StitchSitter
Embroidery Wifi Bridge

User Manual

The wireless dongle for USB-stick embroidery machines

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stitchsitter.com

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About this edition This is the first edition of the manual. It was written against firmware 2.24 using screenshots taken from two working dongles on a workshop network.

Quick start

If you only read one page, read this one. Everything here is explained in full later in the manual.

1. **Plug the dongle into the embroidery machine's USB socket**, where a memory stick normally goes. The screen lights up.
2. **With no Wi-Fi saved, the dongle shows an amber Setup screen with a square code.** Scan the code with your telephone's camera. Your telephone joins the dongle's own setup network, `StitchSitter-Setup`, and a page opens.
3. **Choose your shop Wi-Fi from the list and enter its password**, then select **Join this network**. No Wi-Fi where the machine lives? Select **Offline mode** at the top of that list instead (see section 9).
4. **The dongle restarts and joins your Wi-Fi.** Its screen now shows its name and its address, in turn.
5. **Open the address the screen shows** in any browser on your telephone or computer go to `http://ss.local`. The first time, a short five-step wizard asks for the screen direction, a name, your machine, the file format and your time zone.
6. **Open Designs and drag a design file onto the page.** In a moment it is on the storage. On the machine, open the design list again: the new design is there.

Good to know The dongle is a USB memory stick as far as your machine is concerned. It needs no software installed on any computer, no account, and no internet connection to move designs. The web app lives on the dongle itself.

1 What StitchSitter does

StitchSitter turns an embroidery machine that reads designs from a USB memory stick into a wireless one. The dongle plugs into the machine's USB socket and presents itself to the machine as an ordinary memory stick. At the same time it joins your Wi-Fi and serves its own web page, so you send designs to it from a telephone, a tablet or a computer instead of walking a stick back and forth.

The machine never knows the difference. It sees a memory card with designs in the folder it expects, in the format it reads. The dongle takes care of the folder and the format for the machine you tell it about.

What you can do with it

- **Send designs over Wi-Fi** from any browser: drag and drop, or choose files. Every design is checked on arrival.
- **See what is on the storage**, with a stitched preview, the stitch count, the size in millimetres and inches, and the colour count.
- **Convert on the way in.** A design in another brand's format can be copied as DST in the browser, ready for the machine.
- **Show the machine one design only**, and hide the rest until you are ready for them.
- **Use it as a network drive** from Windows or a Mac, and copy designs with the file manager you already know.
- **Run several dongles** on one network, each with its own name and colour, all on one Dashboard.
- **Work with no Wi-Fi at all**: the dongle can create its own network at a show, in a garage or on a farm.
- **Stay up to date** automatically, with signed firmware the dongle verifies before it installs.

Supported machines

The dongle carries a profile for each machine family. The profile decides which folder designs are written to and which formats are accepted, so a file the machine cannot read is refused before it ever reaches the card. Pick your machine once, in Setup, and forget about it.

Family	Formats the machine reads	Where designs are written	Examples
Janome and Elna	JEF, JEF+, DST	`EMB/EMBF` folder	MB-4, MB-4S, MB-7, Memory Craft 400E / 500E / 550E, Skyline S9, Elna eXpressive 830 / 850 / 940
Brother and Baby Lock	PES, DST	card root	PE800 / PE900, SE600 / SE625 / SE1900, Innov-is NQ, Luminaire, Stellaire, Entrepreneur PR series, Altair, Flourish
Tajima	DST	card root	Tajima commercial machines
Generic	DST, PES, JEF, JEF+, EXP, VP3, HUS, XXX	card root	any machine not listed: the dongle lets every common format through

Twenty-three profiles ship in firmware 2.24. If your machine is not listed, choose **Generic**; you can still pick the format it reads as the default.

2 Meet the dongle

The dongle is a small block with a colour screen along one face, a USB plug on one end, a memory card inside, one button and one light. It draws its power from the machine's USB socket, or from any USB charger.

The screen

The screen is the dongle's face to the room. From across a workshop it tells you which dongle this is, whether it is on the network, what is on the storage and which design the machine is looking at.



Figure 1. The Idle screen, the one you will see most. The numbers are explained below.

	What it is	What it tells you
1	The StitchSitter mark	The dongle is running. A thin ring around it carries the page colour.
2	The title	Takes turns: the dongle's **name**, the **StitchSitter** wordmark, then its **address** (for example `http://ss97.local`). The name holds twice as long as the others.
3	Signal bars	Wi-Fi strength, measured live. When the dongle runs its own network (offline mode) a Wi-Fi symbol sits here instead. A small download mark appears beside the bars when newer firmware is available.
4	Preview	A stitched picture of the design that is highlighted in the list.

5	Design list	Four designs at a time, with the date each was added. The highlight walks down the list and back up, pausing on each, so the whole card passes in front of you.
6	Direction arrow	Which way the highlight is walking through the list.
7	Counter	**8 of 12 Files**: the highlighted design and how many are on the storage. If some designs are held back from the machine (section 5), it says so here: **3 of 12 – 9 held**.
8	Clock	Local time, set from the internet once you have chosen your time zone.

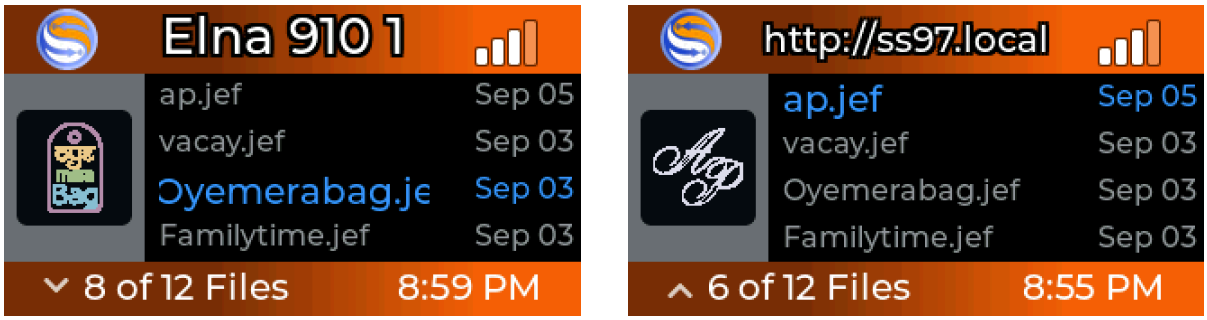


Figure 2. The title takes turns. Left: the dongle's name. Right: its address a few seconds later.

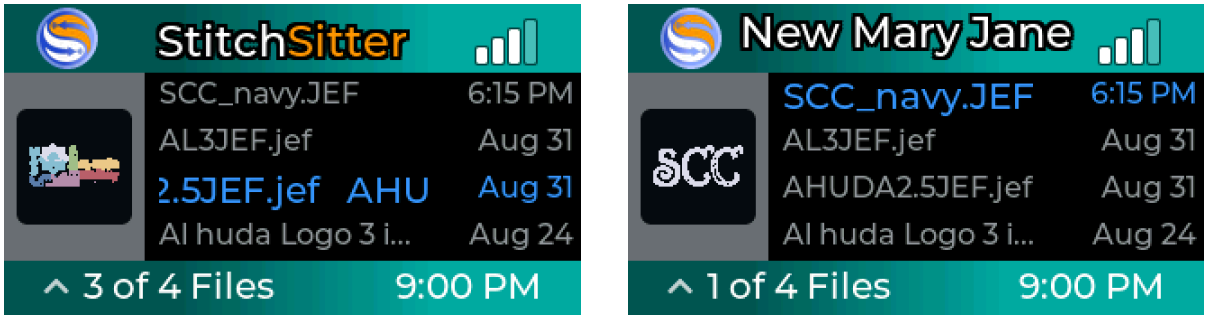


Figure 3. A second dongle, in its own colour. The colour bands and the light are how you tell dongles apart across the room (section 7).

The other pages

A short press of the button turns the page. There are four:

Page	Colour	Shows
Idle	the dongle's colour	Name, address, signal, and the design list. This is the everyday page and the dongle returns to it.
Run	green	A filmstrip of every design preview, stepping along every two seconds.

Setup	amber	The square code to scan for first-time setup, and the name of the setup network. This is also the page a brand-new dongle starts on.
Boot report	slate	What the dongle checked when it started, and whether each check passed. Useful when something is wrong.

The button

There is one button on the side of the dongle. It does two things:

- **Tap it** to turn the page: Idle, Run, Setup, Boot report, and back to Idle.
- **Hold it for six seconds** to reset the dongle to first-time setup. After a second and a half a **red card** appears saying **Factory reset – Let go to cancel**, with a bar that fills as you hold. Let go before the bar is full and nothing happens. Hold to the end and the dongle erases its name, machine, time zone and saved Wi-Fi, and restarts on the amber Setup screen. **Your designs stay on the storage.**

The light

The small light speaks the same language as the screen, so you can read the dongle's state without reading the screen:

- **Slow breathing** in the dongle's own colour (or green and blue if no colour is chosen): everything is well. The machine can use the storage.
- **Yellow flashing**: the dongle is on its Setup screen and waiting for you.
- **Red blinking**: a fault. Turn the page to the Boot report, or open the web app, to read what it is.
- **Off**: the **Dark** colour is chosen in Setup, which keeps the light off on purpose. The screen still shows everything.

