



F-SCAN®

F-SCAN

Instruction manual

TB-ELECTRONICS GmbH

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1. F-SCANT

Instruction manual for the computer software that works with your F-SCAN.

Product: F-SCANT **Release year:** 2026

Supported computers: Mac and Windows

Manufacturer: TB-ELECTRONICS GmbH

1.1 Introduction

F-SCANT is a program you install on your computer, enhancing what you can do with an F-SCAN device. It allows you to:

- **DIRP:** start a new DIRP or import one from your F-SCAN device
- **Analysis:** analyze DIRPs, match pathogens, and work with programs
- **Manage users:** manage your list of users, their DIRPs and programs
- **Settings:** manage date & time format and language, import data from older software

Words in **bold** are the exact names of buttons and labels on the screen.

Most of F-SCANT works on the computer alone but for few steps your F-SCAN device must be plugged in. Those steps are marked with this tag:

Needs F-SCAN

This manual describes F-SCANT. For instructions on the F-SCAN itself, please use the instruction manual that came with your device.

1.2 Contents

1. [How to install F-SCANT](#)
2. [How to connect the F-SCAN](#)
3. [How to create or import a DIRP](#)
4. [How to analyze a DIRP](#)
5. [How to manage users](#)
6. [Settings](#)

Mac-specific USB driver steps: [Connect the F-SCAN on a Mac](#).

1.3 Download

[Download PDF](#) – printable version of this manual (built with the site).

2. How to install F-SCANT

The installation will vary a bit depending on your computer. On Windows you receive an installer file. On a Mac you receive the F-SCANT app, which you put in the Applications folder. F-SCANT is not sold in the Microsoft Store or the Mac App Store.

2.1 How to install on Windows

1. Double-click the installer you received (**F-SCANT-Setup-x64.exe**). If Windows asks for permission, allow it (you may need an administrator password).
2. Accept the F-SCANT licence and the Silicon Labs licence when they appear. Silicon Labs makes the small USB helper that lets the computer talk to the F-SCAN. The installer puts that helper on the PC for you.
3. Open **F-SCANT** from the Windows Start menu.

If Windows shows a SmartScreen warning (a blue or yellow screen that says Windows protected your PC), it means Windows does not yet know the publisher of this installer. That can happen because you received the file directly, not from the Microsoft Store. If you got the installer from your supplier, click the option to run it anyway.

If Windows asks you to allow apps that did not come from the store, allow it for this install. That setting is what lets F-SCANT run on the PC.

2.2 How to install on a Mac

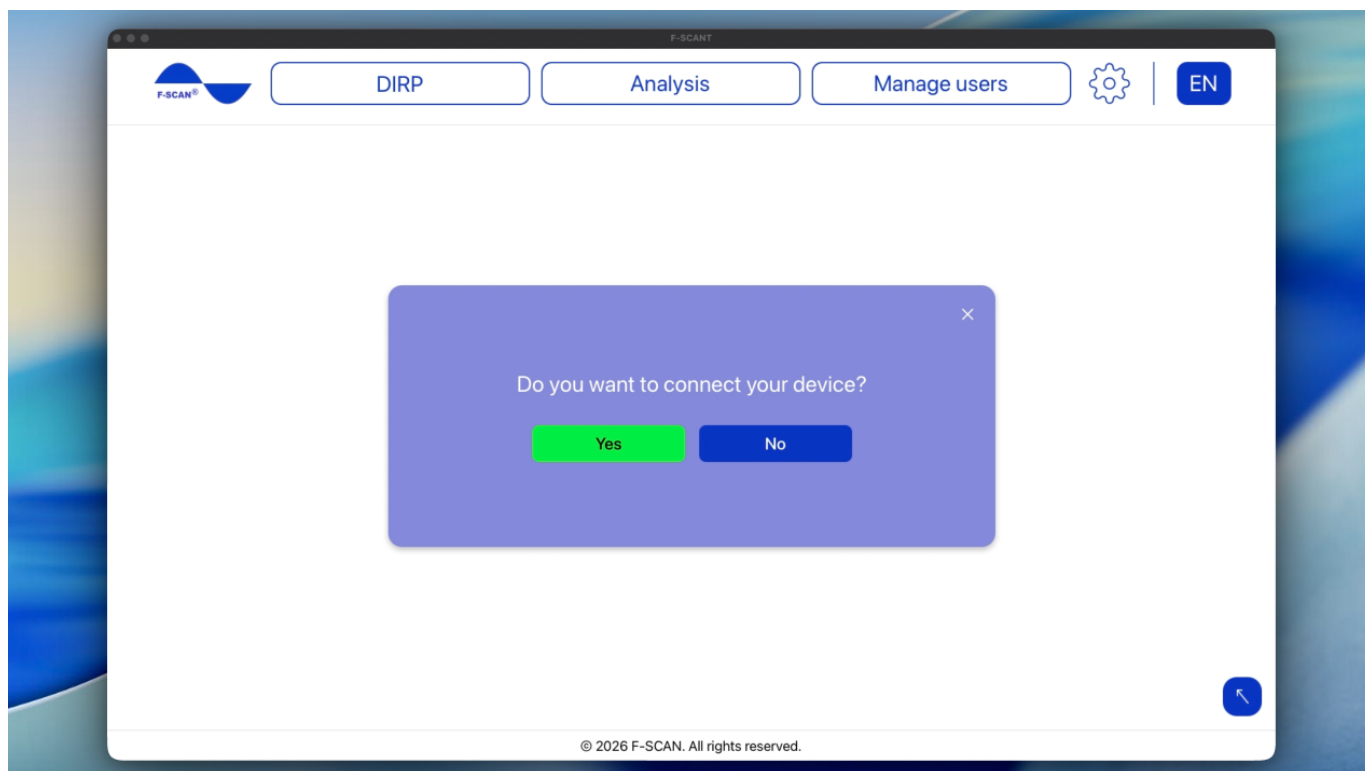
1. Copy **F-SCANT** into the Applications folder.
2. Install the USB helper that came in the same folder as F-SCANT. Read **SILICON-LABS-VCP-LICENSE.txt** first. Open **Mac_OSX_VCP_Driver.zip**, open the disk image inside, and run **Install CP210x VCP Driver**. This helper lets the Mac see the F-SCAN on USB.
3. When macOS asks you to allow software from Silicon Labs, turn that permission on. After the installer finishes, allow the driver in **System Settings** → **General** → **Login Items & Extensions**: under **Extensions**, open **Driver Extensions**, turn on **CP210xVCPDriver** (com.silabs.cp210x), and enter your Mac password if asked. The full steps and Video 1 are in [Connect the F-SCAN on a Mac](#).
4. Open **F-SCANT**.

