# Venus3 Bootloader Recovery Software

The Venus3 has a bootloader, meaning firmware can be loaded via software without requiring the Firmware Programmer, as was necessary with the Venus and Venus2. However, if the firmware upload process is interrupted, the device may lock, and the software will not connect. In such cases, you need the Spitronics Recovery software to install a starter program, allowing you to reload the firmware.

First, close all Spitronics or other product software to free the communication port (Comm Port). Open the **Spitronics Recovery Ver1.0.3 Software**. If it's not installed yet, unzip it on the desktop or in your Spitronics folder on the C: drive.

To manually put the Venus3 in Program mode, connect only the P1 connector and the USB cable to the device. **Do not switch the power on yet**. Take a sharp pint tweezer and short the 2 holes as shown in the schematic and photo below. Make sure you have the correct pins, as incorrect connections may damage the product, for which you will be responsible. Take care not to touch any other places on the PCB when you remove the tweezer.
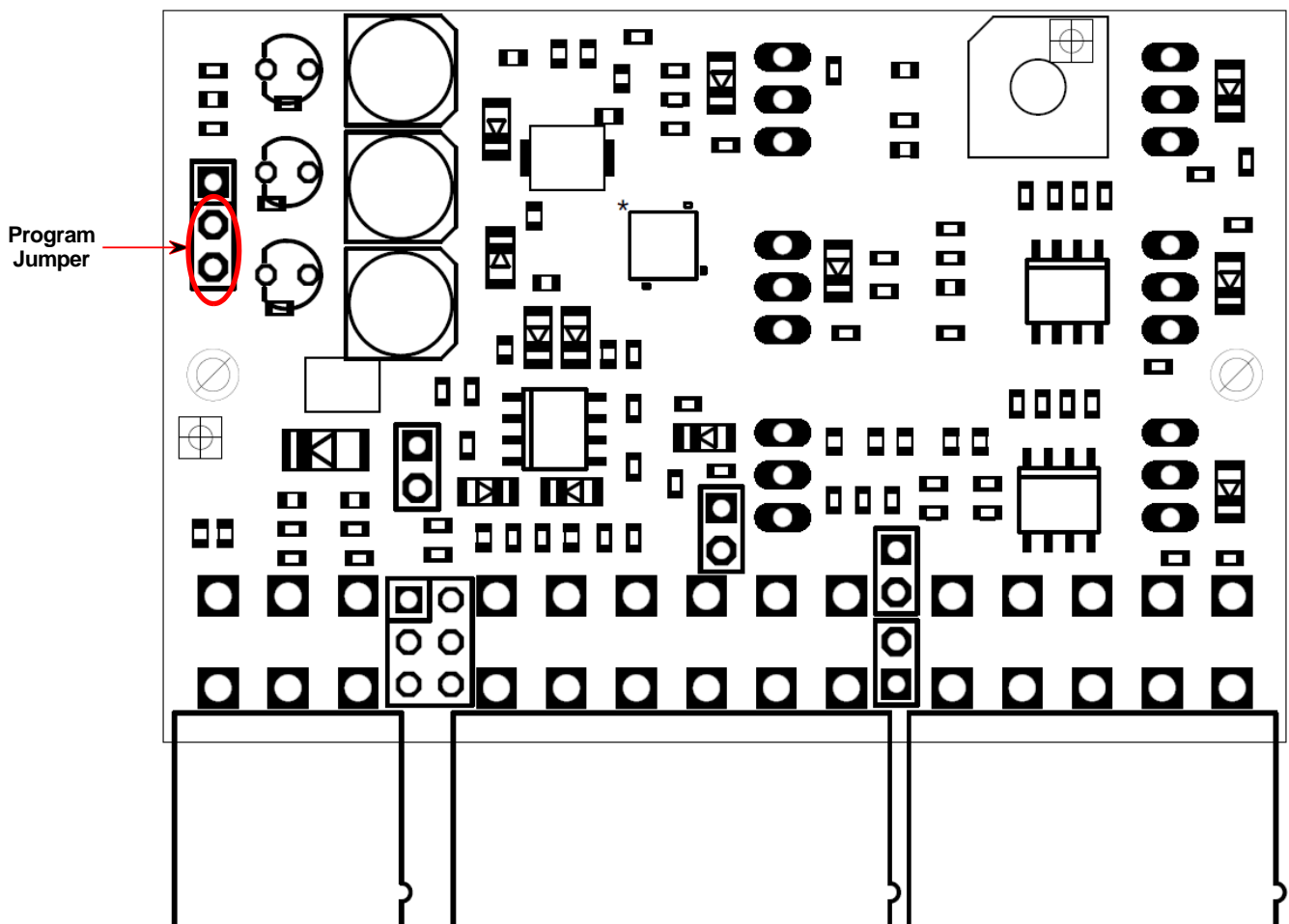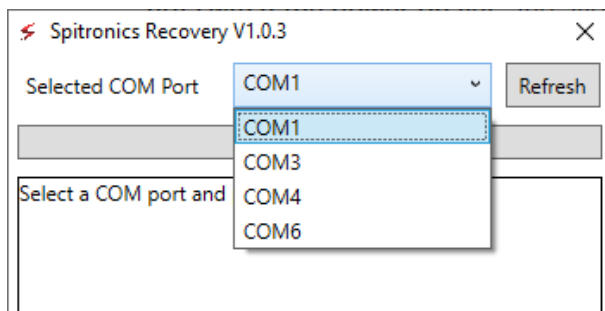