The memory card

Inside the dongle is a microSD card. It is the storage your machine reads. The dongle prepares it exactly the way embroidery machines expect: one FAT32 volume of at most two gigabytes, with the folder your machine looks in. You do not need to take the card out; everything is done over Wi-Fi. If a card is ever replaced, the dongle offers to set it up during first-time setup, and the Help page explains how to do it later.

3 First-time setup

Setting up takes about five minutes and happens in two halves. The first half joins the dongle to your Wi-Fi and is done from your telephone, on the dongle's own setup network. The second half names the dongle and tells it about your machine, and is done on your own network once the dongle has joined it.

Half one: join the dongle to your Wi-Fi

1. **Give the dongle power.** Put it in the embroidery machine's USB socket, or in any USB charger.
2. **Look at the screen.** A dongle with no Wi-Fi saved starts on the amber **Setup** screen, with a square code and the words **Scan to join StitchSitter-Setup**. Its light flashes yellow.
3. **Scan the code with your telephone's camera.** The telephone offers to join the network `StitchSitter-Setup`. Accept. The network is open, so no password is asked for. If you have no camera, open your telephone's Wi-Fi settings and join `StitchSitter-Setup` by hand. The dongle screen turns green when your telephone has joined.
4. **A setup page opens by itself** on most telephones. If it does not, open a browser and go to `http://192.168.4.1`.
5. **Choose your Wi-Fi.** The page lists the networks the dongle can see, strongest first, with a lock on the ones that need a password. Tap yours. If your network does not broadcast its name, use **Type your network** and enter the name exactly.
6. **Enter the password and select Join this network.** The dongle reports when it has connected.
7. **Set up the storage, if offered.** Once the network is confirmed, the page may offer to prepare the memory card for your machine. On a new dongle the card is already prepared, so **Leave it as it is** is the usual answer. Choosing **Set up the storage** erases every design on the card.
8. **The dongle restarts onto your Wi-Fi.** The `StitchSitter-Setup` network disappears and your telephone goes back to its usual Wi-Fi by itself. The page counts down the wait and shows the address to open next.

No Wi-Fi? Is there no Wi-Fi where the machine lives? The first card on the network list is **Offline mode**. It makes the dongle create its own permanent network for your telephone and computer to join. Section 9 explains it.

Half two: the first-run wizard

Open the address the dongle shows on its screen, for example `http://ss97.local`. The first time, the web app shows a five-step wizard instead of its usual pages. Each step is one question.

Step	Question	Notes
1	**Screen direction**	Look at the dongle and pick the side its USB plug is on. The screen turns at once, so choose the one that reads the right way up.

2	**Name this dongle**	Anything you like, up to 39 characters: the machine it sits in, or the bench it is on. The name is shown on the screen and on the Dashboard. You can change it later.
3	**Which machine?**	Manufacturer, then model. This decides where designs are written and which formats are accepted. Pick **Generic** if yours is not listed.
4	**Default format**	The format your machine reads. Designs in this format are shown in bold on the Designs page.
5	**Your time zone**	The dongle sets its clock from the internet; it just needs to know where you are, so file dates read correctly.

When the wizard finishes, the dongle restarts once more and comes back on its everyday Idle screen. Setup is done. The wizard does not appear again, but every one of its answers can be changed at any time in **Setup**.

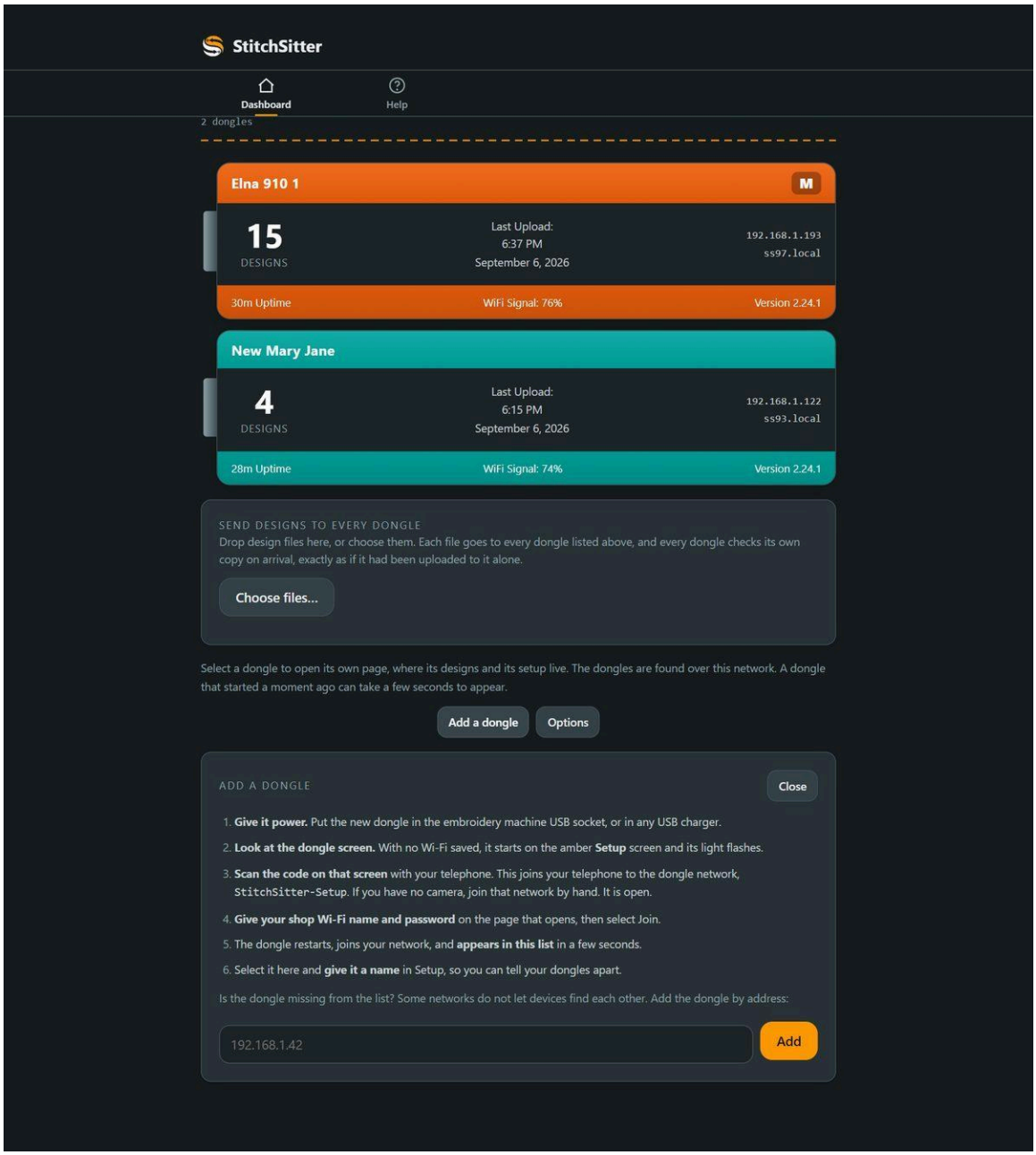


Figure 4. The Dashboard's **Add a dongle** card repeats the first half of setup, and lets you add a dongle by its address on networks that do not let devices find each other.

4 Opening the web app

The web app is served by the dongle itself. Nothing is installed anywhere; you open an address in a browser. Any device on the same Wi-Fi will do: a telephone, a tablet, a laptop, the shop computer.

Which address to open

Address	Reaches	Use it when
`http://ss.local`	whichever dongle currently holds the shared name (marked **M** on the Dashboard)	you have one dongle, or you just want the Dashboard. The quickest thing to type.
`http://ss97.local`	one particular dongle, by its short name	the name shown on that dongle's screen. Short to type; remember it may be re-numbered if another dongle claims it first.
`http://ss-da14.local`	one particular dongle, by its permanent name	you want an address that never changes for this dongle. It is shown under **This device** in Setup > Advanced.
`http://192.168.1.193`	one particular dongle, by its IP address	the names do not open on your network. The IP address is on the Dashboard card and on the dongle's screen.

If a name does not open Some routers and some office networks do not pass `.local` names. If a name does not open, use the IP address. Nothing else is different.

The four tabs

Along the top are four tabs. **Dashboard** shows every dongle on the network; the other three belong to the dongle whose address you opened, and the coloured bar at the very top carries that dongle's name and colour so you always know which one you are on.