If macOS says the developer cannot be verified, it means the Mac is blocking an app that did not come from the App Store. That is expected for F-SCANT. Open it with Apple's [Open Anyway](#) steps for this one app. You do not need to turn off security for every app on the Mac.

3. How to connect the F-SCAN

After **Welcome to F-SCANT APP!**, F-SCANT asks: **Do you want to connect your device?**

Figure 1. First connection question with **Yes** and **No**.



- **Yes** starts the connection steps.
- **No** brings you to the home screen. You can always connect later, using the device panel in the bottom right.

3.1 Connecting the device

Needs F-SCAN

You need:

- F-SCANT, installed (see [How to install F-SCANT](#))
- The F-SCAN, switched on, showing its home screen
- A USB cable
- The **F-Code** from your F-SCANT invoice

Plug the USB cable into a USB port on the computer itself. Do not plug it into a USB hub (a small box that turns one port into several) or into a docking station or a monitor that has extra USB ports. Those extras often stop the computer from recognizing the F-SCAN.

1. Switch the F-SCAN on and leave it on its home screen.
2. Plug in the USB cable as described above.
3. Click the **Connect** button in the F-SCANT software.
4. If F-SCANT shows **Please enter your F-Code**, type the code from the invoice and click **Submit**.

The F-Code is on the F-SCANT APP invoice. If you cannot find it, please contact TB-Electronics.

When the panel shows **Connected** and a serial number and a version, you are done. The first successful connection also shows **Connection succeeded!** before bringing you to the home screen.

Video 2. Connecting the device.

Video 2. Connecting the device. Watch online: fscant-docs/connect/

On a Mac, detailed USB driver steps are in [Connect the F-SCAN on a Mac](#).

3.2 If connection does not work

Try **Connect** again after you have checked the points below.

If nothing happens, or the panel stays on **Connecting....**:

- On a Mac, make sure the Silicon Labs helper is installed and allowed (see [install](#) and [Connect on a Mac](#)).
- Plug the cable into the computer itself, not a hub, dock, or monitor (see above).
- The F-SCAN must be on, showing its home screen.

If you see **ERROR: Wrong F-Code entered. Please try again!**, the code you typed does not match this F-SCAN. F-SCANT checks the code against the invoice for that device. Type the F-Code again from the invoice. If it still fails, please contact TB-Electronics.

3.3 The device panel

The device panel is the blue box at the bottom right of your screen. It is intended to always give you the status of your device; connected or disconnected. If connected, further relevant information is shown:

- **Device:** Name of the connected F-SCAN device
- **Serial:** Serial number of the F-SCAN
- **Version:** Version of the F-SCAN
- **Timer:** If you've set a timer on your device after which your F-SCAN should automatically switch off, this is displayed here. For ideal use with F-SCANT, we recommend turning off the timer from the device settings.

Click **Disconnect** when you want to unplug. F-SCANT does not reconnect by itself if you unplugged the cable or switched the F-SCAN off. When the device is ready again, click **Connect**.

You can expand and collapse the panel using the white "up" and "down" arrows.

Video 3. Expand and collapse the device panel.

Video 3. Expand and collapse the device panel. Watch online: fscant-docs/connect/

3.4 The home screen

The home screen provides three options: **Create or import DIRP**, **Load DIRP**, and **Manage users**.

Figure 2. Home screen, F-SCAN not connected.

