FUJINET

SET-UP MANUAL

GETTING STARTED

Easy-to-Follow Instructions on Setting Up
And Using FujiNet CONFIG With Your
ADAM™ Family Computer System

READ ME FIRST!

FujiNet™ CONFIG for the ADAM™ Family Computer System Set-Up Manual

by The FujiNet Project Contributors

REV 1

Operating Hints

1. **Power:** FujiNet draws very little power, but it is a computer. Switch it OFF before connecting or disconnecting the ADAMnet cable, and use the supplied cable or equivalent.
2. **microSD Cards:** cards must be formatted FAT32. Insert and remove cards only while the FujiNet is switched OFF. Unlike digital data packs, an SD card is perfectly happy near your TV set.
3. **Wireless:** FujiNet speaks 802.11 b/g/n on the 2.4 GHz band only. If your network is 5 GHz-only, ask your router for a 2.4 GHz network (most provide both).
4. **If your FujiNet fails to operate correctly,** the worldwide FujiNet community answers questions on Discord at all hours. No toll-free number required: `https://discord.gg/7MfFTvD`

If you do encounter a problem, it is usually one of the above.

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Chapter 1

Setting Up

Welcome!

Your FujiNet™ is a remarkable product. Whole libraries of ADAM™ software served over the air, four virtual disk drives, a wireless printer, networking for your own programs — FujiNet has something for every member of the family. And it's all in one little package!

You can use FujiNet to browse software collections on the Internet, boot any program in seconds without swapping digital data packs, keep your own library on a tiny memory card, and much more.

FujiNet is easy to use. The program that runs the show is called **CONFIG**, it lives inside the FujiNet itself, and your ADAM loads it automatically. This booklet contains all the information you'll need to hook up your FujiNet and use every function CONFIG has. And you don't need any computer-networking experience or training to use it.

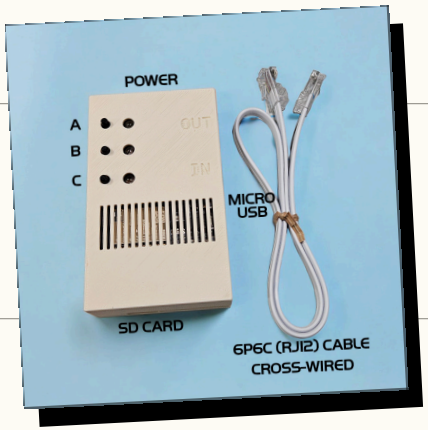
Got Everything for Your FujiNet?

As you unpack, check that you have everything you need:

1. Your ADAM Family Computer System (or Expansion Module #3), set up and working.
2. A FujiNet for the Coleco ADAM.
3. An ADAMnet cable (the small square RJ12 telephone-style plug).
4. The name of your 2.4 GHz wireless network and its password. Capitalization counts, so jot it down exactly.
5. *(Optional)* A microSD card formatted FAT32, for a library of your own.

Know Your FujiNet

Take a moment to get acquainted. You'll find these parts on your FujiNet — their positions vary slightly between cases, but every ADAM FujiNet has them:



I

A **ADAMNET IN jack.** Connects to your ADAM. This is FujiNet's lifeline — data and power arrive through it.

B **ADAMNET OUT jack.** A pass-through, so any device that used to occupy your ADAMnet port can plug in behind the FujiNet and keep working.

C **microSD slot.** Push a card in until it clicks; push again to release.

D **Power switch.** FujiNet ON and OFF.

E **Indicator lights. WiFi** (white) glows when connected to your network. **BT** (blue) signals Bluetooth mode. **Bus** (orange) flickers along with ADAMnet activity.

F **Button A.** A short press rotates your mounted disk images one slot forward — the famous "disk swap" button. (See Chapter 9.)

G **Button B.** Hold a few seconds to restart the FujiNet.