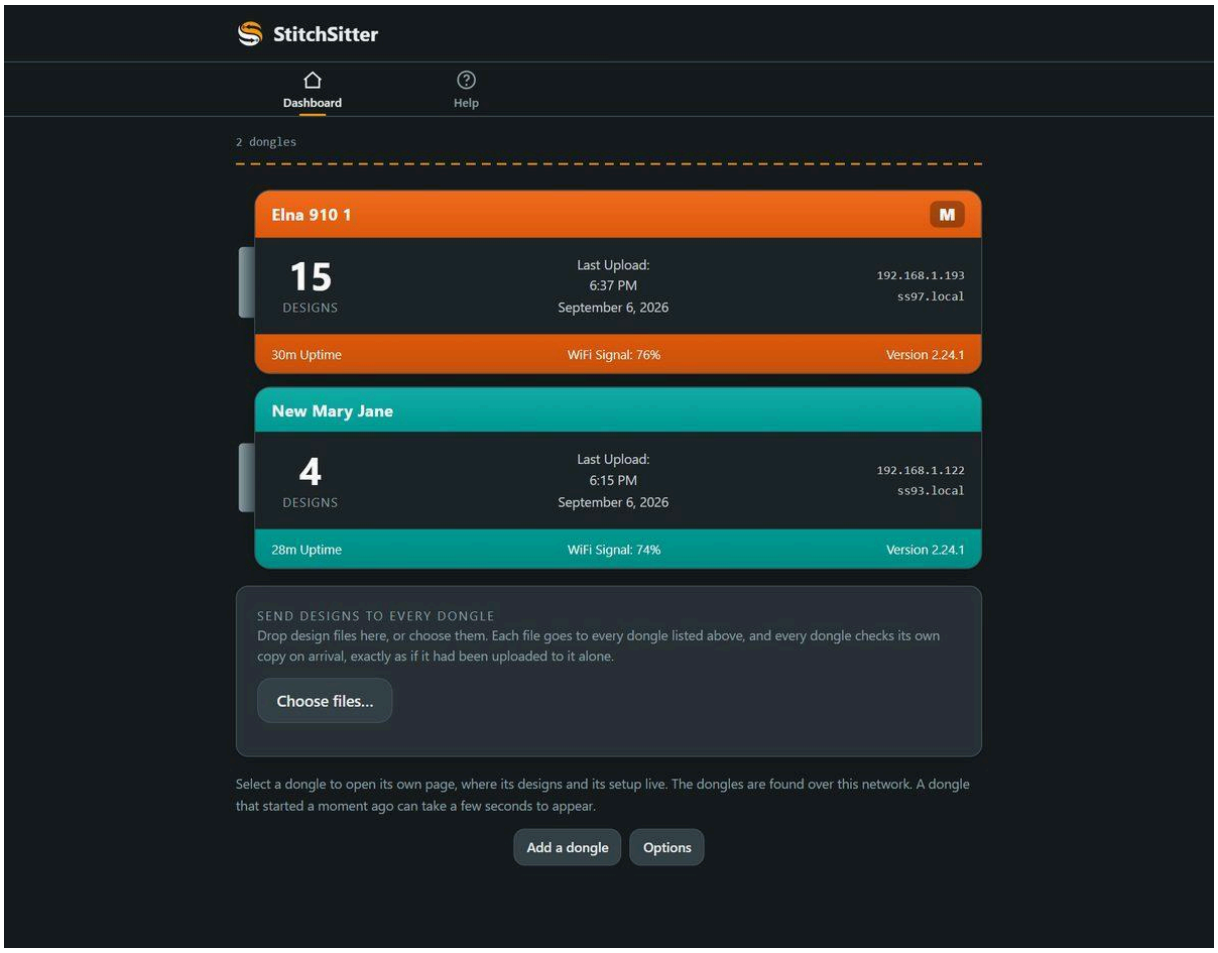


Figure 5. The Dashboard, with two dongles on the network. Each card wears its dongle's colour. The **M** marks the one answering to `ss.local`. Select a card to open that dongle's own pages.

Tab	What is there
Dashboard	One card per dongle: its name, how many designs it holds, when the last design arrived, its address, uptime, signal and firmware version. Below the cards, a drop zone that sends a design to every dongle at once, and the **Add a dongle** guide.
Designs	The drop zone for adding designs, and the gallery of everything on the storage. Section 5.
Setup	Name, machine, format, time zone, screen direction, colour, updates and network, with **Advanced** underneath. Section 10.
Help	Short answers to the things that come up most, the drive instructions for Windows and Apple, and the legal notices.

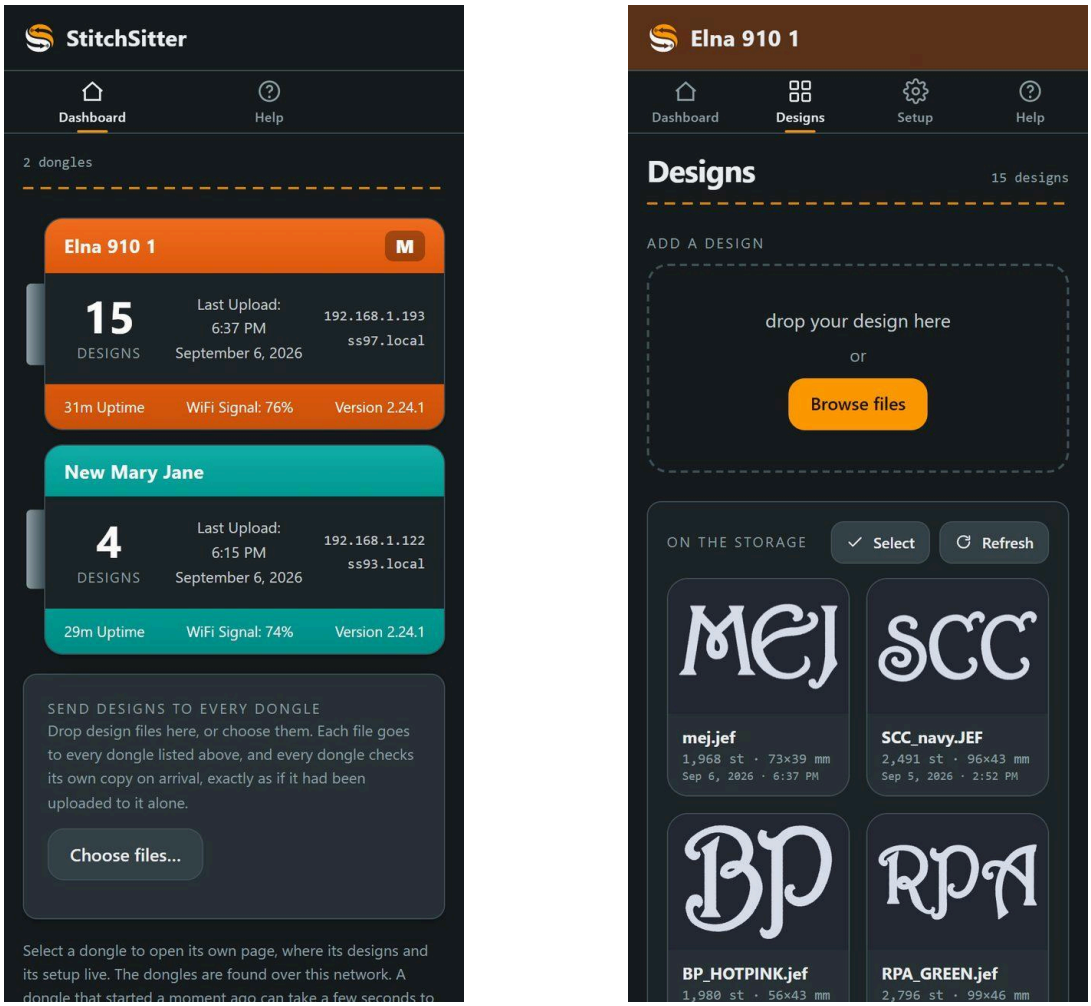


Figure 6. The same app on a telephone. Everything fits a narrow screen; nothing is missing.