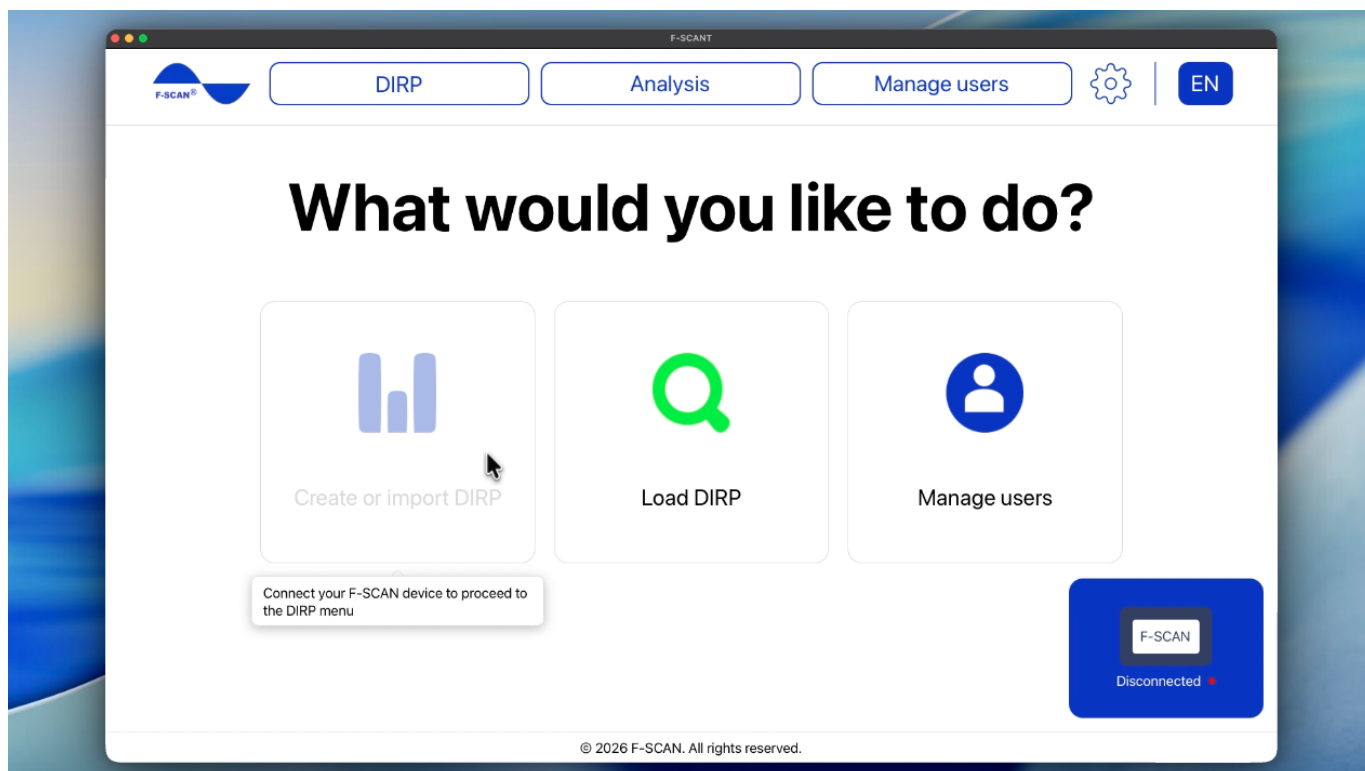
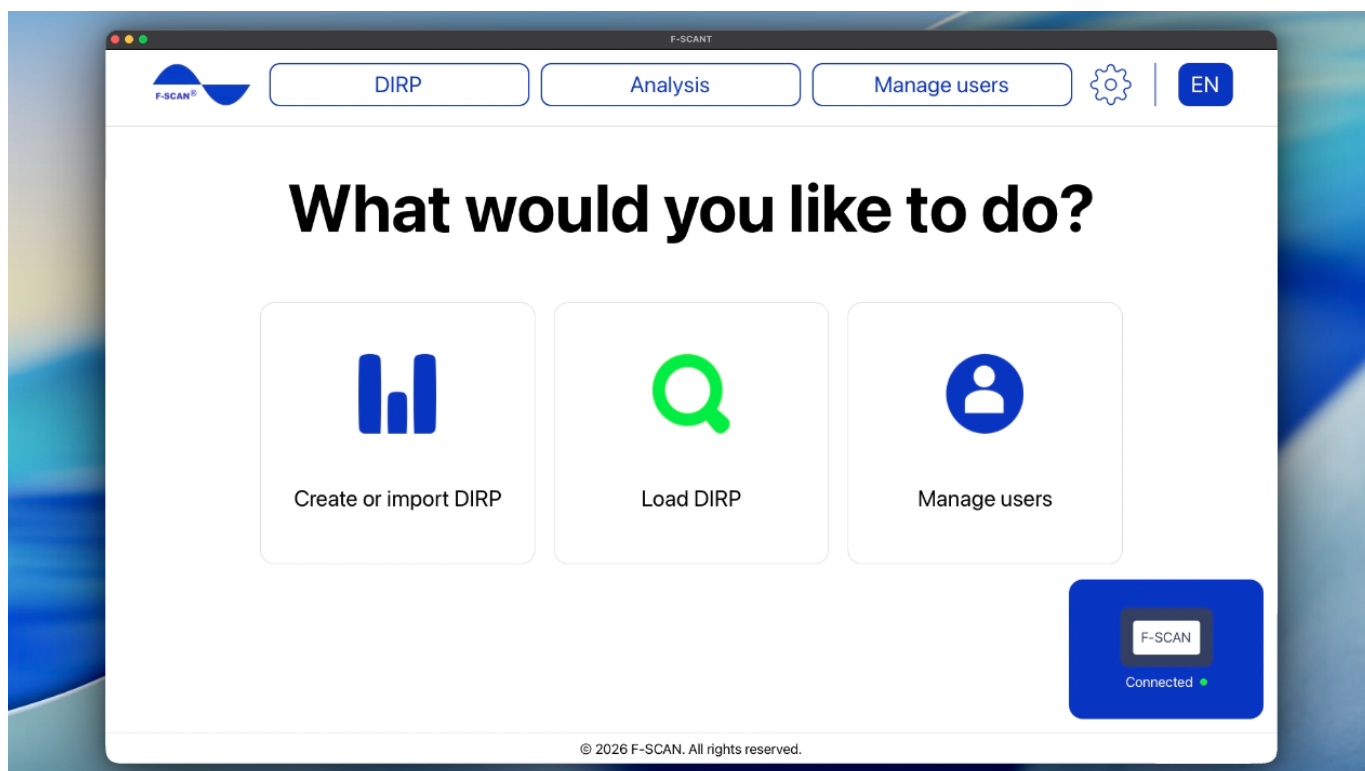


Figure 3. Home screen, F-SCAN connected.



4. Connect the F-SCAN on a Mac

You already have F-SCANT. These steps install the USB driver that came with it and connect the F-SCAN. The same driver file is used on an Intel Mac and an Apple Silicon Mac. You do not pick a processor, and you do not download a driver from the web.

You need:

- F-SCANT
- The F-SCAN, turned on and showing its home screen
- A USB cable (into the Mac, or a hub or a dock)
- The F-Code from your F-SCANT invoice

4.1 1. Install the driver included with F-SCANT

In the folder that came with F-SCANT, read **SILICON-LABS-VCP-LICENSE.txt** before you continue. Then open **Mac_OSX_VCP_Driver.zip**, open **SiLabsUSBDriverDisk.dmg**, and double-click **Install CP210x VCP Driver**.

The installer may ask for your Mac password. This is Silicon Labs CP210x VCP 6.0.3. Silicon Labs says it is for Mac OS X 10.11 and later. F-SCANT has been checked with this driver on an Intel Mac running macOS 15. That check does not cover every older or newer macOS.

Figure 4. The F-SCANT folder with the Silicon Labs installer beside the app.

