Fuselink

User manual

The plug-and-play USB bridge from your Victron Lynx Distributor chain to your Cerbo GX.

1. Overview

Fuselink is a small USB-attached device that lets your Victron Cerbo GX read fuse-state information from a Victron Lynx Distributor chain. Without Fuselink, the Cerbo's built-in Lynx Distributor fuse pages can only be populated by an expensive Lynx Smart BMS. Fuselink lights up the same UI pages using inexpensive hardware and a clean USB install flow.

It is read-only by design: it cannot send commands to anything on the bus and is explicitly designed not to participate in charge-control logic, so it can't affect your chargers or your battery.

2. What's in the box

- 1 x Fuselink unit (USB-C socket, RJ10 socket, single button, status LED)
- 1 x USB-A to USB-C cable, 1.5 m
- 1 x Quick-start card

You will also need a standard Victron RJ10 (4P4C) cable to connect Fuselink to your first Lynx Distributor. These ship with every Lynx Distributor; any 4P4C straight-through cable will do (3-5 m is a good length).

3. Installation

Designed for first-time installers. Five steps, around two minutes:

- Press the button once. The LED turns blue - Fuselink is now in install mode, presenting itself as a USB stick.
- Plug it into the Cerbo GX using the supplied cable, then cycle power on the Cerbo. On boot, Venus OS detects the new USB storage and runs the driver installer.
- Press the button again. The LED turns green - Fuselink is now in run mode, presenting itself as a USB-serial device.
- Connect the RJ10 cable between Fuselink and the first Lynx Distributor. Daisy-chain additional distributors as required.
- Open the Cerbo UI. The Lynx Distributor pages appear in the standard menu. Tap any fuse to give it a name.

4. Wiring the distributor chain

One Fuselink supports up to four Lynx Distributors on a single RJ10 chain. Each distributor must have a unique I2C address (0, 1, 2 or 3), set with the 2-way DIP switch on the back of the distributor.

DIP 1	DIP 2	Address	UI letter
OFF	OFF	0	A
ON	OFF	1	B

DIP 1	DIP 2	Address	UI letter
OFF	ON	2	C
ON	ON	3	D

Order on the physical chain does not have to match the DIP-switch order - distributors are identified by address, not by their position on the cable.

USB power budget
A standard USB port supplies 500 mA. Fuselink itself draws around 80 mA in run mode, and each Lynx Distributor's logic supply pulls 20-40 mA from the chain. Worst case for four distributors: about 240 mA - well within budget. No external 5 V supply is required.

5. LED reference

Colour	Behaviour	Meaning
Blue	Solid	Install mode - USB mass-storage device.
Green	Solid	Run mode - streaming fuse data to the Cerbo.
Green	Quick blink (1Hz)	Run mode and actively reading a distributor.
Amber	Pulsing	Wi-Fi recovery mode - connect to the captive portal.
Red	Solid	Fault. Unplug, wait 5 s, plug back in.
Red	Slow blink	No distributor responded on the chain.
None	-	No power. Check USB cable and Cerbo port.

6. USB modes & the button

Action	Mode entered
Short press (in run mode)	Install mode (USB mass-storage)
Short press (in install mode)	Run mode (USB-serial)
Hold for 5 seconds	Wi-Fi recovery mode
Hold for 10 seconds	Factory reset (clears stored Wi-Fi credentials)

7. Firmware updates

- Hold the button for 5 seconds. The LED pulses amber.
- From a phone or laptop, join the Wi-Fi network named fuselink-setup.
- A captive portal opens. Pick your home Wi-Fi and enter the password.
- Fuselink checks https://fuselink.uk/firmware/latest.json and downloads any new firmware.
- It reboots into run mode automatically.

Wi-Fi credentials are stored on the device. Clear them with a 10-second button hold.

8. Troubleshooting

Fuse pages don't appear in the Cerbo UI

- Is the Fuselink LED green? If not, press the button.
- Did the Cerbo reboot after Fuselink was first plugged in in install mode?
- Check the RJ10 cable clicks in fully at both ends.
- Two distributors on the same DIP-switch address will collide. Set unique addresses.

'No power on busbar' on every distributor

The distributor is responding to Fuselink but reports no DC on its busbar. Check your main DC connections to the distributor.

Red LED, slow blink

Fuselink is trying to read the chain but no distributor at addresses 0-3 replied. Check the RJ10 cable and that at least one DIP switch is set.

Red LED, solid

Internal fault - usually transient. Unplug, wait 5 seconds, plug back in. If it persists, contact support@fuselink.uk.

9. Specifications

USB connector	USB-C, USB 2.0 Full-Speed
Distributor connector	RJ10 (4P4C), Victron-compatible pinout
Power	Bus-powered, 5 V via USB
Current draw (run mode)	~80 mA
Current draw (Wi-Fi mode)	~180 mA peak
Distributors per unit	Up to 4 (DIP switch addresses 0-3)
Operating temperature	-10 C to +60 C
Enclosure	Vented ABS, IP30
Wi-Fi	2.4 GHz 802.11 b/g/n, recovery mode only
Dimensions	~60 x 30 x 14 mm
Weight	~22 g (excluding cable)

10. Safety & compliance

Fuselink is a low-power 5 V USB device with no exposed conductors and no path to the high-current DC side of your Lynx Distributor. The RJ10 port carries only logic-level signalling and the 5 V supply from the distributor.

Do not modify the device or operate it outside the temperature range. Indoor use only.

Fuselink is a read-only telemetry source. It cannot inhibit charging, change BMS state, or affect inverter behaviour.

11. Warranty & returns

Warranty: 12 months from delivery, covering manufacturing defects. Excludes damage from misuse, modification or operation outside the documented specifications.

Returns: 30 days, no questions asked. Send the unit back in any condition with the original cable; we refund the full purchase price (you cover return postage).

To start a return or warranty claim, email support@fuselink.uk with your order reference.