bus.

It is not necessary to have all (or even any) disk images mounted on the #FujiNet. If you have one or more real floppy drives (Atari 810, 1050, etc.) or virtual disk drives ("SIO2PC", "SDriveMax", etc.), you can use them with your #FujiNet, just as you can use them with each other.

For example, if you have a commercial game on floppy disk, you can boot it off of your real floppy disk drive #1, and mount a saved-game disk onto drive #2 of your #FujiNet. That save-game disk could be on local (SD card) or remote (on a TNFS server) storage!

Let's go through a few example cases:

- I want to boot my floppy disk drive / SIO2SD / SDriveMax / etc., and NOT boot or use the #FujiNet
  - If your device responds as disk drive #1 ( D1: ), it should "just work"
  - You can also use the power switch on the left side to deactivate the #Fujinet altogether
- I want to boot my floppy disk drive / SIO2SD / SDriveMax / etc., and DO want to use the #FujiNet's features
  - As above, if your device responds as drive #1 ( D1: ), it should just work
  - You can access any virtual disks made available by the #FujiNet

(on its local SD storage, or on TNFS servers) in the other disk slots (e.g., `D2:` , etc.)

- You can manipulate the #FujiNet's configuration manually, from the Atari OS

- The same goes for mixing other devices the #FujiNet makes available with their real counterparts, like printers ( `P:` ) and RS232 devices ( `R:` )

- I want to boot my #FujiNet and still access my floppy disk drive / SIO2SD / SDriveMax / etc.
  - As long as nothing else on your SIO bus responds to disk drive #1 ( `D1:` ), and your #FujiNet is on, it will respond when the Atari boots. Below are a few examples of disabling drives; consult your specific device's document for more details.
    - SIO2SD, via hardware keys and LCD screen:
      - Press `[K1]` repeatedly, until the `D1:` slot is displayed on the LCD. Press `[Shift] + [Enter]` until " – OFF – " is displayed
    - SIO2SD, via `CFG_S2S v35` running on the Atari:
      - Press `[Shift] + [1]` , which unmounts the disk image on `D1:` and switches it to " – OFF – "
    - SDriveMax: **FIXME: TBD**
  - If a disk is mounted on the #FujiNet's `D1:` slot, it will be booted
  - You can press the `Reset` button on the top right of the #FujiNet, and restart the Atari (power off & back on, or soft reboot) to boot back into #FujiNet's CONFIG program
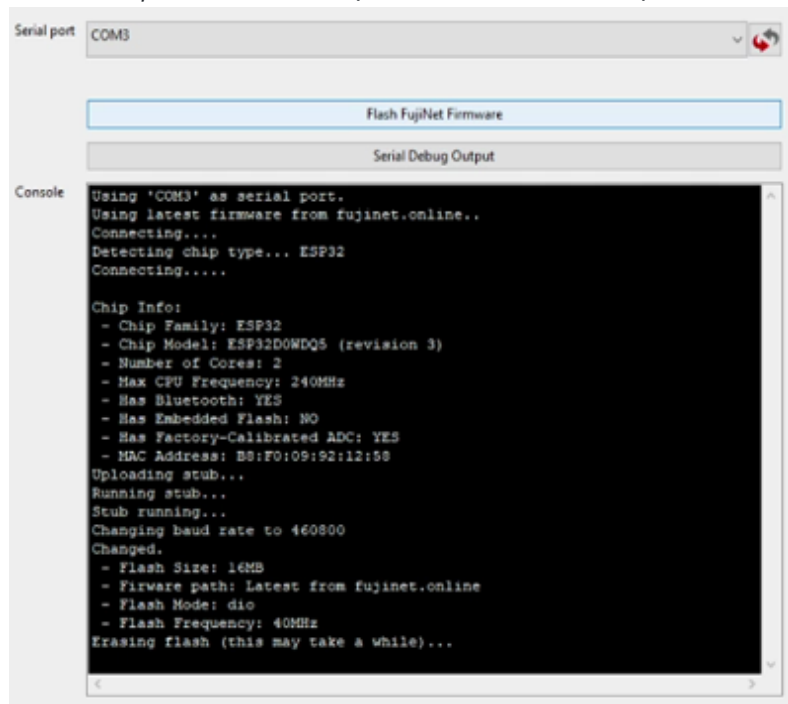
# Web config

Your #FujiNet makes available a simple web-based configuration interface when you visit your device's IP address while it's powered on.

To find its IP address, use the `[C]` "Config" option, available in the main screen of the CONFIG program. You can also find the #FujiNet in your router's list of connected devices, by its hostname (default: " `FujiNet` ").

For example, if your #FujiNet's IP address on your local network is "192.168.0.42", you would visit " `http://192.168.0.42/` " in a browser connected to that same network.

FujiNet Config HTTP page:



# Wait! I need a new #FujiNet firmware

You can learn more, and download the "FujiNet-Flasher" (for Windows, macOS, or Linux), from https://fujinet.online/download/

The FujiNet Flasher app. (Make sure you launch it as Administrator in Windows, or run as root / via `sudo` on Linux)



The web config (described above), and (as of mid-October 2020) the CONFIG tool, will show you which firmware version you have.

# Further reading

For complete documentation on using the CONFIG tool, see the CONFIG Users Guide

More about the hardware interface can be found on the Official Hardware Versions page.