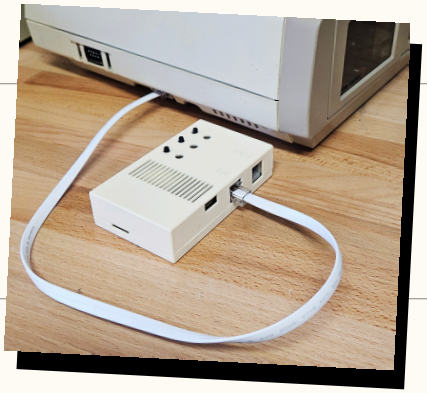
H **Safe Reset button.** A short press restarts the FujiNet safely.

I **micro-USB port.** Used to flash new firmware from a PC, and as an alternate power source.

Hooking Up Your FujiNet

Complete the steps below to connect FujiNet to your ADAM.

1. Turn your ADAM OFF (the switch on the back of the printer).
2. Plug one end of the ADAMnet cable into the jack marked **ADAMNET IN** on the FujiNet.
3. Plug the other end into the ADAMnet port on your ADAM.
4. If another device was using that port, plug it into FujiNet's **ADAMNET OUT** jack.
5. If you have a microSD card, insert it until it clicks.
6. Slide the FujiNet's power switch to ON.



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IMPORTANT: DO NOT TURN ON THE COMPUTER SYSTEM YET. Turn to the next chapter for those directions.

Chapter 2

Getting Started

Turning On Your Computer

Whether you have the ADAM Family Computer System or Expansion Module 3, you follow the same steps to bring up CONFIG. Complete the steps listed below.

1. Make sure there is **no** digital data pack in the data drive, no disk in the disk drive, and no game cartridge in the cartridge slot.
2. Turn on the TV and select the proper channel (3 or 4).
3. Turn the ADAM on — or, if it is already on, pull the **COMPUTER RESET** switch toward you.
4. Watch the screen. In a moment you'll hear a cheerful chime and see **WELCOME TO FUJINET** at the bottom of your screen. The ADAM has booted CONFIG directly from your FujiNet — no digital data pack required.

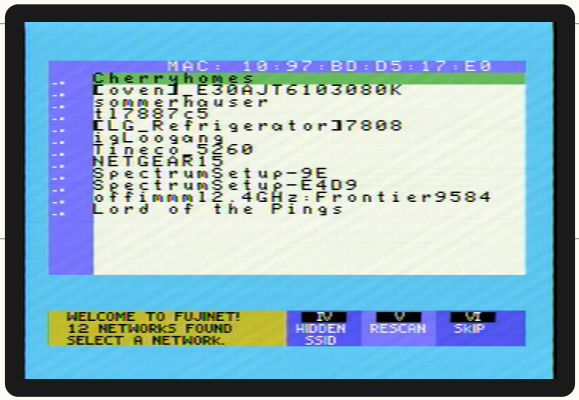
NOTE: If software is already mounted in disk slot 1 from an earlier session, the ADAM boots that instead. Chapter 9 shows how to return to CONFIG.

The SmartKeys

CONFIG is operated mostly with the ADAM's six **SmartKeys** — the dark keys numbered I through VI across the top of your keyboard. The bottom of every CONFIG screen shows a row of labeled boxes; each box lines up with one SmartKey, and a blank box means that key does nothing right now. This manual writes them as **(I)** through **(VI)**.

The first time FujiNet starts, CONFIG goes straight into network setup — it scans the air and announces **SCANNING FOR NETWORKS...** If your FujiNet has connected before, it reconnects by itself and you may skip to Chapter 3.

After the scan, the wireless networks FujiNet found (up to 16) are listed on your screen:



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- Each network shows a one-to-three bar **signal-strength meter.** More bars, better signal.
- Your FujiNet's **MAC address** is printed at the top of the screen — useful if your router restricts which devices may join.

