Self-consumption hub-1

Self-consumption Hub-1	
Welcome	
This assistant is designed to make optimal use of solar energy, produ Chargers which are directly connected to the battery.	iced by Victron Solar
Refer to the Hub-1 manual for more info.	
Principle of operation Normally solar chargers will reduce their power, when the batterie prevent overcharging the batteries. This implies that solar energy A Multi/Quattro system connected to the batteries can prevent th converting the surplus DC solar power to AC power. This power to connected AC loads or, when there is a surplus, it can optionally mains.	es become full, to is wasted! nis energy waste by will then be fed to the be fed into the
 IMPORTANT The firmware version in the Multi has to be xxxx3xx/xxxx4xx versions) Since batteries are charged by an external device the State unknown by the Multi/Quattro! Please do not use this assist assistants which rely on the State of Charge calculation. This assistant must be placed in ALL possible phase master When using a Lynx Ion BMS, It MUST be connected to the This will be indicated by the assistant. Extended systems (e.g. a system with more than 1 AC input, not possible in combination with a Lynx Ion BMS. (Note: A system with 2 AC inputs build with Quattros is not a Take care that the total charge current (Multis + Solar charge exceed the maximum allowed charger current for the batteri 	(more info about of Charge is tant together with s master of phase L1. , build with Multis) are un extended system!) gers) does not es.
 Charge process 1) When there is communication between the MPPT charger and the Multi/Quattro system, the charge process is controlled by the assistant and optimized for solar energy. (More info on this communication will be given further on, depending on the selections made.) Under normal circumstances the batteries will not be charged with power from the AC mains but only with solar power. Exceptions: 	
 Sustain mode. A safety mechanism will prevent that the batteries are fully drained. In that case the Multi/Quattro enters the sustain mode in which a small amount of energy will be taken from the net to maintain the battery at a minimum voltage. Once per 28 days (standard setting) a full charge request is issued.	
 The following settings in VEConfig are not relevant: "Stop after 10Hr bulk" "Storage mode" "Use tubular plate traction battery curve" "Charge curve" "Absorption time / Maximum absorption time" 	
Cancel <<	>>



When to use the hub-1 Assistant?

Use the Assistant for these systems with Solar chargers, ie. dc-coupled solar power:

• Grid that allows feed-back

- Grid that does not allow feed-back
- Grid + a backup generator

Do not use this Assistant for the following systems, even though they have solar chargers:

- No grid nor generator; solar only
- Only a generator connected to the ac-input of the Multi or Quattro, no grid.

More information:

- blog post on hub-1.
- Deprecated: Hub-1 Policy 'Connected to mains, no feedback'
- blog post about using a CCGX as a communication hub between a Multi (or Quattro) and one or more VE.Direct chargers

Frequently asked questions

Do I need to use the VE.Bus to VE.Can interface cable?

No, not anymore since CCGX v1.73.

What happens when there is to power to be fed back, but there is no grid available?

The solar charger will charge the batteries until the absorption voltage is reached, and then reduces it's output. It switches to regulation on battery voltage instead of MPPT or output current. In other words: the batteries will not be overcharged.

What happens when the battery is full and feeding back the grid is has not been enabled in the configuration?

See previous answer.

I do not have a Multi with the new microprocessor, what are my alternatives?

With older Multis and Quattros it is unfortunately not possible to feed power from DC back into the grid. It is possible to prioritize solar in a dc-coupled system.

How many MPPT 150|70 or 150|85 can be connected in parallel

A maximum of 25 units can be connected in parallel.

~~DISQUS~~

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