5 Designs: putting work on the machine

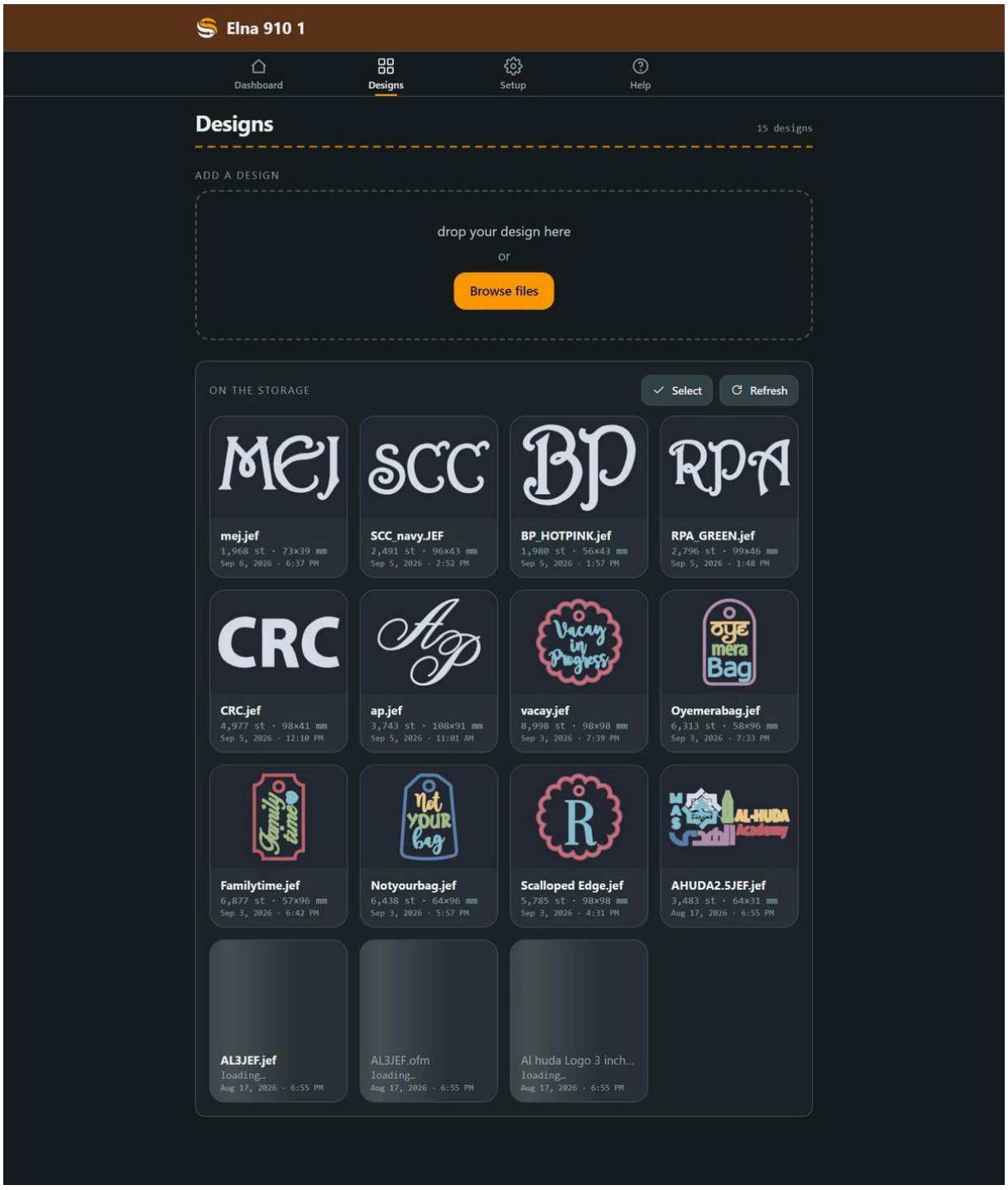


Figure 7. The Designs page. Adding comes first; the gallery of what is on the storage follows.

Put a design on the storage

1. Open **Designs** on the dongle you want.

2. **Drag a design file onto the page**, or select **Browse files** and choose it. You can drop several at once.
3. **Watch the list under the drop zone.** Each file shows its progress, then the dongle reads it back from the card and checks it. A green result means the design is on the storage and the machine has been asked to re-read.
4. **On the machine, open the design list again.** The new design is there.

A design may be up to 4 MB. The dongle carries every common embroidery format and tells you, as each file arrives, what your machine will make of it: **native** formats sew as they are; a format your machine does not read still goes on the storage, but the machine will not list it. A file that is not an embroidery file at all is refused with the reason.

Two names for one design Embroidery machines read short file names only. The dongle gives every design a short name for the machine (for example `NOTYOURB.JEF`) and keeps your full name for the web app, so the two lists can look different. That is correct.

Look at a design

Select any card in the gallery to open the design. You get a stitched preview you can zoom and drag, the stitch count, the number of colours, and the size in millimetres and in inches.

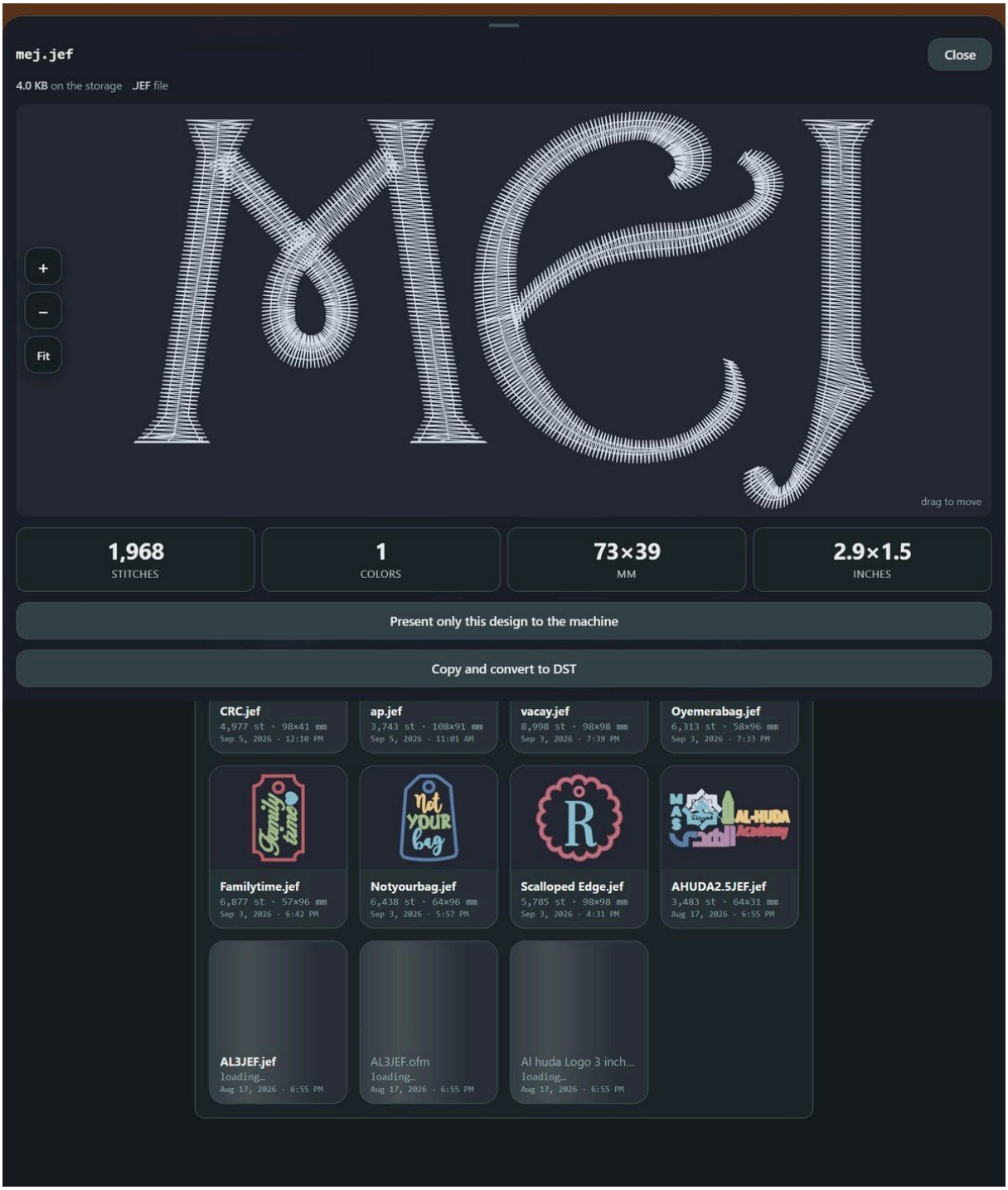


Figure 8. A design's own page. **Present only this design to the machine** and **Copy and convert to DST** are explained below.

Convert a design

From a design's page, **Copy and convert to DST** makes a DST copy of it on the storage, converted in your browser. Use this when a design arrived in a format your machine does not read but DST is one it does; JEF, PES, PEC and EXP files all convert. The original stays where it is.

Show the machine one design only

The machine normally lists every design on the storage. If you would rather it offered just one, open the design and select **Present only this design to the machine**. The other designs move to a hidden folder on the same card. Nothing is deleted and they stay in the gallery, greyed and marked **HELD**, so you can still see and delete them.

A banner at the top of Designs then says what the machine is being shown, and the dongle's screen counts what is held (**1 of 12 – 11 held**). Select **Present all** in the banner to go back to showing everything. This lasts until you undo it, even after the machine has been switched off, and a design uploaded meanwhile is held too, so the machine keeps seeing only the one you chose.

Select several designs

Select **Select** above the gallery. A circle appears on every card; tap the ones you want. A bar at the bottom offers **Present only this** (for a single selection) and **Delete (n)**. Select **Done** to leave selection mode.