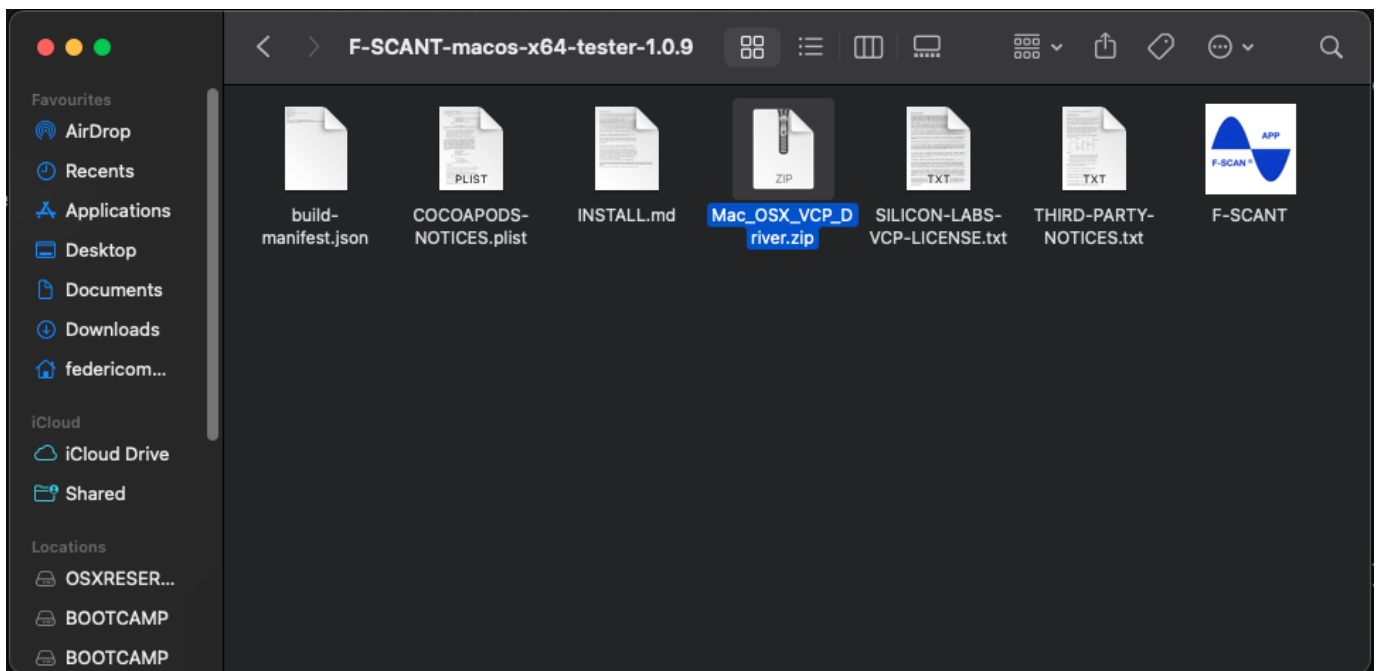
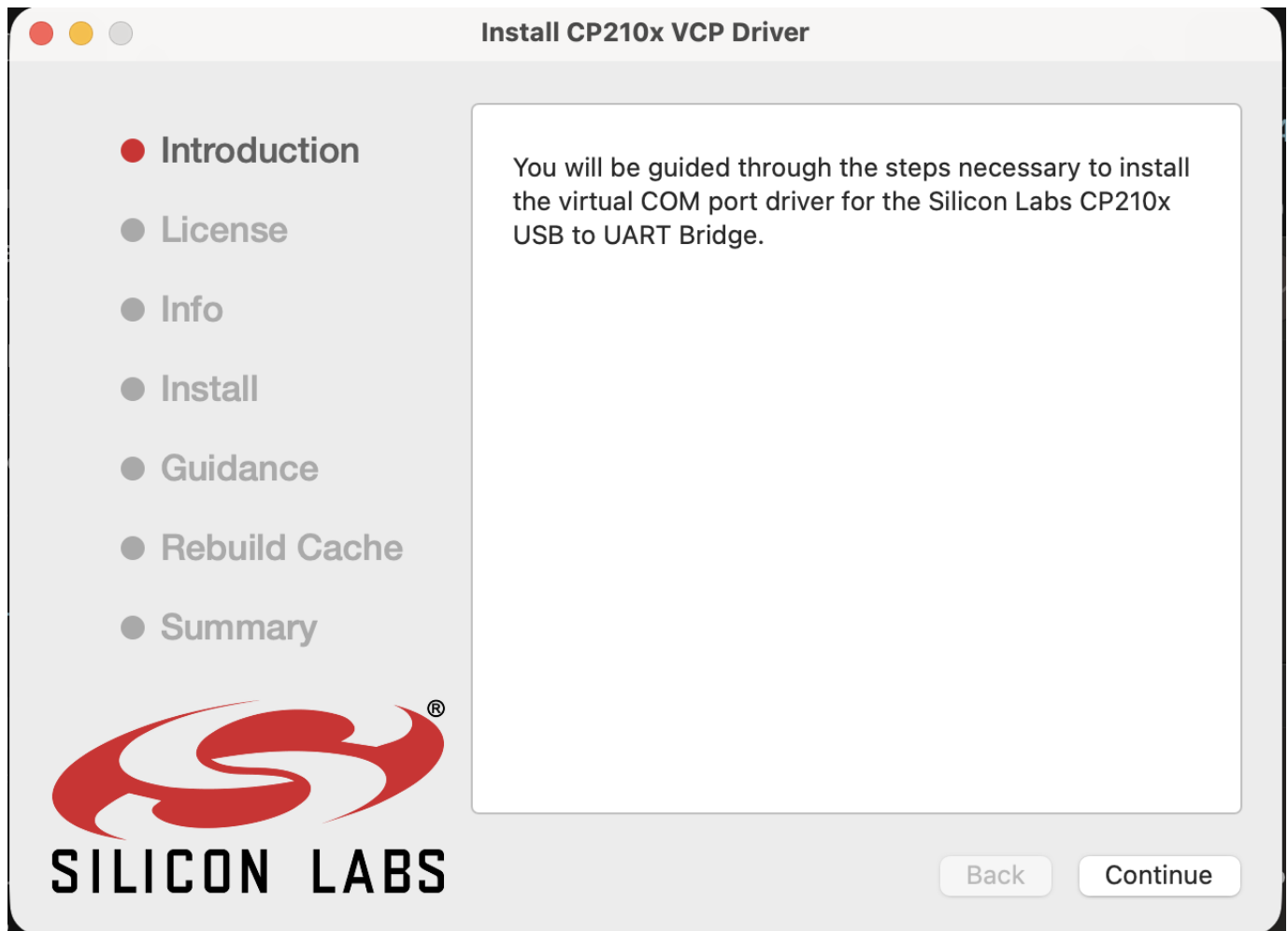


Figure 5. The Silicon Labs installer.



4.2 2. Allow the Silicon Labs extension

macOS still asks you to allow the driver after the installer finishes. On the Mac where this was last checked:

1. Open **System Settings** → **General** → **Login Items & Extensions**.
2. Under **Extensions**, open **Driver Extensions** (it lists `com.silabs.cp210x`).
3. Turn on **CP210xVCPDriver**. Enter your Mac password if asked, then click **Done**.

A newer macOS may use a slightly different name for that panel. Use the video below.

No restart was needed on that Mac.

Video 1. Enable the Silicon Labs driver on a Mac.

Video 1. Enable the Silicon Labs driver on a Mac. Watch online: fscant-docs/connect-mac/

If macOS also shows a separate button to allow system software from Silicon Labs, allow it.

4.3 3. Plug in the F-SCAN

Turn the F-SCAN on and leave it on its home screen. Plug the USB cable into the Mac or using a hub or a dock.

4.4 4. Connect in F-SCANT

Open **F-SCANT**. If macOS says the developer cannot be verified, use Apple's steps to open that app anyway: [Open Anyway](#). Do not turn off the security check for every app.

