Instructions for integrating

AC•THOR / AC•THOR 9s / AC ELWA 2

mit Victron Energy ESS

Default settings on my-PV device

Before commissioning, it is essential that you read the assembly instructions that accompany the device, as well as the operating instructions available on line.
Find the AC•THOR operation manual **here**.
Find the AC ELWA 2 operation manual **here**.

Communicaion with Victron (on-grid)

AC•THOR or AC ELWA 2 are connected to Victron in the network via a router. Within this network, the unit receives the information on how much photovoltaic surplus is available from Victron.

⚠ Do not connect my-PV device directly to the inverter or battery system!

⚠ When controlled by an inverter, a feed-in meter is required in the system. Otherwise, the query of the inverter does not provide any data.

In the event of a grid failure, Victron can switch to "off-grid" operation. In this case, there is no more surplus information for regulation. From this moment on, my-PV regulates according to the mains frequency. The switchover takes place automatically.

Settings on Victron

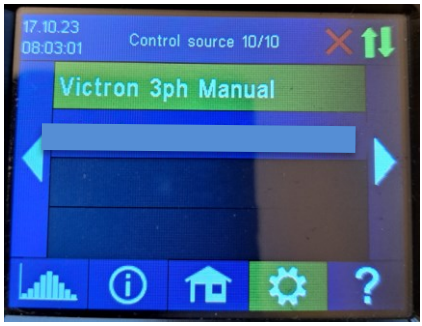
⚠ **When communicating with Victron, the IP address of the inverter must not change during operation (e.g. by a DHCP router), otherwise the AC•THOR or the AC ELWA 2 will lose the control signal!**

⚠ **The following information and illustrations have been kindly provided to my-PV by Victron. my-PV cannot guarantee the accuracy of the information or that the views are up-to-date.**

You can find this information **here**.

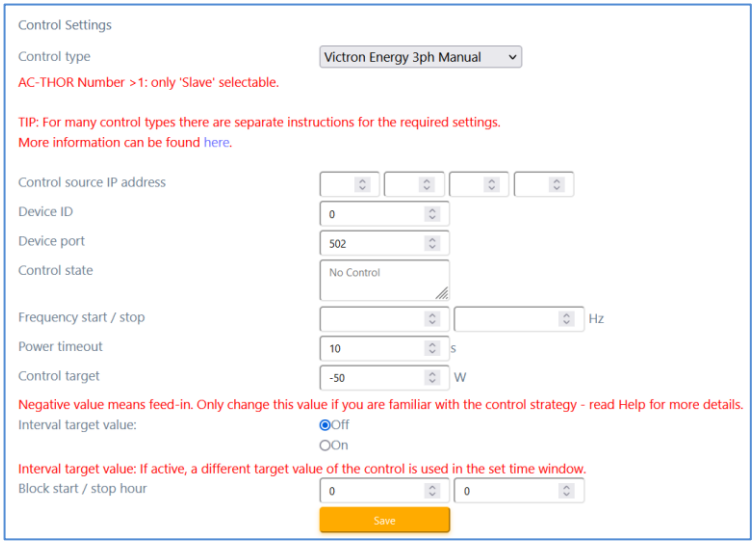
Settings on my-PV device

Depending on whether it is a single-phase **or** three-phase mains access, either "**Victron Energy 1ph Manual**" or "**Victron Energy 3ph Manual**" must be selected for the control type on the display or in the web interface. Then enter the IP address of the Victron GX unit under "Ctrl IP" on the display.



Alternatively, these settings can also be made on the web interface. In the web setup, the parameters "Device ID" and "Device Port" of the GX device can also be set.

For both control options, my-PV has preset the device ID to 0 and the device port to 502.



"Power timeout" is not to be changed.

If there is a battery storage system that has to be charged on priority, then the "Control Target" should be left at -200 W. Otherwise, we recommend using -50 W.

Communicaion with Victron (off-grid)

By combining AC•THOR or AC ELWA 2 with Victron, it is **possible in off-grid systems** to use surplus photovoltaic electricity that cannot be stored in the battery to generate heat. When the battery is fully charged, Victron increases the AC output frequency. my-PV detects the increase in frequency and increases the heating power accordingly.

⚠ Under no circumstances can my-PV be held liable for any battery damage, as our units act as excess consumers ("dump load") but cannot guarantee overcharge protection in every case (e.g. when the target hot water temperature is reached).

Overcharge protection must be guaranteed by the charge controller or PV inverter! Deep discharge protection by the inverter is also essential.

⚠ The AC•THOR or the AC ELWA 2 must always be taken into account when planning loads!

System requirements of AC ELWA 2 for frequency control:

Hardware version: 1.5A or higher
Firmware version: e0000600 or higher
Power stage firmware version ep102 or higher

Settings on Victron

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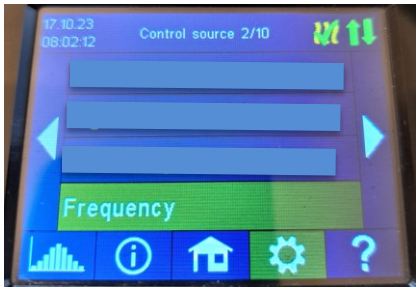
Settings on my-PV device

On the display **or** in the web interface, select "Frequency" for the control source under Control Settings.

The frequency range for 0W up to the full nominal power of the connected load can be set.



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Subject to change.