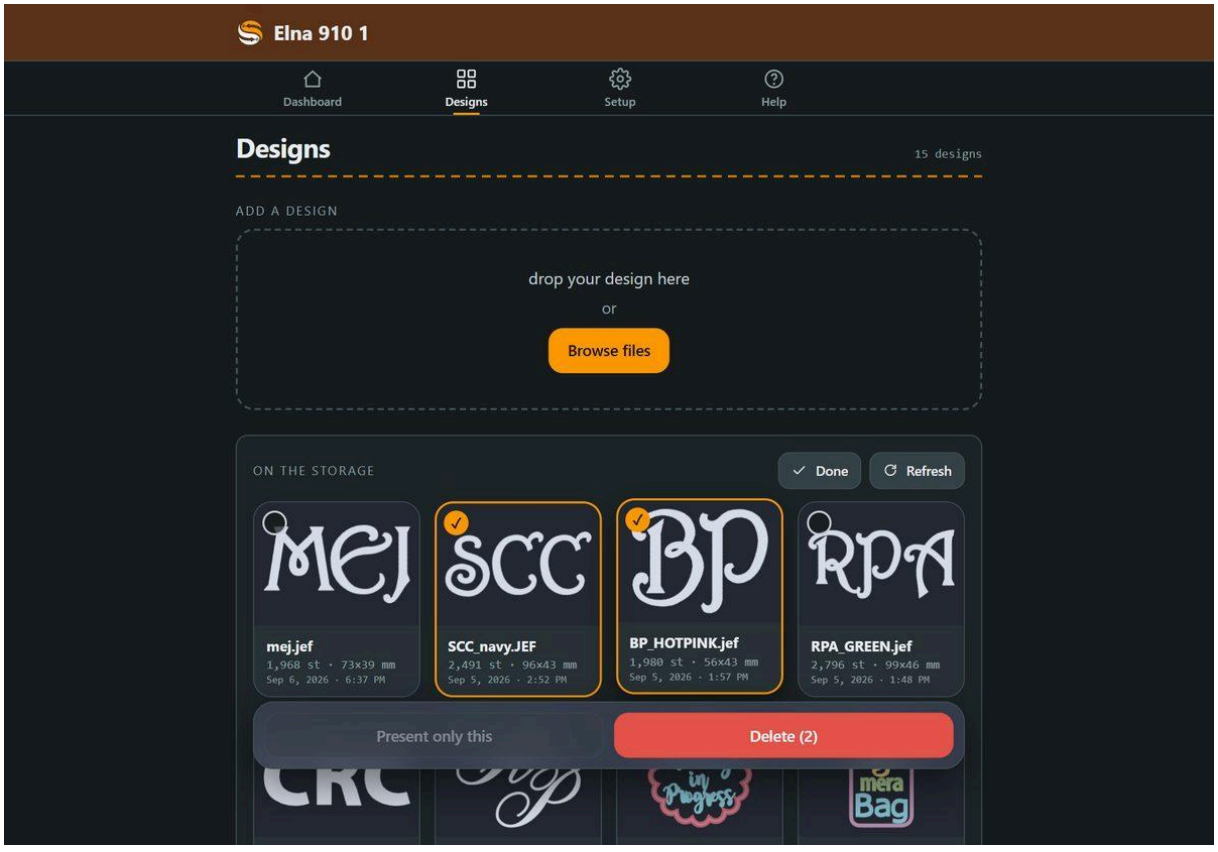


Figure 9. Selection mode, with two designs chosen and the delete button counting them.

Delete a design

Select the design, or several, and choose **Delete**. The dongle removes the file from the storage and asks the machine to re-read. If the machine is showing a design while you delete it, the machine may hold its own copy until it goes back to the design list.

Send a design to every dongle

On the **Dashboard**, drop files on **Send designs to every dongle**. Each file goes to every dongle in the list, and every dongle checks its own copy on arrival exactly as if it had been uploaded to it alone. Handy when several machines are to sew the same job.

6 The dongle's screen while you work

You will glance at the screen far more often than you open the web app, so here is what it is telling you.

- **The list walks.** The highlight moves down the design list and back up, pausing on each design for a few seconds, and the preview follows it. A long name scrolls sideways while it is highlighted. Nothing is being selected on the machine; the walk is just so you can see the whole card without touching anything.
- **New designs appear at the top** with today's date. A design that arrived by a memory card being written on a PC shows no date until the dongle has read it.
- **The counter tells you what the machine can see.** `12 of 12 Files` means everything is presented. `3 of 12 – 9 held` means the machine is being shown three; the rest are held (section 5).
- **A download mark beside the signal bars** means newer firmware is available. With automatic updates on (the default) it installs itself the next time the dongle starts; otherwise install it from Setup > Advanced.
- **The title changes when you are in offline mode.** Instead of the name and address, the screen alternates between the address to open and the network password, so anyone in the room can join (section 9).
- **The screen dims by itself** after a while with nobody around, and comes back when the button is pressed or the web app is used. It also dims when the dongle gets hot, and brightens again as it cools (section 12).
- **A red card with a filling bar** means the button is being held; let go to cancel a factory reset.

7 Several dongles

StitchSitter is built for a room with more than one machine. Every dongle has three things that tell it apart.

- **A name**, chosen by you in Setup. It is the title on the screen and the heading of its Dashboard card.
- **A colour**, chosen in Setup from nine. The screen bands and the light both wear it, so you can tell two dongles apart from across the room. **Dark** keeps the light off.
- **Two addresses of its own**: a short name such as `ss97.local`, and a permanent name such as `ss-da14.local`, plus its IP address.

The shared name

On top of their own names, the dongles share one short name, `ss.local`. Whichever dongle is up first answers to it, and if that one is unplugged another takes over within a few seconds, so `ss.local` always opens a Dashboard. The dongle holding it wears an **M** on its Dashboard card. Type `ss.local` when you want the Dashboard; open a dongle's own name when you want that dongle.

The Dashboard

The Dashboard finds every dongle on the network by itself and refreshes the list every few seconds (change this under **Options**). Select a card to open that dongle's own pages: its Designs and its Setup. A dongle that started a moment ago can take a few seconds to appear.

Some networks do not let devices find each other. In that case select **Add a dongle** and enter the dongle's IP address; the Dashboard remembers it in this browser.

Adding another dongle later

Plug it in, scan the code on its amber screen and give it your Wi-Fi, exactly as in section 3. It appears on the Dashboard in a few seconds. Select it, give it a name and a colour, and it is part of the room.

8 Use the dongle as a drive on your computer

Your computer can open the dongle's storage like a drive: see the designs, drag new ones in, delete old ones, all from File Explorer or Finder. Copying a design onto the drive does exactly what an upload on the Designs page does: the file is checked on arrival and the machine is asked to re-read.

The address to mount

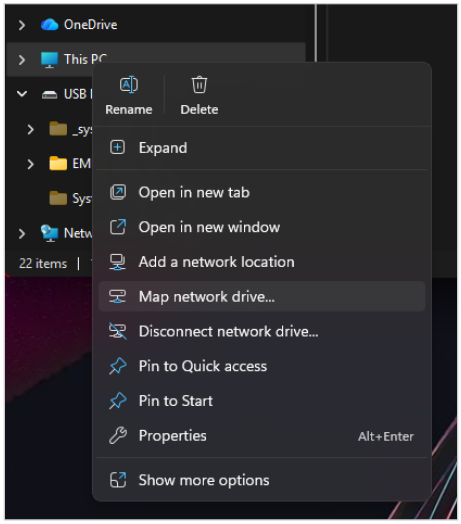
Use the dongle's own address **twice over**: once as the address, once on the end. The last part of the address becomes the drive's name on your computer, so with two dongles you get two drives named after their dongles instead of two drives with the same name.

Mount this	The drive is called	Use it when
`http://ss-6b3c.local/ss-6b3c`	ss-6b3c	**the one to save.** The permanent name never changes.
`http://ss97.local/ss97`	ss97	shortest to type; the name on the screen. It can be re-numbered if another dongle claims it first.
`http://192.168.1.193/ss-6b3c`	ss-6b3c	names do not open on your network. The IP address always works.

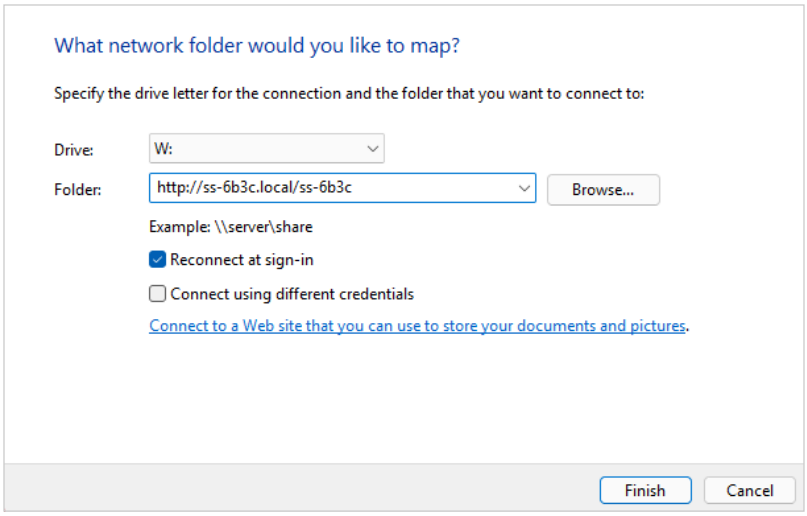
The Help page in the web app shows this dongle's own address ready to copy.

Windows

1. **Find your dongle's name.** Open `http://ss.local` in a browser and select your dongle on the **Dashboard**. Its own page opens, for example `http://ss-6b3c.local/`. The part before .local is the dongle's name, here ss-6b3c. The name is also on the dongle's card on the Dashboard, under its IP address. If the address bar shows numbers instead, read the name from the card.
2. In **File Explorer**, right-click **This PC** and select **Map network drive**.



3. Choose a free drive letter. In **Folder**, enter http://, the name, .local/ and the name again, for example `http://ss-6b3c.local/ss-6b3c`. Tick **Reconnect at sign-in** to keep the drive after a restart. Leave **Connect using different credentials** unticked. The share is open on your own network.



4. Select **Finish**. The drive opens and lists the designs. Drag designs onto it like any other drive.
5. **If Windows says the network name cannot be found** (system error 67), its WebDAV client is switched off. Windows ships it that way. Open **Services** (type services into the Start menu), find **WebClient**, set its startup type to **Automatic** and start it. Then map the drive again. You do this once on each computer.

A copy onto the drive takes five to seven seconds for a typical design. Most of that is Windows checking for a proxy server before each request. If you would like it faster, turn off Automatically detect settings under **Settings > Network & Internet > Proxy**.