Program Jumper

Once the jumper is in place, switch the power on. The **Green1 LED** will light up. Now, remove the jumper from the communication connector. The **Green1 LED** will turn off, indicating that the Venus3 is now in Program mode.
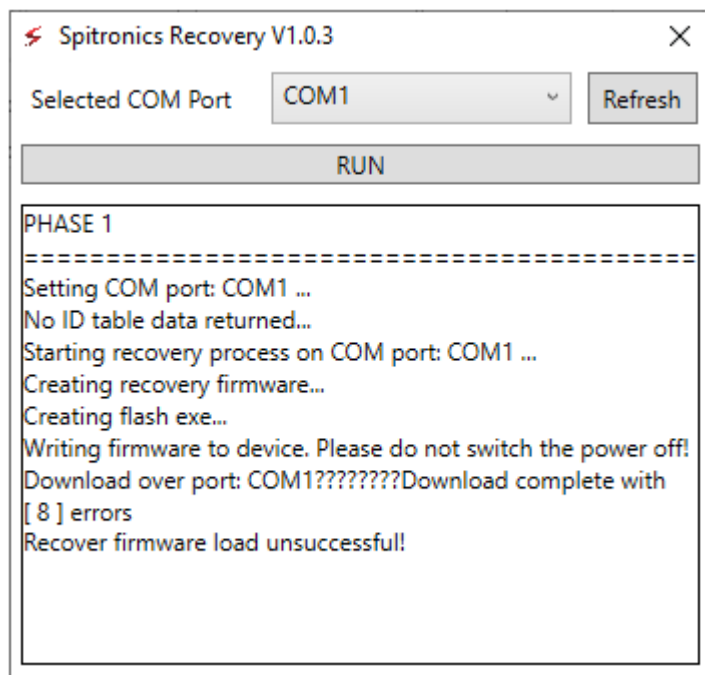
Next, open the Spitronics Recovery software. The startup screen will look like this one below:
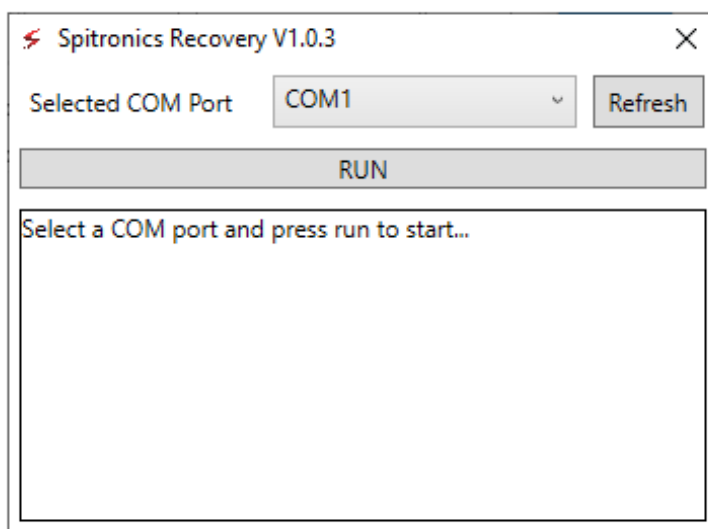
Click on the **Select COM Port** button.