ON THE NETWORK LIST

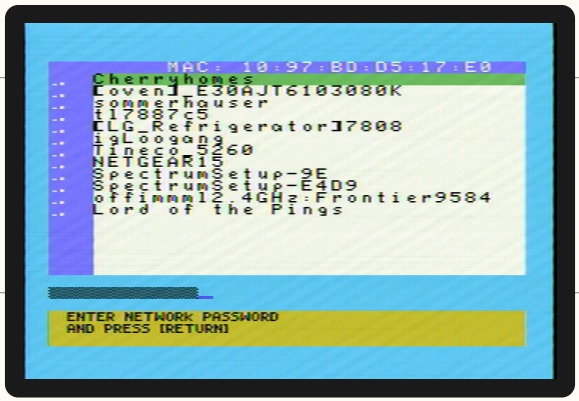
PRESS	TO
↑ / ↓	Move the highlight bar
RETURN	Choose the highlighted network
(IV) HIDDEN SSID	Type the name of a network that hides itself
(V) RESCAN	Search the air again
(VI) SKIP	Go to the main screen without connecting

Entering Your Network Password

1 Highlight your network with the arrow keys and press **RETURN**.

2 CONFIG asks: **ENTER NETWORK PASSWORD AND PRESS (RETURN).** Type the password — up to 64 characters, capitals and all. Each character appears as a smudge so onlookers can't read it. **BACKSPACE** fixes mistakes.

3 Press **RETURN**. CONFIG announces **CONNECTING TO NETWORK** and tries for several seconds. Press **ESCAPE/WP** to abort.



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If you pressed **(IV) HIDDEN SSID**, CONFIG first asks for the network's name (up to 32 characters), then continues with the password as above.

What you'll see next

a. **CONNECTION SUCCESS!** — You're online. FujiNet remembers this network and will rejoin it automatically every time it powers up. The main screen appears.

b. **CONNECT FAILED**, **NO SSID AVAILABLE**, **CONNECTION LOST** or **UNABLE TO CONNECT** — the connection didn't take, and CONFIG returns to the network list. Nine times out of ten the password was mistyped; choose your network and try again carefully.

Troubleshooting

Sometimes you don't get the result you expected when you turn on your computer. Most difficulties are easy to resolve. Refer to the chart below to remedy any problem.

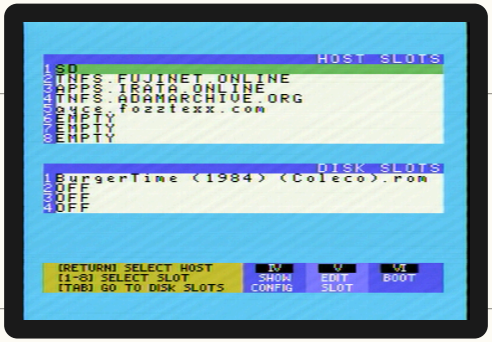
Symptom	Cause	Remedy
ADAM boots the electronic typewriter, not CONFIG	FujiNet off, or cable loose	Check FujiNet's power switch and the ADAMnet cable; pull COMPUTER RESET
	Boot media in a drive	Remove data packs, disks and cartridges; reset
ADAM boots old software instead of CONFIG	An image is still mounted in disk slot 1	Restart the FujiNet, then pull COMPUTER RESET (Chapter 9)
No networks found	Network is 5 GHz-only or out of range	FujiNet sees 2.4 GHz networks only; enable 2.4 GHz on the router or move closer
	Network is hidden	Use (IV) HIDDEN SSID and type the name
CONNECT FAILED or UNABLE TO CONNECT	Wrong password	Re-enter carefully; capitalization counts
	Router restrictions	Check MAC filtering against the MAC address shown on the scan screen

Chapter 3

Using Hosts and Disk Slots

The Main Screen

Everything in CONFIG begins at the main screen. The top half lists your eight **HOST SLOTS** — remembered places that software comes from. The bottom half lists your four **DISK SLOTS** — the virtual drives your ADAM sees. Press **TAB** to jump between the halves.



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A **host** is most often a **TNFS server** on the Internet — a computer that shares a library of ADAM software, such as `fujinet.online` — or the microSD card in your FujiNet (the special name `SD`). Web, SMB, NFS and FTP servers work too (next section). Empty slots read **EMPTY**.

Each **disk slot** shows the disk image mounted in it, or **EMPTY**, or **OFF** if you have disabled that drive. The slot's number sits on a colored tile: **blue** means the image is mounted read-only, **green** means read/write.