Click **Connect**. If F-SCANT asks for an F-Code, enter the code from your F-SCANT invoice. When the panel says **Connected** and shows a serial number and a version, you are done. The connect flow is also shown in [Video 2 on How to connect the F-SCAN](#).

4.5 If Connect does not succeed

Check these before you try again:

- The Silicon Labs extension is turned on.
- The cable is plugged into the Mac, or into a hub or a dock.
- The F-SCAN is on and showing its home screen.
- The F-Code matches the invoice.

A wrong F-Code shows **ERROR: Wrong F-Code entered. Please try again!**

5. How to create or import a DIRP

Needs F-SCAN

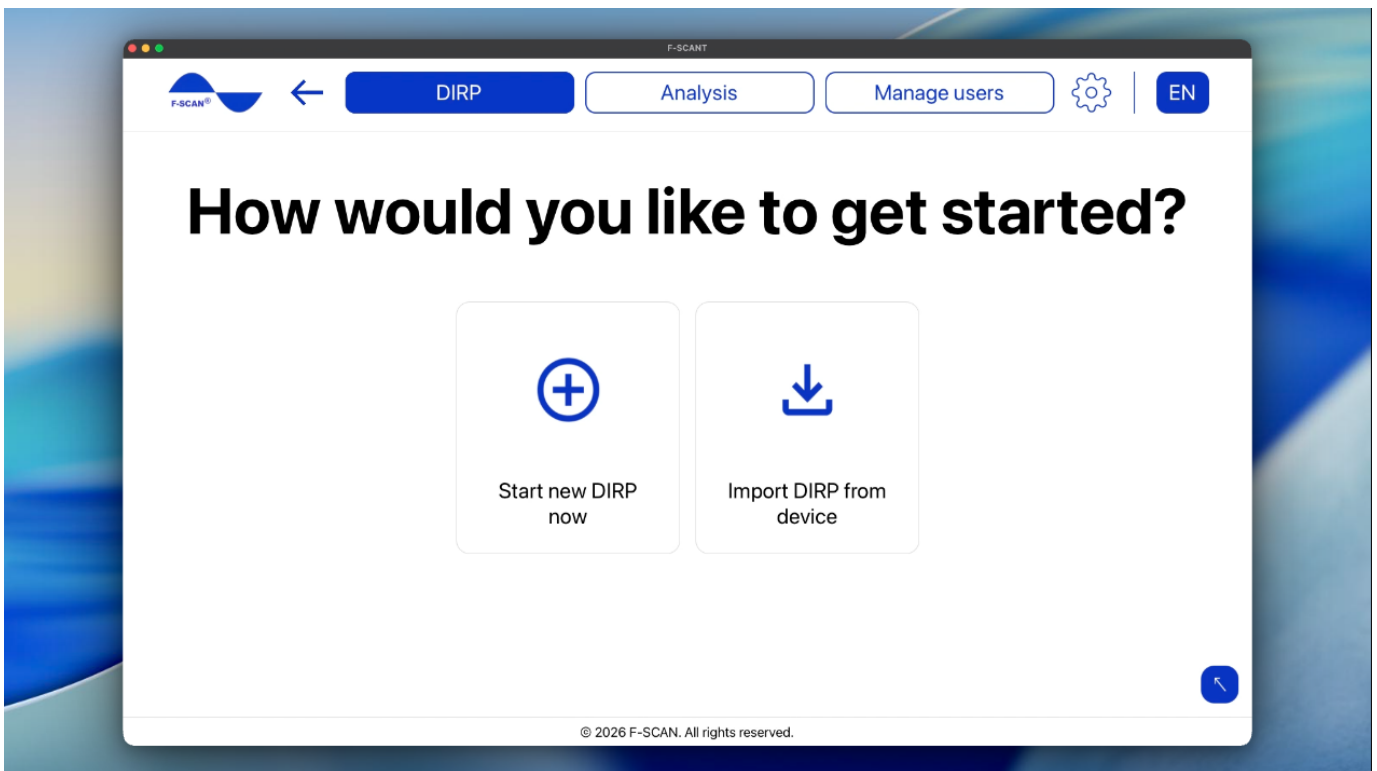
DIRP stands for Dual Integration Resonance Procedure and is essentially a scan across a range of frequencies. The F-SCAN sends each frequency in turn and F-SCANT draws a graph of the answers.

The scan runs from a lower frequency (**Fmin**) to an upper frequency (**Fmax**), in steps of **Delta F**.

After clicking **Create or import DIRP** on the home screen, or **DIRP** in the menu bar at the top of your screen, you can select how to get started:

- **Start new DIRP now:** run a new DIRP from F-SCAN
- **Import DIRP from device:** import a DIRP that is already on your F-SCAN device

Figure 6. DIRP start: **Start new DIRP now** or **Import DIRP from device**.



5.1 Starting a new DIRP

1. Select a user, then click **Continue**.
2. Select a frequency range, then continue.
3. Click **Start** on the DIRP chart.

5.1.1 Selecting a user

Select user lists the people already stored in F-SCAN. Click a name, or click **New user** to add someone, then **Continue**.

Video 4. Create a new user, then start a DIRP.

Video 4. Create a new user, then start a DIRP. Watch online: fscant-docs/dirp/

5.1.2 Selecting a frequency range

The range screen offers:

- **Select last used values:** the last **Fmin**, **Fmax** and **Delta F** you used in F-SCANT (the first time, this is 300 kHz to 450 kHz, in steps of 150 Hz)
- **or select an option:** ready-made ranges **CLARK**, **RIFE**, **DIRP 290k**, **DIRP 390k**, **DIRP 490k**
- **Custom:** type your own **Fmin**, **Fmax** and **Delta F**

Fmin is where the scan starts. **Fmax** is where it ends. **Delta F** is the gap between one frequency and the next. The **DIRP mode** field shows **AUTO** or **FAST** for that range.

Note: **Fmin** must be lower than **Fmax**. You can set **Fmin** from 50 Hz, **Fmax** up to 2 MHz, and **Delta F** from 1 Hz to 10 000 Hz. If a value is outside those ranges, F-SCANT will show an error. Please correct the number to continue.

Figure 7. Frequency range: last used values, presets, and **Custom**.



Video 5. Choose a custom frequency range.

Video 5. Choose a custom frequency range. Watch online: fscant-docs/dirp/

5.1.3 Before starting the DIRP

Set up the F-SCAN for a DIRP as in the device instruction manual (sensor on the output shown on the device, person connected). F-SCANT starts the scan and stores the graph. It does not replace the sensor setup on the device.