Enter the **Comm Port number** your software usually uses. If you're unsure, try selecting each port one by one and click **RUN**. If other software is open, the port may not appear in the list.

If the incorrect Comm Port is selected, the message will look like this: **"???"** in the string, indicating no response from the device. However, if the correct port is chosen, you'll see **"@@@"** in the message, confirming the communication was successful. See the picture below. The **Firmware select block** will now open, allowing you to load the **X_Test Firmware version 4.0**. This will enable you to open **Hyperspace Device Manager 4.0**, from which you can install the correct firmware.
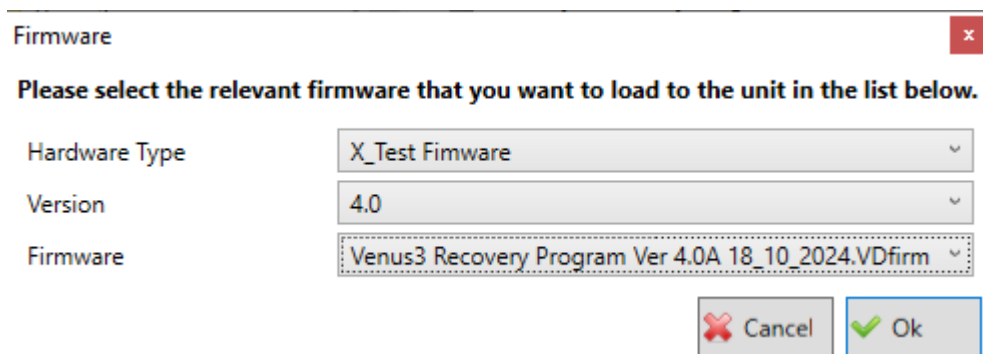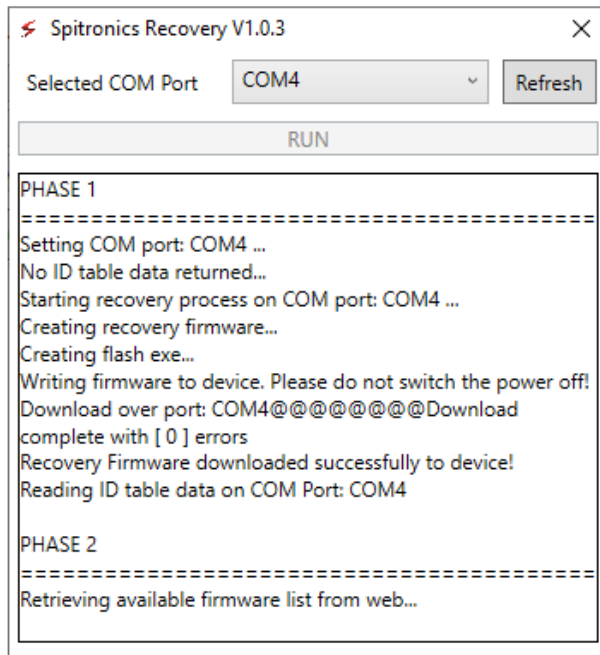
Select the **Venus3 Recovery Program Ver 4.0A 18_10_2024.VDfirm** and click **OK**. If the message shows **"@@@"** again, the programming was successful. This firmware will not pulse any outputs so it is safe to use in a car. Only the 4 LED's on the mercury will flash indicating the firmware loaded successfully.