Apple

1. In **Finder**, open the **Go** menu and choose **Connect to Server** (Command K).
2. Enter the same address, for example `http://ss-6b3c.local/ss-6b3c`, and select **Connect**. Connect as **Guest**.

On many networks the dongle also appears by itself in the Finder sidebar under **Network**, named after the dongle.

What the drive can and cannot do

Action	Works?	Notes
See the designs on the storage	yes	instant; served from the dongle's memory
Copy a design to the storage	yes	checked on arrival, machine asked to re-read
Open or copy a design from the storage	yes	
Delete a design	yes	
Make folders, rename	no	the storage is deliberately flat: the machine only looks in one place

Before an update Unmap the drive before you update the dongle's firmware or unplug it. Windows keeps polling a mapped drive, and a dongle restarting under that load may take longer to come back.

9 Offline mode: the dongle's own network

A machine does not always live where there is Wi-Fi: a craft fair, a barn, a hired hall. In offline mode the dongle creates its own Wi-Fi network. Your telephone or computer joins that network and everything works as usual: the web app, the Designs page, the drive.

Switching it on

- **During first-time setup**, select **Offline mode** — the first card on the list of networks. Give the network a name and a password, or leave the password blank for an open network, and select **Set up**.
- **Later**, open **Setup**, scroll to **Network**, and select **No Wi-Fi at this location? Use the dongle's own network**.

The dongle restarts on its own network. Its screen shows the network you chose on the title line, taking turns between the address to open (`http://192.168.4.1`) and the password, so anybody in the room can join without asking. A Wi-Fi symbol replaces the signal bars.

What is different in offline mode

- There is no internet, so the dongle cannot set its clock or check for updates. File dates may be wrong until it is back online.
- The shared name `ss.local` and the Dashboard's automatic discovery are not available; open the address shown on the screen.
- Everything else — uploading, previews, converting, holding a design, the network drive — works exactly as it does on Wi-Fi.

Going back to Wi-Fi

Open **Setup**, choose a network from the list and join it. The dongle restarts onto that network and stops running its own.

10 Setup and Advanced: every setting explained

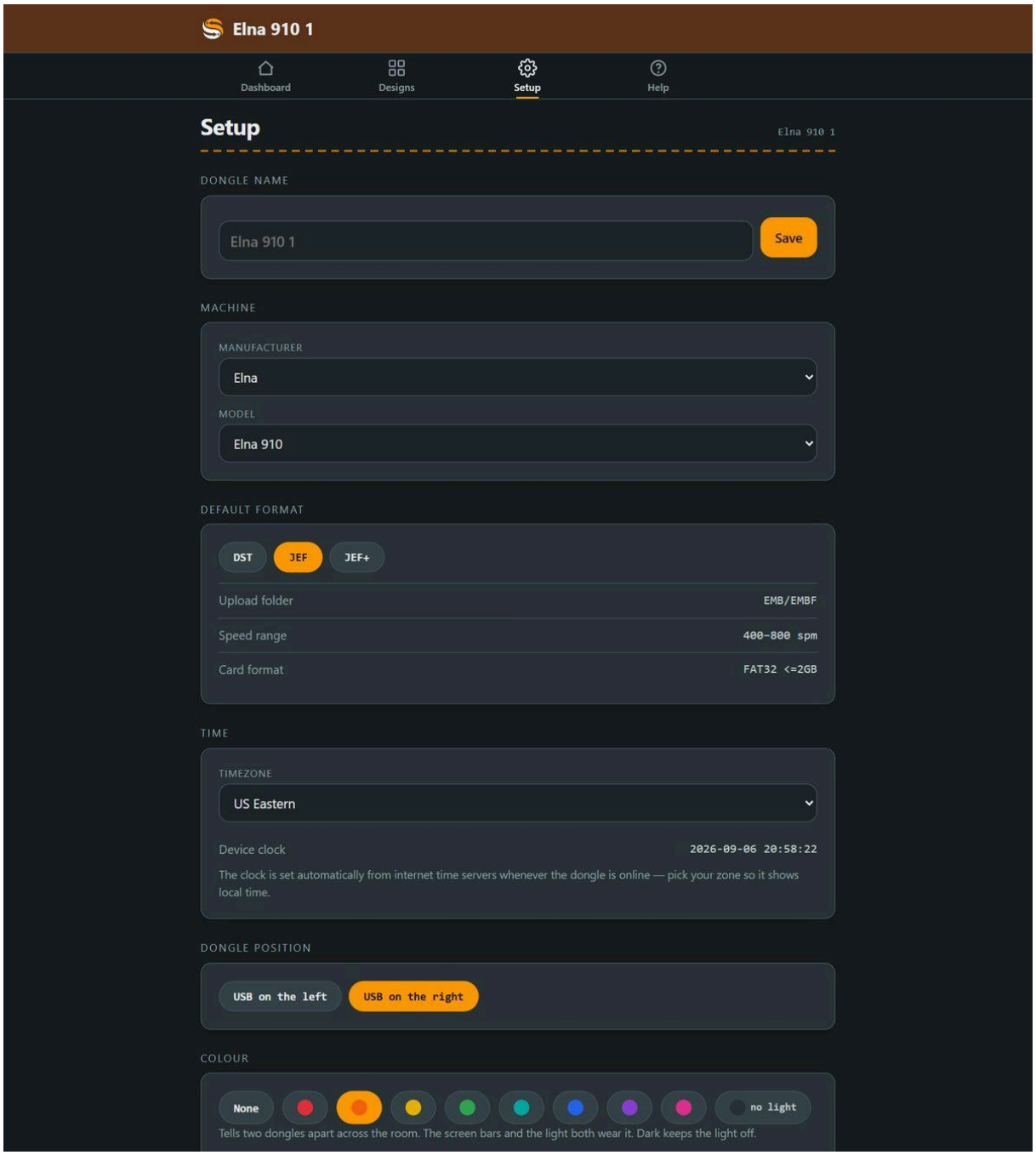


Figure 10. Setup, upper half: name, machine, format, time and position.

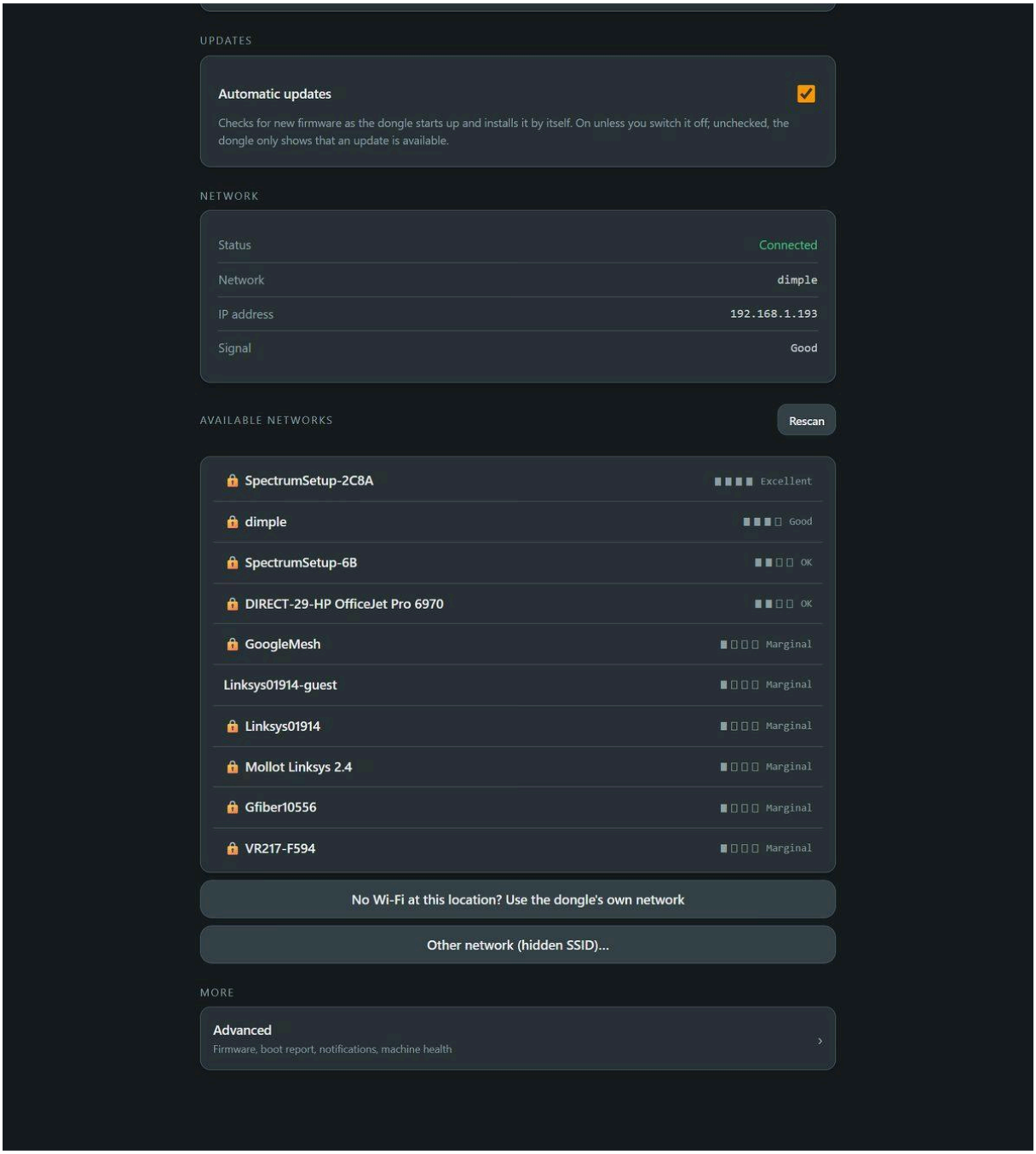


Figure 11. Setup, lower half: colour, updates and network, with Advanced at the end.