5.1.4 Running a DIRP

Once you've set up your device, click **Start**.

The chart will show the scan from **Fmin** to **Fmax**, whereas:

- Green bars are the answers at each frequency (**MV** is how high each bar is).
- The lilac-colored line is the clipping level (**Clip**). Bars above this line count as **HITS**.
- **CV** is a background reading for the person.
- The zooming function (- / +) makes the bars look taller or shorter for easier reading. It does not change how many **HITS** there are.

Wait until the graph reaches **Fmax** and the status shows **Completed**. The DIRP will automatically be saved both on F-SCANT and on your device.

Video 6. Running a live DIRP.

Video 6. Running a live DIRP. Watch online: [fscant-docs/dirp/](https://fscant-docs.dirp/)

If you want a different set of **HITS**, you can move the clipping level by entering a value between 0 and 100 in the DIRP settings in the gray box on the right of the chart. While using F-SCANT, please only use the software (not your F-SCAN device) to manually move the clipping level. **Save DIRP** appears when the clipping level is different from the one already saved.

If you stop the scan before it reaches **Fmax**, a message asks whether you really want to stop. Stopping early means the scan is incomplete, and F-SCANT can't save partial results. So only stop if you're happy to discard this DIRP. If you'd rather keep it, choose **Stay** and the scan carries on.

If you switch to another menu via the top menu bar while a DIRP is still running, you will get the same choice. **Stay** keeps you on the chart. **Stop** or **Leave** leaves the scan.

6. How to analyze a DIRP

6.1 How to load a saved DIRP

1. Click **Load DIRP** on the home screen, or **Analysis** in the top bar.
2. Select the user, and then the DIRP you want to analyze.
3. The saved chart opens.

You can open the same chart from **Manage users**, **Manage DIRP**, then **Load DIRP**.

If you see **Please select a user** or **Please select a DIRP**, nothing is chosen yet. Pick a user and a DIRP from the lists, then continue.

Video 7. Open Analysis and load a DIRP.

Video 7. Open Analysis and load a DIRP. Watch online: fscant-docs/analysis/

On the chart, **Match pathogens** and **Open program** use the clipping level already saved.

6.2 How to read the chart

The chart is the same as during a live scan:

- **CV** (Conductivity Value): a personal baseline value for the person being analyzed. For useful results it should be between 5% and 25%.
- **MV** (Measured Value): how strong a frequency registered. It shows as a green bar, and the taller the bar, the stronger the reading.
- **HITS**: the bars above the CLIP line. These are the strongest results of the scan.
- **ZOOM**: use + to make the graph taller and – to make it shorter. Make it taller when the bars are too small, and shorter when they are too big.
- **CLIP / Clipping level**: the line that decides which bars count as **HITS**. Once the scan finishes, **AUTO** places it for you. If you want more or fewer HITS, move the line down or up.

The arrows next to the DIRP number open the previous or next saved DIRP for that user.

6.3 How to match pathogens

Match pathogens compares your HITS with the pathogen list stored in F-SCANT. For each pathogen on the list, it checks whether that pathogen's frequency is close to one of your HITS. If it is, the pathogen appears in the table as a possible match.

How close is "close enough" is set by **Match ± Hz**. The usual window is 1000 Hz. A wider window gives you more possible matches, a narrower one gives you fewer. You can change the window on the results screen (not in **Settings**).

To see the matches:

1. Open a saved **DIRP**, or finish a new one.
2. Click **Match pathogens**.
3. Read the table. Change Match ± Hz if you want a wider or narrower window.
4. Choose what to do next:
 - **Export** saves a CSV spreadsheet.
 - **Open pathogen database** lets you browse the full list. You can search by pathogen, sort from A to Z or by frequency. Selected rows can be added to the analysis table with the button **Add to analysis**.
 - **Save program** creates and stores a program based on the rows you selected.

Please note: the pathogen table is only a comparison with the stored list. It is not a medical diagnosis.

Video 8. Match pathogens and browse the pathogen database.

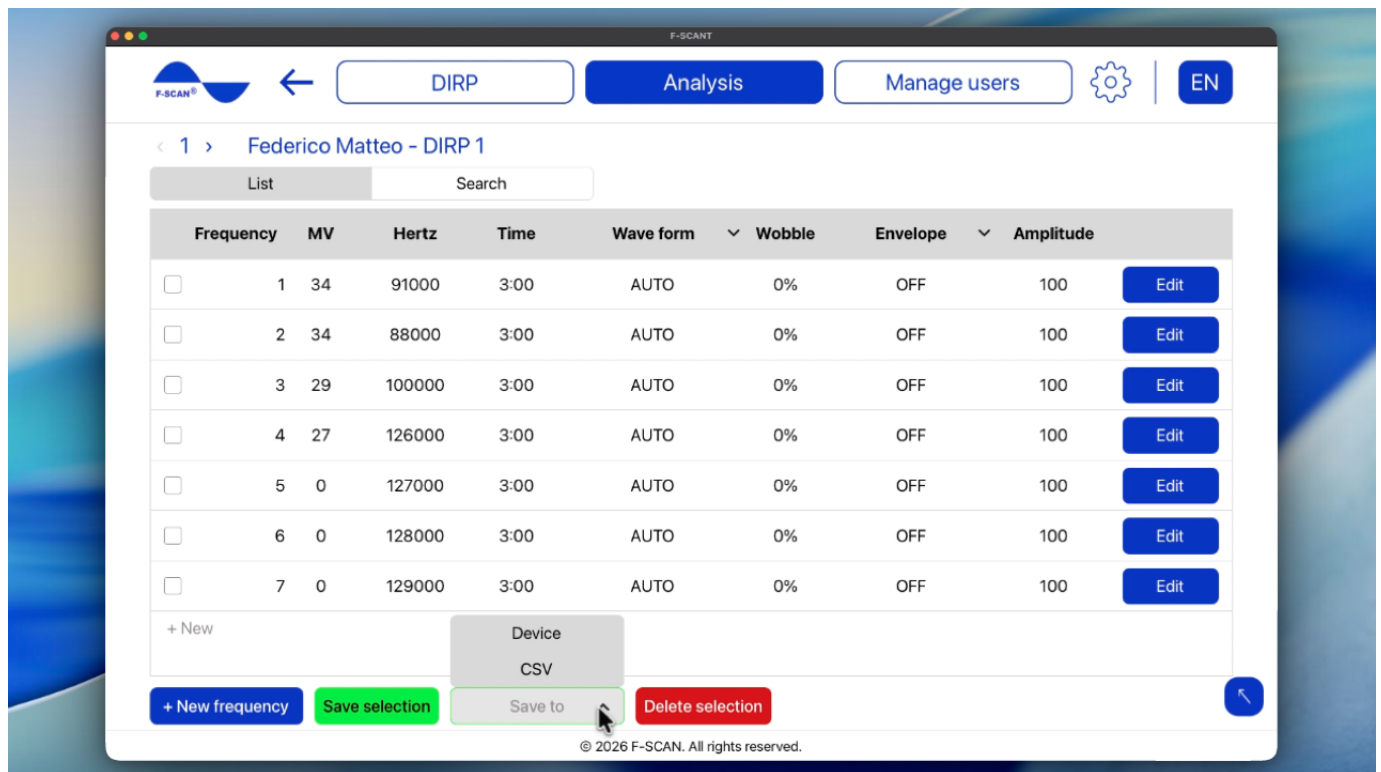
Video 8. Match pathogens and browse the pathogen database. Watch online: fscant-docs/analysis/