ON THE HOST SLOTS (TOP) HALF

PRESS	TO
↑ / ↓ or 1–8	Move to a host slot
RETURN	Open the highlighted host and browse it (Chapter 4)
TAB	Jump to the disk slots
(IV) SHOW CONFIG	Display FujiNet's network details (Chapter 7)
(V) EDIT SLOT	Type a new host name into the slot
(VI) BOOT	Leave CONFIG and boot what's mounted (Chapter 4)

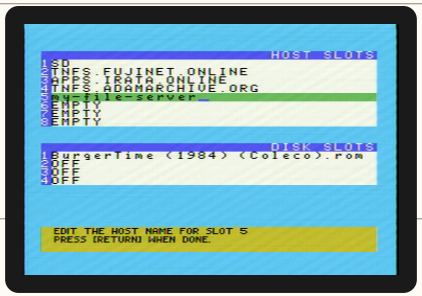
Setting Up a Host Slot

To tell FujiNet where your software lives, put a name in a host slot:

1. Highlight a host slot with the arrow keys (or press its number, 1–8).
2. Press **(V) EDIT SLOT**. CONFIG prompts: **EDIT THE HOST NAME FOR SLOT** followed by the slot number.
3. Type the host's name and press **RETURN**. **BACKSPACE** erases.

Host slots speak several protocols — what you type tells FujiNet what kind of server to reach:

YOU TYPE	FUJINET CONNECTS TO
`SD`	The microSD card in your FujiNet
`fujinet.online` (any plain name or IP)	A **TNFS** software server — the default when no protocol is given
`http://server/path`	A web server — its index page is read and presented as a browsable folder
`smb://server/share`	A Windows (SMB) file share; `user:password@` may be included
`nfs://server/export`	An NFS server
`ftp://server`	An FTP server



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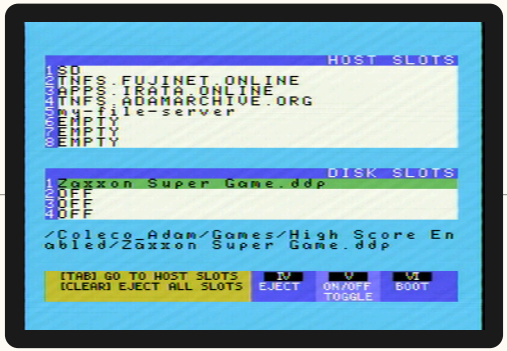
To clear a slot, edit it and backspace the name away, then press **RETURN** — the slot reads **EMPTY** again.

IMPORTANT: Changing or clearing a host slot automatically ejects any disk images that were mounted from it, since they can no longer be reached.

Press **TAB** to move the highlight into the DISK SLOTS half:



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ON THE DISK SLOTS (BOTTOM) HALF

PRESS	TO
↑ / ↓ or 1–4	Move to a disk slot
TAB	Jump back to the host slots
(IV) EJECT	Unmount the image in the highlighted slot
(V) ON/OFF TOGGLE	Enable or disable that virtual drive
(VI) BOOT	Leave CONFIG and boot what's mounted
CLEAR	Eject ALL disk slots at once

About ON/OFF. This one is for owners of real ADAM disk drives. If a physical drive answers at the same ADAMnet address as one of FujiNet's virtual drives, switch that slot **OFF** so the two don't quarrel. A slot showing OFF ignores everything until you toggle it back on. Press **(V)** on the highlighted slot to flip it.

Long names. If a mounted image's filename is too long for its row, the full name appears in the open area beneath the disk slots.

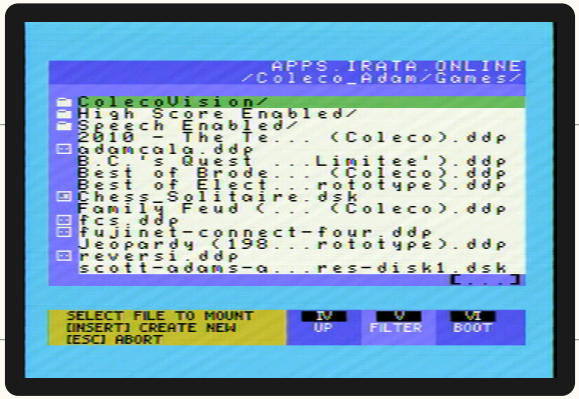
When you press **CLEAR**, CONFIG announces **CLEARING ALL SLOTS...** and every slot returns to EMPTY. The image files themselves are never harmed by ejecting — you are only taking the digital data pack out of the drive.

