

# Cyrix Battery Combiner Kit

www.victronenergy.com

**Kit for adding a 2nd or 3rd battery system in your car, boat, RV or whatever you wish. It utilizes the simplest and most advanced technology to keep all your batteries charged using the engine's electrical system, but isolates the starting battery when charging ceases so you never get stranded.**

The Cyrix-i 12/24-120 is a **bidirectional voltage sensitive relay**. It will therefore also engage if for example the accessory battery is being charged by a battery charger.

**Intelligent battery monitoring prevents cycling.** The software of the Cyrix does more than simply connect and disconnect based on battery voltage and with a fixed time delay. The Cyrix looks at the general trend (voltage increasing or decreasing) and reverses a previous action only if the trend has reversed during a certain period of time. The time delay depends on the voltage deviation from the trend.

**Emergency parallel feature.** An emergency start push button can be wired to the "start assist" connection (85) if required. The relay will engage during 30 seconds after "start assist" has been momentarily connected to the battery plus. Alternatively, a parallel connect switch can be used to engage the relay as long as the switch remains closed.

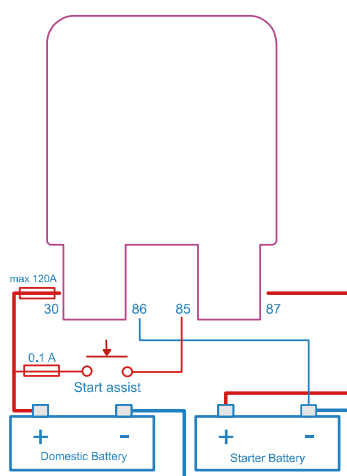
**Easy to install.** There is no need to cut into any factory wiring that may void the manufacturer's warranty of your boat or vehicle.

### Cables and lugs included.

- 6mtr RED 10mm<sup>2</sup> cable
- 0.5mtr BLACK 10mm<sup>2</sup> cable
- 0.2mtr BLACK 1.5mm<sup>2</sup> cable assembly with M8 lug and 6.3mm fast on terminal
- 2pcs M8 cable lug with insulation sleeve
- 4pcs M6 cable lug with insulation sleeve
- 4pcs cable tie 150mm

### Fit & Forget Installation Instructions

1. The Cyrix can only be used in 12V or 24V installations with a negative common.
2. Disconnect the minus of both batteries.
3. Place the Cyrix closest to the smallest battery (in general the starter battery). Mount on a dry surface and keep away from hot items.
4. Prepare cabling:
  - Cut red 10mm<sup>2</sup> battery cables to required length to reach each battery point and crimp or solder lugs onto the cables.
  - Similarly prepare the black 10mm<sup>2</sup> cable to connect the minus of the new battery to the negative common.
5. Use the red cables to connect the plus of the batteries to the brass bolts of the Cyrix, marked with no 30 resp. 87. Install a fuse in series where possible (see fig). The fuse(s) should be sized in accordance with the wire cross section used, but not exceed 120A.
6. Connect the minus of the Cyrix (86) to the negative common with the small black 1.5mm<sup>2</sup> cable.
7. An emergency start push button can be wired to the "start assist" connection (85) if required. The relay will engage during 30 seconds after "start assist" has been momentarily connected to the battery plus. Alternatively, a parallel connect switch can be used to engage the relay as long as the switch remains closed.
8. Reconnect the minus of both batteries.  
The system is now ready for use.



Model	Cyrix-i 12/24-120
Continuous current	120A
Maximum alternator rating	150A
Auto ranging	12/24 Volt
Connect voltage (delay appr. 10 minutes)	13V / 26V
Connect voltage (delay appr. 4 seconds)	13,8V / 27,6V
Disconnect voltage (delay appr. 10 minutes)	12,8V / 25,6V
Disconnect voltage (delay appr. 4 seconds)	11,8V / 23,6V
Over voltage disconnect	16V / 32V
Current consumption when open	<4 mA
Emergency start	Yes, 30s
Protection category	IP54