6.4 How to open and save a program

A **program** is the list of frequencies taken from the **HITS** of a DIRP (wave form, time, wobble, envelope, and amplitude). Changing a program does not change the original DIRP graph.

1. Open the program in one of two ways: click **Open program** on the DIRP chart after DIRP is completed, or use **Manage program** in **Manage users**.
2. Edit the rows if you need to. You can change Wave form, Time, Wobble, Envelope, and Amplitude. Click **+ New frequency** to add a row.
3. Click **Save to** and choose where to save it:
 - **CSV** saves the selected frequencies as a spreadsheet file.
 - **Device** sends the program to the F-SCAN (**Needs F-SCAN**). F-SCAN does not start the output. Press START on the F-SCAN when you want to run it.

Figure 8. Program list with **Save to Device** and **CSV**.

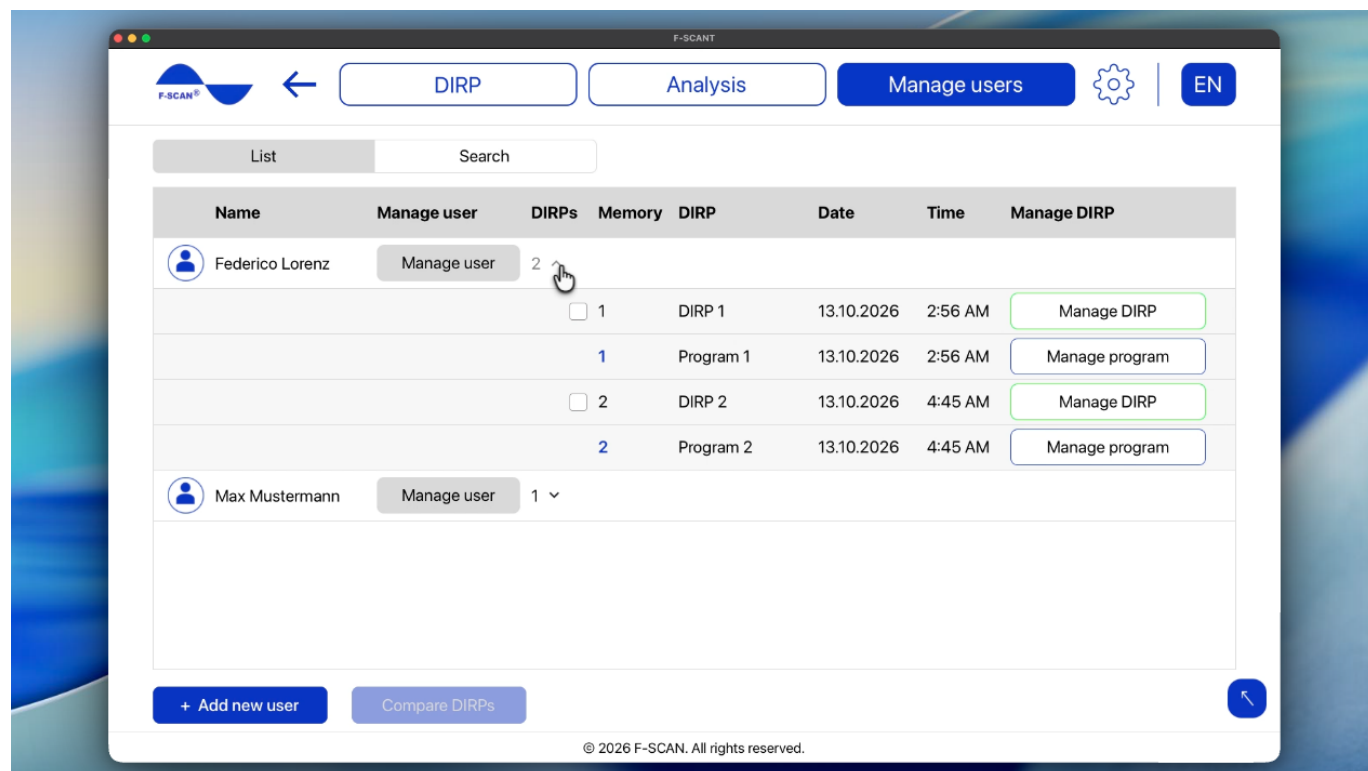


7. How to manage users

A **user** in F-SCANT is a person you keep DIRP results for. It is not a login or a password.

Manage users lists everyone stored in F-SCANT, with **Name**, **DIRPs**, **Memory**, **Date** and **Time**. Open a row to see that person's DIRPs and program.

Figure 9. **Manage users**, one row expanded.



7.1 Adding and finding users

- **Add new user:** type a name and click **Add**.
- **Search:** type a name and confirm with the search control. The list does not filter while you type; you need to confirm the search.

You can also add a person with **New user** when you start a DIRP.

If you see **A patient with this name already exists.**, that name is already in your list. F-SCANT can't save two users under the same name, so choose a different name, for example by adding a middle initial or number.

7.2 Renaming or deleting a user

Select a user and click **Manage user**.

- **Edit name:** type the new name.
- **Delete user:** When you delete a user, F-SCANT asks you to confirm. Deleting means the person and all of their DIRPs and programs will be removed from F-SCANT, and this can't be undone. If you're sure, click **DELETE**.