Chapter 4

Browsing and Mounting Disk Images

Browsing a Host

Highlight a host slot and press **RETURN**. CONFIG says **OPENING...** and presents the host's files, fifteen to a page, with the host's name and your current folder path across the top.



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Every entry carries a little icon telling you what it is: a **folder**, a **DDP** (data pack image), a **DSK** (disk image), or a **ROM**. A **(...)** mark at the top or bottom of the list means more entries lie in that direction. Rest the highlight on a long name for a moment and the full name appears at the bottom of the screen.

IN THE FILE BROWSER

PRESS	TO
↑ / ↓	Move the highlight (rolls onto the next page)
CONTROL + ↑ / ↓	Jump a whole page at a time
HOME	Back to the top of the list
RETURN	Open the highlighted folder, or pick the file
(IV) UP	Up to the parent folder (hidden at the top level)
(V) FILTER	Show only matching files; search the whole host
(VI) BOOT	Mount the highlighted image in slot 1 and boot it NOW
INSERT	Create a brand-new blank disk image (Chapter 5)
MOVE/COPY	Copy the highlighted file to another host (Chapter 6)
ESCAPE/WP	Back to the main screen

Link entries. On some public servers you may see entries marked with a **+**. These are doorways to *other* TNFS hosts: choose one and CONFIG connects there and keeps browsing. (The linked host's name lands in host slot 8, so it will be on your main screen afterward, too.)

Filtering and Searching

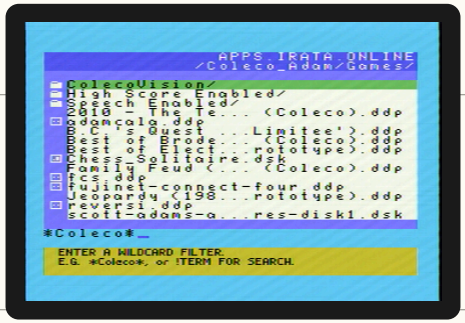
When a host holds hundreds of files, let CONFIG do the digging. Press **(V) FILTER** in the browser. CONFIG prompts:

ENTER A WILDCARD FILTER.
E.G. *Coleco*, or !TERM FOR SEARCH.

1 A pattern with ***** wildcards — like `*Coleco*` or `Donkey*` — narrows the current folder to names that match.

2 A pattern starting with **!** — like `!zork` — **searches the entire host**, top to bottom, and lists every file containing that term, wherever it hides.

3 Enter a blank filter to see everything again.



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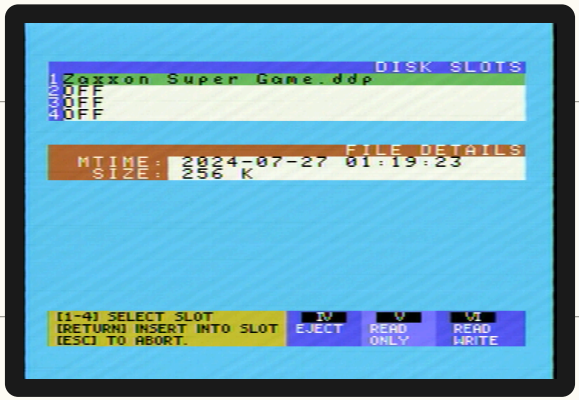
While a filter is active it is shown in the top-right corner of the browser, so you'll always know why a folder looks short.

Mounting a Disk Image

Mounting an image is just like putting a data pack in the drive — without getting up. Highlight a disk image in the browser and press **RETURN**. CONFIG presents **FILE DETAILS** — the file's name, date, and size — with your four disk slots below:



IO

ON THE FILE DETAILS SCREEN

PRESS	TO
↑ / ↓ or 1–4	Choose a disk slot
RETURN or (V)	Mount the image READ ONLY (safe)
(VI)	Mount the image READ/WRITE (programs can save to it)
(IV) EJECT	Empty the highlighted slot first, if you need room
ESCAPE/WP	Abort, back to the main screen

After mounting, CONFIG returns you to the browser in the same folder, so you can mount more disks into other slots. Press **ESCAPE/WP** when you're done.

