How to add an Assistant from start to finish

Note: below screenshots are just an example. The same procedure works for other Assistants as well. The used example refers to an Assistant which has later been renamed to PV Inverter support, and is also rarely used on new installations. The Self-consumption Hub-2 Assistant is used instead. It is not necessary, nor possible, to combine it with the PV Inverter support Assistant.

Note for three-phase and parallel systems: some Assistants need to be configured in in all Multis or Quattros in the system, others only in the master of L1 or in all phase-masters. Carefully read the instructions in the Assistant pages while configuring.

Prerequisite

To work with Assistants, VE.Bus Multis, Inverters and Quattros must be loaded with a a different firmware first. More information about which firmware type to choose for an installation, and the updating instruction, is available in our PDF VE.Bus firmware versions explained.

Step by step instructions

Open VEConfigure3 on your computer, connect to the Victron product and open the Assistants tab. Don't see the assistants tab? See here.

Then, from the drop down menu select the Grid Converter support

😘 VE Co	nfigure 3 (Quattro	24/3000/70-50/30)		
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	how VE.Bus monitor			

Click add assistant

	4/3000/70-50/30)
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aux. relay 0 show VE.Bus monitor	
<u>G</u> et settings	
	Start assistant Save assistant Delete assistant
Victron Energy	Summary Load assistant

The assistant will appear in the 'Used assistants' box and it will be in italics, as it has not been configured yet.

Now Click on Start assistant

	000/70-50/30)	
File Port selection Target Defa Quattro UMains 236 V IMains -1.9 A UOut 236 V IOut 0.0 A Udc 28.9 V Udc ripple 0.1 V Idc 6 A Freq. Out 50.0 Hz Freq. In 50.1 Hz SoC 0 Ignore AC 0 aux. relay 0	aults Options Special Help General Inverter Charger Battery monitor Virtual switch Assistants Assistant Configuration Assistant Tools Assistant Setup Available assistants: grid converter support (0114) Add assistant Used assistants: grid converter support	
show VE.Bus monitor		
Victron Energy	Start assistant Save assistant Delete assistant Summary Load assistant	

The Welcome screen is very important and contains important information. Read it carefully.

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b grid converter support	
Welcome This assistant will help you to setup a solar system IMPORTANT: Make sure to read and follow the requirements below introduction)	ill (at the end of the
 INTRODUCTION: A Multi/Inverter can be used in conjunction with a grid-connected converter to make an island system. Normally all extra energy (=solar energy minus load) will flow to the This can cause the batteries to become over charged! To prevent this, the solar converter should be limited in power or when the battery voltage becomes too high. Victron Bluesolar Grid Inverters can be limited in power by adjust output frequency of the Multi. So by changing the frequency the process can be regulated. This assistant will help you to setup such a system. When this assistant is used, changing the 'system frequency' on page has no effect on the inverter frequency. (It can still have effect acceptable frequency range of the transfer switch, see the help REQUIREMENTS: Any assistants which have effect on whether or not the incomi accepted must be placed BEFORE this assistant. If any such assistant is used in a Multi phase system they MUS be used in phase 1. All Multis in the system must load this assistant. A Multi-phase system must be symmetrical, this implies: * Each phase must have the same number of Multis/Quattros * Each input must 'switch as group' (see 'VE.Bus System Context) 	ne battery. r shut off ting the r 'charge' the general ffect on the file) ing AC is ST
(When using 'VE.Bus Quick Setup' most conditions are satisf automatically. Only the Solar power must be balanced per ph Cancel	

Make sure you know the frequency at which the Grid Inverter will switch off, it must be entered on this page

😘 grid converter support	ſ
Disconnect frequency Enter the frequency at which the grid converter disconnects. Note: the assistant assumes that: * solar power will be reduced to minimum at (Disconnect frequency - 0.2Hz) * solar converter will be switched off at (Disconnect frequency + 0.1Hz)	
The solar converter disconnects at 52.90 Hz.	
X Cancel << >>	

Victron Energy - https://www.victronenergy.com/live/

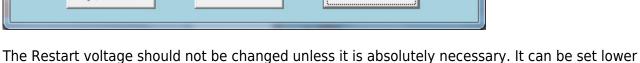
Here enter the total amount of PV power installed in Watts.

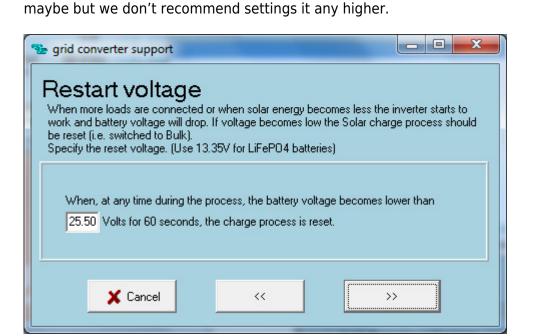
-	e grid converter support	ſ
I	Relative solar power Please calculate the relative solar power as: Total installed solar converter power / Total nr of Multis or Quattros	
	Relative solar power is 2500 Watts.	
	X Cancel << >>	

The Battery type can be selected here

Se grid converter support	
Battery type	
Specify the battery type. The selected battery type will be used to optimize I of the assistant. (Also, when Lithium batteries are selected, the temperature compensation w	
 Lithium batteries 	
● Other	
X Cancel << >>	

The charger settings can either be used from the Charger page or you can define other settings.





Once the assistant set up pages are finish you will the 'grid converter support' is now in normal text.

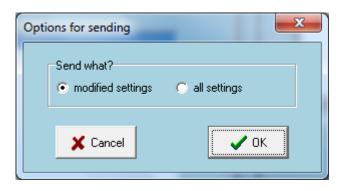
At this point if all the normal settings on the other pages of the software are complete you can select 'send settings'



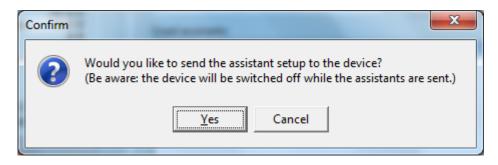
Se grid converter support		X
Make your selection Notes: * Settings used from VEConfigure are: Absorption voltage and duration, Flo voltage, Charge current and State of charge reset point. * Depending on the battery type/capacity, installed solar power and size and loads, voltages above 14.4V (12V system) can result in instability. This inst will especially occur when, with a full battery and on a sunny day, a large switched off.	nd type ol stability	
 Use settings from 'Charger' and 'Battery monitor' page Specify different settings for this assistant 		
X Cancel << >>		

File Port selection Target Defaults Quattro UMains 233 V IMains 1.0 A UOut 234 V IOut 0.3 A Udc 28.8 V Udc ripple 0.1 V Idc 28.8 V Udc ripple 0.1 V Ignore AC 0 aux. relay 0 show VE Bus monitor Ignore AC 0 aux. relay 0 Show VE Bus monitor Ignore AC Ignore AC <th></th> <th>000/70-50/30)</th>		000/70-50/30)
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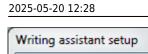
You will be asked which normal settings you want to send.



Then you will be asked whether the assistant set up must be sent also.



The Inverter/charger will switch off while sending the assistant set up to the Unit. This screen will appear.



When the 'writing' of the assistant is finished this screen will appear, the Inverter/charger will restart, if OK is selected it also restarts.