7.3 Managing a users' DIRP or program

On an open user row:

Manage DIRP

- **Load DIRP:** opens the DIRP chart (see [How to analyze a DIRP](#)).
- **Analyze pathogens:** opens pathogen matching for that DIRP.
- **Remove DIRP from this user:** deletes that DIRP from F-SCANT for this user.
- **Change memory location:** sets a memory number from 1 to 100 for this user.

Manage program

- **Open program:** opens the frequency list.
- **Remove program from this user:** deletes the program (but not the corresponding DIRP).
- **Change memory location:** sets a memory number from 1 to 100.

To send a DIRP or a program to the device, use **Transfer DIRP to device** or **Save to Device** (see [create or import a DIRP](#) and [analyze a DIRP](#)).

7.4 Comparing two DIRPs

1. Open **Manage users**.
2. Select two DIRPs.
3. Click **Compare DIRPs**.

If nothing happens when you click **Compare DIRPs**, check that exactly *two* DIRPs are selected.

The comparison opens as a graph. **Switch to program** and **Switch to DIRP** change the display. **Export** saves both DIRPs together into one **CSV** spreadsheet.

Video 9. Compare two DIRPs.

Video 9. Compare two DIRPs. Watch online: fscant-docs/users/

7.5 Changing a memory location

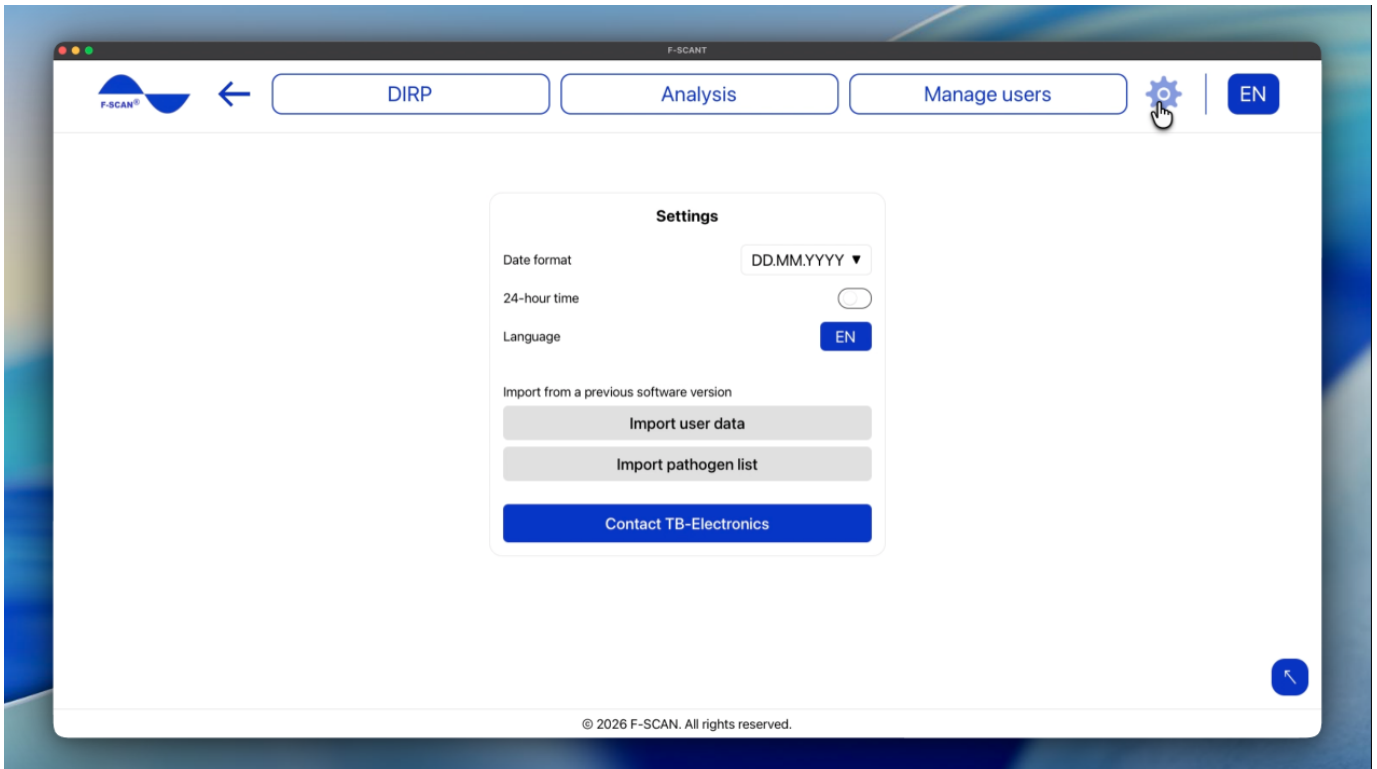
Each user can have memory numbers 1 to 100 in F-SCANT. These numbers help you find a DIRP again. They are not the same as folders on your computer.

1. Click **Change memory location**.
2. Choose a number from 1 to 100.
3. If F-SCANT asks **REPLACE?** and tells you there is already something stored in this memory location, that number is already used for this user. Click **Replace** to overwrite what is there, or **Cancel** to keep the old item and pick another number.

8. Settings

Click the gear in the top menu to open **Settings**.

Figure 10. **Settings**: date format, 24-hour time, language, and import.



8.1 How to set date and time

- **Date format**: sets the order in which dates are shown. Choose **DD.MM.YYYY** (day first, e.g. 25.10.2026), **MM.DD.YYYY** (month first, e.g. 10.25.2026), or **YYYY.MM.DD** (year first, e.g. 2026.10.25).
- **24-hour time**: when on, times appear as 14:30. When off, they appear as 2:30 PM.

These settings only change how dates and times look in F-SCAN. They do not change the F-SCAN.

8.2 How to set the language

Language in **Settings**, or the language letters in the top bar, change the language of F-SCAN.

The menu shows **EN, IT, DE, PL, CZ** (English, Italian, German, Polish, Czech).

Words such as DIRP, Hz, **Fmin**, **Fmax**, **HITS** and **CLIP** stay as they are in every language. People's names and the pathogen list are also not translated.

8.3 How to import from a previous software version

Under **Import from a previous software version** you can bring in data from older F-SCAN software:

- **Import user data**
- **Import pathogen list**

For each one, click **Choose file** and pick the export from the old software, or paste the text of that export where the screen asks for it. The screen mentions a JSON array; that is simply the file format of the old export.

Please note: import adds or replaces data on this computer, depending on the file. Check that you have the right file before you continue. This does not change what is stored on the F-SCAN until you transfer something.

8.4 Contact TB-Electronics

Contact TB-Electronics opens an email to info@fscan.com.