HINT: Mount read-only unless you know the software saves onto its own disk. A read-only image can be shared by everyone on a server at once, and no stray write can ever damage it.

Booting Your Software

There are two ways to start what you've mounted:

1. **BOOT.** From either half of the main screen, press **(VI) BOOT**. CONFIG mounts everything in your disk slots, steps out of the way, and restarts the ADAM. The ADAM boots from disk slot 1 exactly as if a real data pack were in the drive.
2. **QUICK BOOT.** In the browser, highlight a disk image and press **(VI)**. The image is mounted into slot 1, read-only, and booted immediately. Browse, pick, play.

Your disk slots are remembered inside the FujiNet, so the same software boots again next time — until you eject it or mount something else.

NOTE: When some slots are already occupied the browser's smartkey reads **BOOT** when all are empty it reads **QUICK BOOT**. Both do the same convenient thing to the file you have highlighted.

Chapter 5

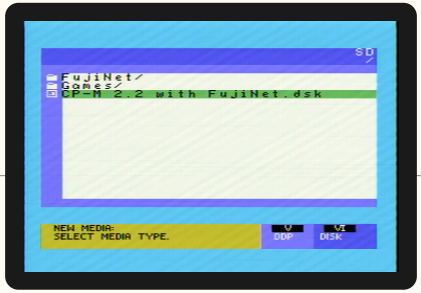
Creating New Disk Images

Creating New Disk Images

CONFIG can manufacture blank media out of thin air — on your SD card, or on any TNFS server that allows writing. Browse to the folder where the new image should live, then:

1. Press **INSERT**. CONFIG asks: **NEW MEDIA: SELECT MEDIA TYPE.** Press **(V) DDP** for a digital data pack image or **(VI) DISK** for a disk image. (Any other key cancels.)
2. **SIZE?** Pick a capacity with the SmartKeys:
   - **DDP:** 128K, 256K or 320K — or CUSTOM. 256K is the most common choice: the size of a standard digital data pack.
   - **DISK:** 160K, 320K, 720K or 1440K — or CUSTOM. 160K is the most common: the size of a standard Coleco Disk Drive disk.

   CUSTOM asks you to type the size as a number of 1K blocks.
3. **PLEASE ENTER A FILENAME FOR THIS DISK/DDP:** Type a name — give it a `.ddp` or `.dsk` ending to match its type — and press **RETURN**. A blank name cancels.
4. Choose a disk slot and press **RETURN**. CONFIG announces **CREATING FILE... PLEASE WAIT.** The image is mounted read/write.
5. **DO YOU WISH TO WRITE AN EOS DIRECTORY TO THIS IMAGE?** Press **(V) YES** to format it for EOS — SmartBASIC, SmartWriter and friends — or **(VI) NO** to leave it blank (for CP/M and other uses).
6. If you chose YES: **ENTER A VOLUME LABEL (12 CHARACTERS MAX)**, then **RETURN**. CONFIG writes the directory: **CREATING THE DIRECTORY. PLEASE WAIT.**



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You return to the main screen with a fresh, formatted, writable disk in its slot — ready for SmartBASIC's SAVE command.

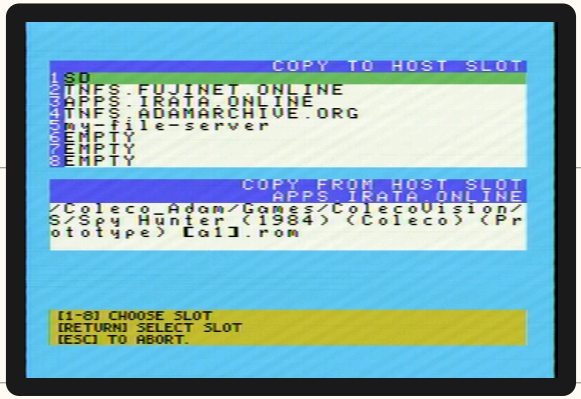
Chapter 6

Copying Files Between Hosts

Copying Files Between Hosts

Grab a game from a server in Poland and keep it on the card in your FujiNet — CONFIG copies files from any host to any writable host. Server to SD, SD to server, even server to server:

1. Browse to the file you want, and highlight it.
2. Press the **MOVE/COPY** key. (The original file is never altered.)
3. **COPY TO HOST SLOT** — your eight host slots are listed. Choose the destination host with **1–8** or the arrows and press **RETURN**. (**ESCAPE/WP** aborts.)
4. The destination host opens in the browser, and the status line reads **SELECT DESTINATION.** Walk to the folder where the copy should go — **(V) FILTER** works here too.
5. Press **(VI) PERFORM COPY**. CONFIG shows **COPYING FILE...PLEASE WAIT.** with the source above and the destination below.



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When the copy finishes, you are returned to the folder you copied from — handy for collecting several files in one sitting.

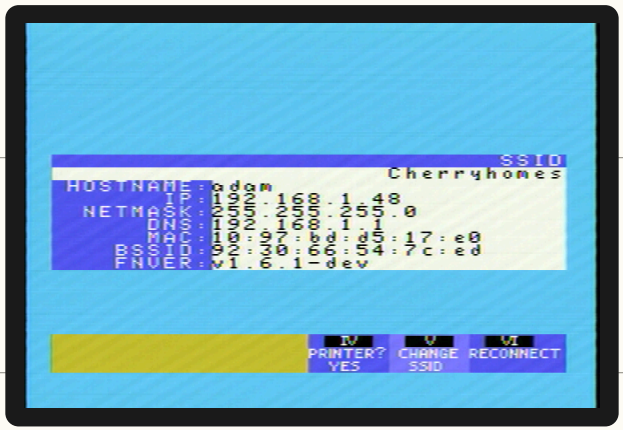
NOTE: The destination must allow writing. Public servers are usually read-only; your SD card is always willing.

Chapter 7

The Configuration Screen

The Configuration Screen

From the main screen's host half, press **(IV) SHOW CONFIG** to see exactly how your FujiNet is faring on the network:



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SSID	The wireless network FujiNet is connected to
HOSTNAME	FujiNet's name on your network
IP	FujiNet's address on your network
NETMASK	Your network's subnet mask
DNS	The name server FujiNet uses
MAC	FujiNet's hardware address
BSSID	Your Wi-Fi access point's hardware address
FNVER	FujiNet firmware version and build date

ON THE CONFIGURATION SCREEN

PRESS	**TO**
(IV) PRINTER? YES/NO	Toggle FujiNet's virtual printer
(V) CHANGE SSID	Forget this network; run network setup again
(VI) RECONNECT	Drop and re-join the current network
RETURN / ESC / SPACE	Back to the main screen

About the printer toggle. Set to **YES**, FujiNet answers as the ADAM's printer and quietly captures everything your programs print; view and save the output from FujiNet's web page. Set it to **NO** to let your SmartWRITER™ printer receive output as usual.

The web page. Type the IP address shown on this screen into a web browser on any computer or phone in your house — for example `http://192.168.1.123/` — and FujiNet's full configuration site appears: captured printer output, host and slot management, firmware settings, and much more. It is the deluxe companion to the CONFIG program you are reading about.

A FujiNet in every home!

Chapter 8

Using Your Game Controllers

Using Your Game Controllers for CONFIG

Your ADAM's game controllers may also be used to drive CONFIG — from the comfort of your couch. Just be sure they are attached to their controller ports. Their uses are as follows:

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- Push the **joystick up or down** (hold it a moment) to move the highlight bar on any CONFIG screen.
- Press **either fire button** — it acts just like **RETURN**.
- Press **1 through 8 on the keypad** to jump straight to that host or disk slot.
- Press the **∗ key** on the keypad to BOOT — the same as **(VI)**.

Either controller port will do. Consult Chapter 3 and Chapter 4 to see what RETURN and BOOT accomplish on each screen.