Click **Yes.**

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Spitronics Recovery V1.0.3                            ✕

Selected COM Port    COM4              ⌄    Refresh

                        RUN

PHASE 1
==========================================
Setting COM port: COM4 ...
No ID table data returned...
Starting recovery process on COM port: COM4 ...
Creating recovery firmware...
Creating flash exe...
Writing firmware to device. Please do not switch the power off!
Download over port: COM4@@@@@@@@Download
complete with [ 0 ] errors
Recovery Firmware downloaded successfully to device!
Reading ID table data on COM Port: COM4

PHASE 2
==========================================
Retrieving available firmware list from web...
Downloading firmware (Venus3 Recovery Program Ver 4.0A
18_10_2024.VDfirm) from web...
Creating flash exe...
Setting device mode 248...
Writing firmware to device. Please do not switch the power off!
Download over port:
COM4@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
@@@@@@@@@@@@@@Download complete with [ 0 ]
errors
Web Firmware downloaded successfully to device!
Process completed.
Please connect the device to the Device Manager software!
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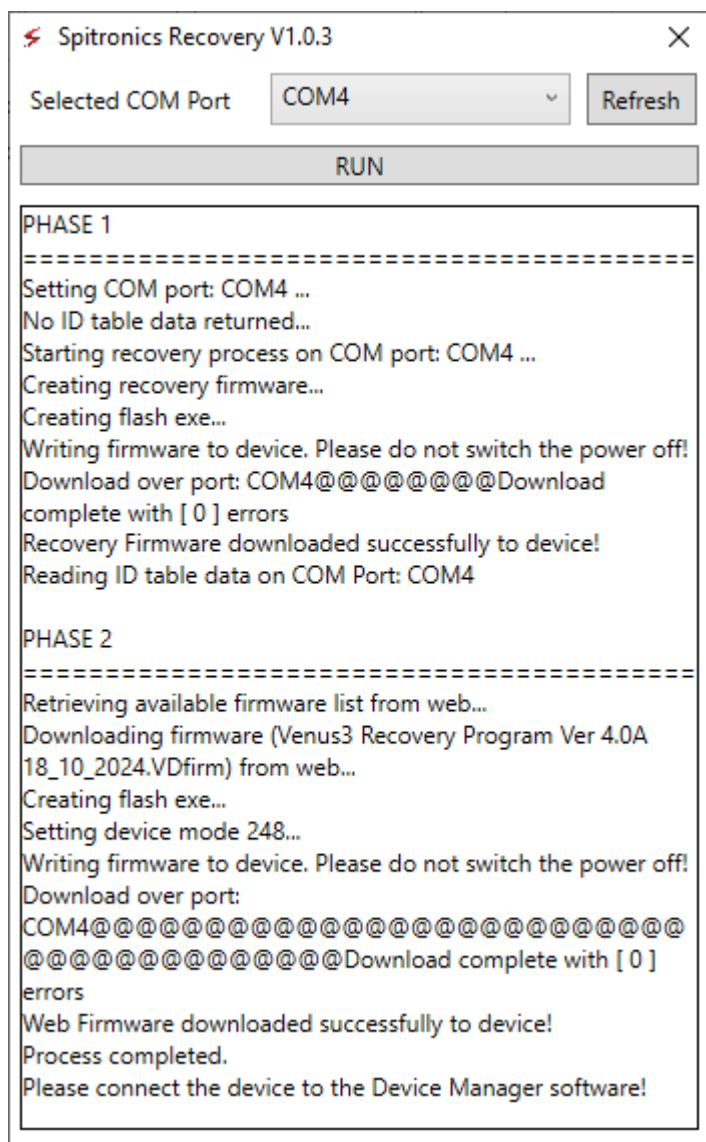
You can now close the recovery software and open **HS DM4**. From there, proceed to load the correct firmware for the Venus3. Once you loaded firmware connect with HS ECU software and go through your setup again and make sure your map file is still ok and no settings have changed. Once you are sure your ECU is setup correctly you may switch the device off and connect the other connectors.