Setting	What it does
Dongle name	The title on the screen and on the Dashboard. Up to 39 characters. Select **Save**.
Machine	Manufacturer and model. Sets the folder designs are written to, the formats accepted, and the speed used for time estimates. Changing it moves where new designs go, so only change it deliberately.
Default format	Which of the machine's formats is yours. Shown in bold in the gallery. The card also shows the upload

	folder, speed range and card format the profile expects.
Time	Your time zone. The clock itself is set from the internet.
Dongle position	USB on the left or on the right. Turns the screen so it reads the right way up however the dongle sits in the machine.
Colour	One of nine, or Dark. Worn by the screen bands and the light.
Updates	**Automatic updates** on (the default) installs new firmware as the dongle starts. Off, the dongle only shows that an update is available; a release marked urgent installs even then.
Network	The network the dongle is on, its address and signal, the list of networks it can see, **Rescan**, the offline-mode button and **Other network (hidden SSID)**.

Advanced

Reached from the **Advanced** row at the bottom of Setup.

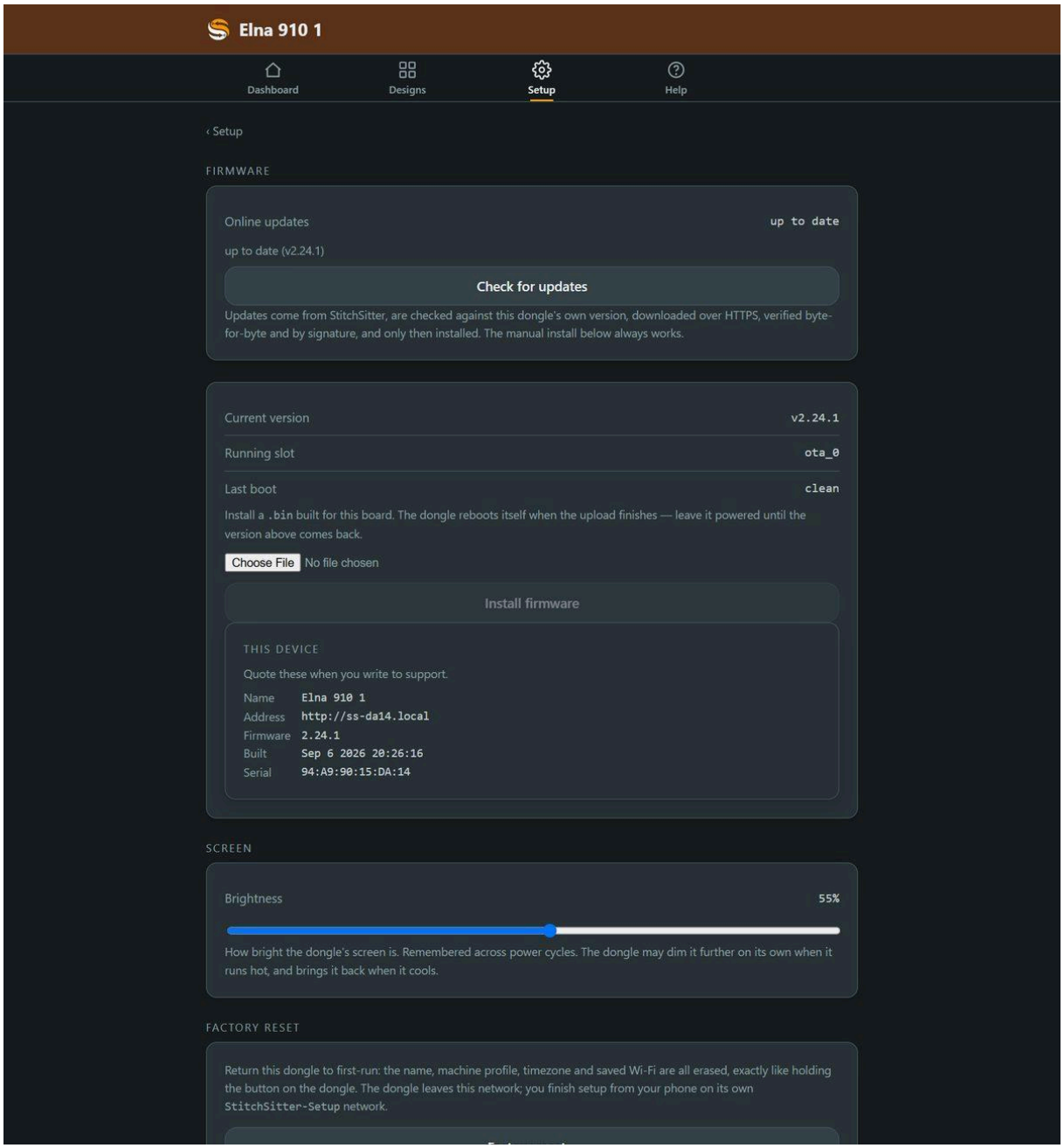


Figure 12. Advanced, upper half: firmware, this device, screen brightness and factory reset.

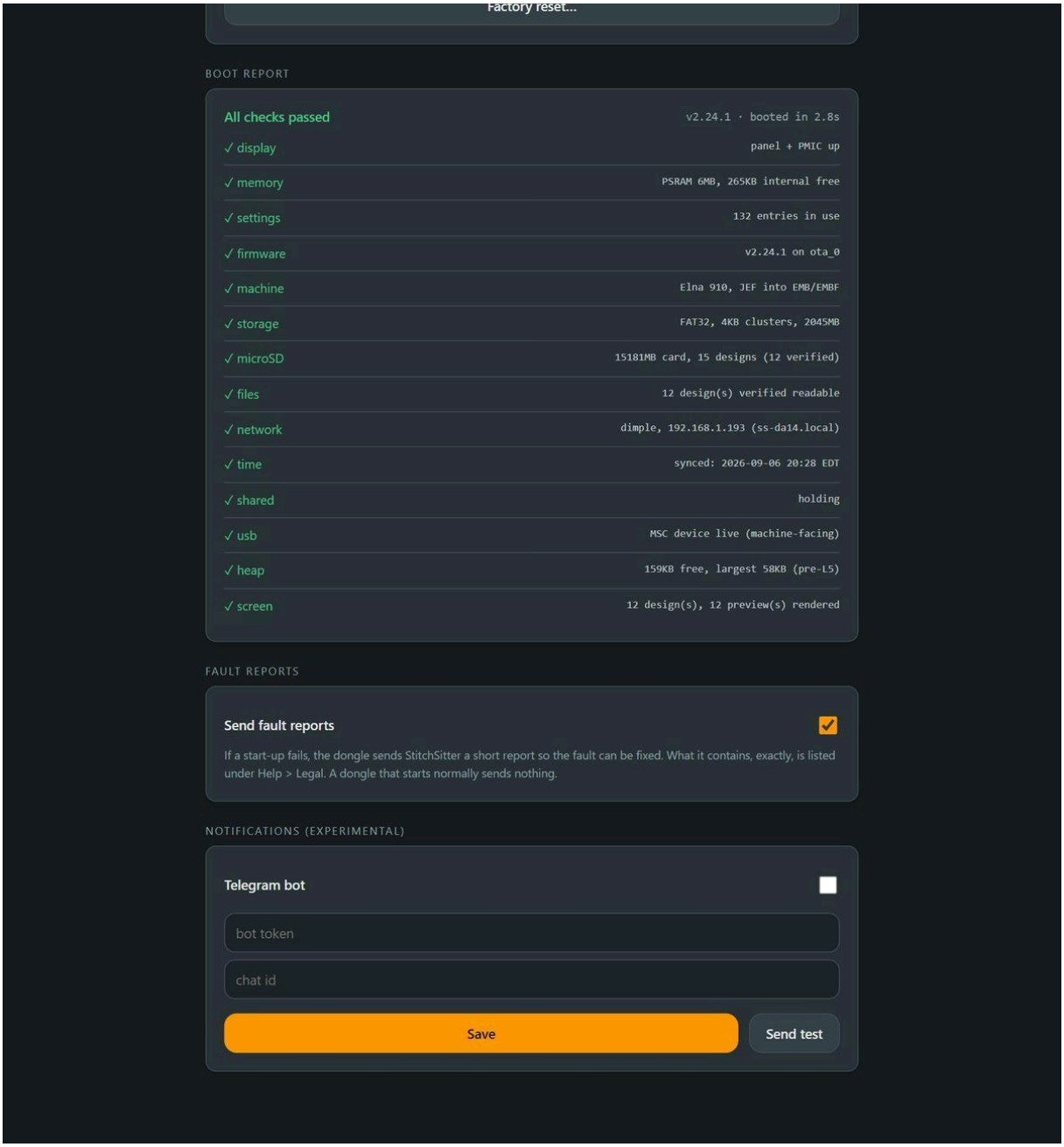


Figure 13. Advanced, lower half: the boot report, fault reports and notifications.