Chapter 9

Routine Procedures

Returning to CONFIG

After you press BOOT, CONFIG politely steps aside until the FujiNet is restarted. To get back:

1. Press the FujiNet's **Safe Reset** button — or switch the FujiNet off and on.
2. Pull the ADAM's **COMPUTER RESET** switch.

The ADAM boots into CONFIG with your hosts and mounted images just as you left them.

Swapping Disks With Button A

When a program asks you to "insert disk 2 and press RETURN," don't get up:

1. Press FujiNet's **Button A** briefly. Every mounted image rotates one slot forward — slot 2's image slides into slot 1, slot 3's into slot 2, and so on, around the horn.
2. Continue in your program as if you had swapped the media by hand.

Mount all of a program's disks into slots 1 through 4 before booting, and multi-disk software becomes a one-button affair.

Hints on Taking Care of Your FujiNet

1. Switch the FujiNet OFF before connecting or disconnecting the ADAMnet cable, and before inserting or removing the microSD card.
2. Keep firmware fresh. New features and fixes arrive regularly; flash updates over the micro-USB port using the FujiNet Flasher from `fujinet.online/download`.
3. The FujiNet contains no user-serviceable parts — but unlike 1983, the schematics are free. See the fujinet-hardware repository if you enjoy a soldering iron.

Chapter 10

Glossary of Computer Words

Glossary of Computer Words

ADAMnet — the ADAM's built-in network of peripherals (keyboard, drives, printer). FujiNet joins it as several devices at once.

CONFIG — the program this manual is about: FujiNet's control panel, booted by the ADAM directly from the FujiNet.

DDP — a Digital Data Pack image file — an entire ADAM digital data pack, captured in a single file.

Disk image — a complete digital data pack or disk stored as one file (.ddp, .dsk, .rom).

Disk slot — one of FujiNet's four virtual drives. Whatever is mounted in disk slot 1 is what the ADAM boots.

EOS — the Elementary Operating System — the ADAM's native operating system. "Writing an EOS directory" formats an image so EOS programs can store files on it.

FTP — the File Transfer Protocol, a longtime Internet standard for moving files. A host slot beginning `ftp://` browses an FTP server.

Host — a place disk images live: a TNFS, web (HTTP), SMB, NFS or FTP server — or the microSD card in your FujiNet.

Host slot — one of the eight remembered host names on CONFIG's main screen.

HTTP — the protocol of the World Wide Web. A host slot beginning `http://` or `https://` reads a web server's index page and presents it as a browsable folder.

MAC address — a hardware serial number identifying your FujiNet to the network.

Mount — to load a disk image into a disk slot — the electronic equivalent of inserting a digital data pack and closing the drive door.

NFS — the Network File System, a file-sharing protocol commonly used on UNIX™ systems. A host slot beginning `nfs://` browses an NFS server's export.

Read-only / read-write — whether programs may change a mounted image. Blue slot number: read-only. Green: read-write.

SMB — Server Message Block, the file-sharing protocol of Microsoft Windows. A host slot beginning `smb://` browses a Windows shared folder.

SSID — the broadcast name of a wireless network — the name you pick from CONFIG's network list.

TNFS — the Trivial Network File System, the simple, friendly protocol FujiNet uses to browse software servers over the Internet.

Wi-Fi — wireless networking. FujiNet uses the 2.4 GHz flavor (802.11 b/g/n).

Learning More

- **FujiNet web site:** `https://fujinet.online/`
- **Firmware, downloads, wiki:** `https://github.com/FujiNetWIFI/fujinet-firmware`
- **Community Discord:** `https://discord.gg/7MfFTvD` — the fastest place to get help, day or night.
- **Flashing & updating:** `https://fujinet.online/download/`

Doing More

CONFIG is only the beginning. FujiNet-aware ADAM software can read the time from the Internet, fetch weather reports, print to modern printers, play multi-player games against other FujiNet owners on Ataris and Apples, and write its own network programs through the N: device. Visit the web site and the Discord to see what the community is building — and to show off what you build.

Welcome to the FujiNet family.
Happy computing!