Setting	What it does
Online updates	Shows whether the dongle is up to date and lets you **Check for updates** now. An **Install** button appears when there is something to install (section 11).
Current version / manual install	The firmware version, the slot it runs from and how the last start went. Below it, a way to install a firmware file by hand.
This device	Name, permanent address, firmware version, build date and serial number. Quote these when you write to support.

Screen brightness	5 to 100 percent, remembered across power cycles. The dongle may dim further on its own when it runs hot.
Factory reset	Erases the name, machine, time zone and saved Wi-Fi and restarts on the amber Setup screen. Designs stay on the storage. Same as holding the button for six seconds.
Boot report	Every check the dongle ran when it started — display, memory, settings, firmware, machine profile, storage, card, files, network, time, shared name, USB, free memory, previews — and whether each passed.
Fault reports	On by default. If a start-up fails, the dongle sends StitchSitter a short report so the fault can be fixed. A dongle that starts normally sends nothing. Section 15 lists what a report contains.
Notifications (experimental)	A Telegram bot can be given a token and chat id to receive messages from the dongle. Experimental in this release.

11 Updates

New firmware brings fixes and features. Updates come from StitchSitter over the internet, and every image the dongle will accept carries StitchSitter's signature, which the dongle checks before it installs. A tampered or damaged file is refused.

- **Every six hours**, and each time it starts, the dongle asks `updates.stitchsitter.com` whether newer firmware exists.
- **When there is**, a download mark appears beside the signal bars on the screen and **Online updates** in Setup > Advanced says so.
- **With automatic updates on** (the default), the dongle downloads the new firmware, verifies it byte for byte and by signature, installs it, and restarts. This happens as the dongle starts, when nobody is uploading. The machine sees a memory stick that went away for half a minute and came back.
- **With automatic updates off**, select **Install** in Setup > Advanced when you are ready. A release marked urgent installs regardless.
- **A firmware file can also be installed by hand** from the same page. Leave the dongle powered until the version shown comes back.

During an update Do not unplug the dongle while an update installs. If power is lost anyway, the dongle keeps its previous firmware and starts from that.

12 Care and placement

- **Power.** The dongle runs from the machine's USB socket. Any USB charger works too, for setup or for loading designs away from the machine.
- **Wi-Fi.** The dongle uses 2.4 GHz Wi-Fi, the kind every router provides. It will not see a 5 GHz-only network. Place the machine within normal Wi-Fi range of your router; the signal bars on the screen and the **Signal** line in Setup tell you how it is doing.
- **Heat and sun.** Like any small electronic device the dongle warms in direct sun and in a hot room. It protects itself by dimming its screen, and brightens again as it cools; this is normal. Where you can, keep it out of direct sunlight, especially at outdoor events.
- **The memory card.** Leave it in. Every job the card needs is done over Wi-Fi.
- **Unplugging.** Safe at any time the machine is not reading or writing. A design half-uploaded when power goes is simply not there; upload it again.
- **Cleaning.** Wipe with a dry cloth. Keep threads and lint away from the USB plug and the card slot.

13 Troubleshooting

What you see	What it means and what to do
The web page cannot reach the dongle	Check the dongle has power (the screen is lit). Check your telephone or computer is on the same Wi-Fi as the dongle. Open the exact address on the dongle's screen; if the name does not open, use the IP address from the Dashboard or the screen.
The Dashboard says *Looking for dongles…* and never finds one	Some networks stop devices finding each other. Select **Add a dongle** and enter the dongle's IP address.
The machine does not show a design	Open **Designs** and check the design is in the list; if not, upload it again. Check the machine chosen in **Setup**: it decides which folder the machine looks in. On the machine, leave the design list and open it again. Look for a **HELD** mark: if the machine is being shown one design only, select **Present all** in the banner.
A file will not upload	The message under the drop zone says why. Most often the file is not an embroidery file, or is over 4 MB. A format your machine does not read still goes on the storage but the machine will not list it; convert it to DST from its design page.
The design list on the machine and in the web app show different names	Correct. Machines read short names; the web app keeps your full names (section 5).
Windows: *system error 67 – the network name cannot be found*	The WebDAV client is switched off. Section 8, Windows, step 5.
Windows: the drive opens and lists designs, but every copy fails with *a device attached to the system is not functioning*	The dongle's firmware is older than 2.23. Update it (Setup > Advanced). Reading always worked; writing needed a fix that shipped in 2.23.0.
The mapped drive still shows an old name after remapping	Windows remembers the previous mapping. Disconnect all network drives and restart the WebClient service, or use a different drive letter.
The dongle keeps showing the amber Setup screen after I gave it my Wi-Fi	The password was wrong or the network is out of range. Scan the code again and try once more, standing where the machine stands. Check that the network is 2.4 GHz.
The screen is dim	Either nobody has used it for a while (press the button), the dongle is hot (it brightens as it cools), or brightness is set low in Setup > Advanced.
The light blinks red, or the Boot report shows a failed check	Unplug the dongle, wait a moment, and plug it back in. If the same check fails again it is not something you can fix from here: note the check's name and detail from the Boot report and the details under **This device**, and write to support.
The dongle started in safe mode	Two starts in a row did not finish, so the dongle came up with only the essentials. Unplug and replug it. If it happens again, install the latest firmware from Setup > Advanced and contact support with the boot report.
A design is missing from the list after a card was written on a PC	The dongle reads the card at start-up and on upload. Unplug and replug the dongle, or use the web app or the drive to add designs instead.

14 Specifications

Presents to the machine as	a USB mass-storage device (memory stick), FAT32, one volume of up to 2 GB
Storage	microSD card, installed; the dongle prepares a 2 GB FAT32 volume on it
Wi-Fi	2.4 GHz, WPA2 and open networks, hidden networks supported; can run its own network (offline mode)
Addresses	`ss.local` (shared), `ssNN.local` (short name), `ss-XXXX.local` (permanent), IP address
Screen	1.47-inch colour IPS, 320 × 172 pixels; brightness 5–100 %, automatic dimming
Controls	one button (tap: page; hold 6 s: factory reset); one colour light
Design formats carried	DST, JEF, JEF+, PES, EXP, VP3, HUS, XXX (the machine profile decides which are presented as native)
Conversion in the browser	JEF, PES, PEC, EXP to DST
Largest design	4 MB per file
Machine profiles	23 in firmware 2.24: Janome, Elna, Brother, Baby Lock, Tajima, Generic
Network drive	WebDAV, no password on your own network; Windows and macOS
Firmware updates	signed (RSA-3072), verified on the dongle; automatic, or by hand
Power	5 V from the machine's USB socket or any USB charger
Processor	ESP32-S3, dual core, 8 MB PSRAM, 16 MB flash

15 Privacy, legal and support

Privacy, in plain words

The dongle serves its pages on your own network. Your designs stay on the dongle and on the machines you send them to. It does not send your designs, your file names, or any record of what you stitch or when. It makes three kinds of outside request, and no others:

- **Updates.** Every six hours it asks `updates.stitchsitter.com` whether newer firmware exists. That tells StitchSitter the version it runs and the internet address it asked from, as any web request tells any server.
- **Fault reports.** If a start-up fails, the dongle sends a short report: firmware version, serial number, which stage of start-up failed, why it restarted, how many times in a row, and how much memory was free. Never your designs, their names, your network name or password, or anything you typed. Switch this off in Setup > Advanced if you prefer.
- **The time.** It asks public time servers for the date, so your files carry the right timestamp.

Legal

By installing or using the dongle you agree to the StitchSitter terms of service, the limited warranty (30 days from delivery) and the firmware licence, as published at `stitchsitter.com/legal`. The full text is also under **Help > Legal** in the web app, together with the notices for the open-source components the firmware is built on, which the dongle serves itself so they can be read without an internet connection.

Support

When you write to support, include the five lines under **Setup > Advanced > This device**: the dongle's name, address, firmware version, build date and serial number. If a start-up check failed, add the Boot report line for it. Visit `stitchsitter.com` for contact details and the latest version of this manual.

Glossary

Term	Meaning
Dongle	The StitchSitter device. One per machine.
Storage	The memory card inside the dongle: what the machine reads and what the web app and the drive show.
Present / held	A design the machine can see is presented. One hidden from the machine, but kept on the storage, is held.
Native format	A format your machine sews as it is (for example JEF on a Janome). Set by the machine profile.
Machine profile	The dongle's knowledge of one machine model: its folder, its formats, its speed.
Shared name	`ss.local`: one address that always reaches some dongle, held by one of them at a time (the **M**).
Short name / permanent name	`ss97.local` and `ss-da14.local`: two addresses that reach one particular dongle.
Offline mode	The dongle running its own Wi-Fi network instead of joining yours.
Boot report	The list of checks the dongle runs each time it starts.
Safe mode	A reduced start after two starts in a row failed to finish.
WebDAV	The standard your computer uses to open the dongle as a network drive.
DST, JEF, PES…	Embroidery file formats. DST is Tajima's and widely read; JEF is Janome/Elna's; PES is Brother's.