

Virtual switch - Generator start/stop

This document explains one of the ways to automatically start and stop a generator. See [here](#) for the other options.

More generator information about using a generator in combination with Victron is available [here](#).

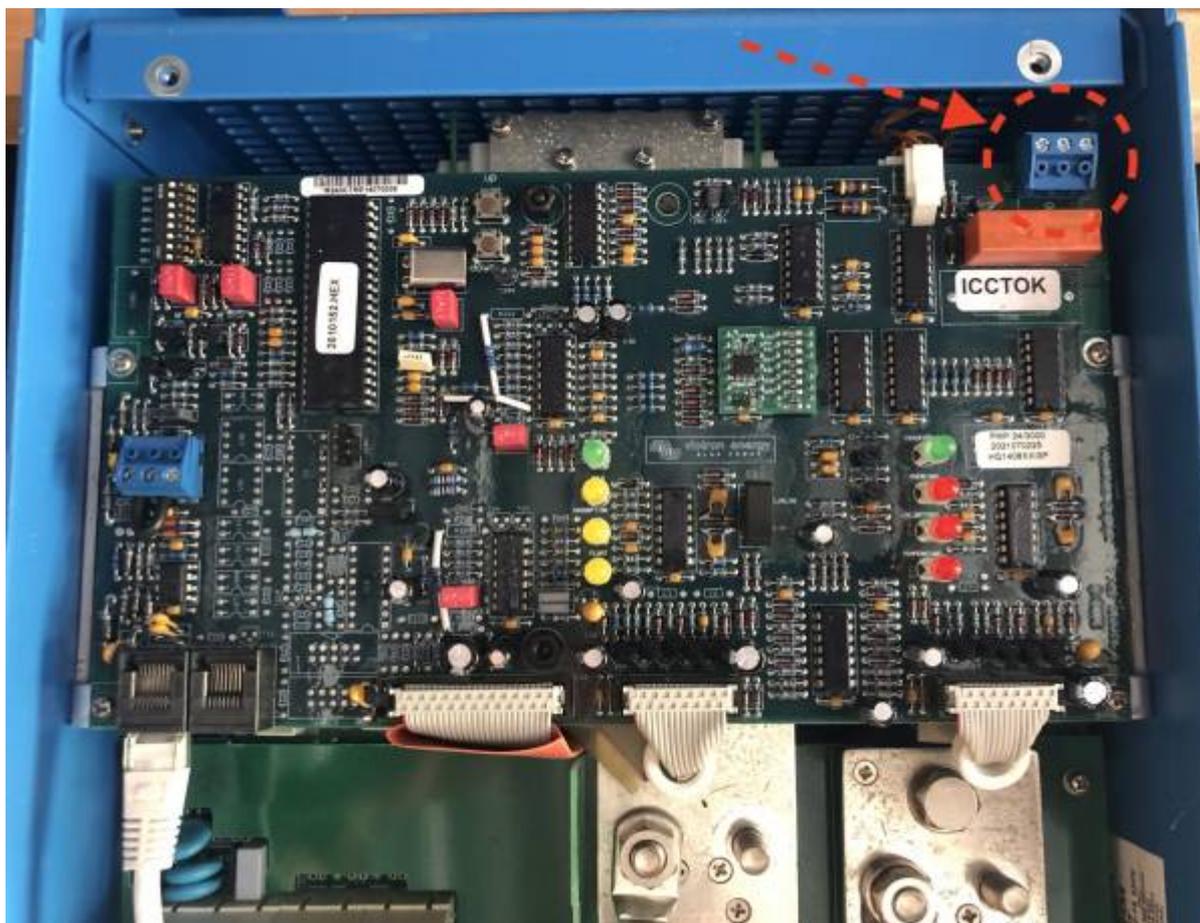
1. Wiring

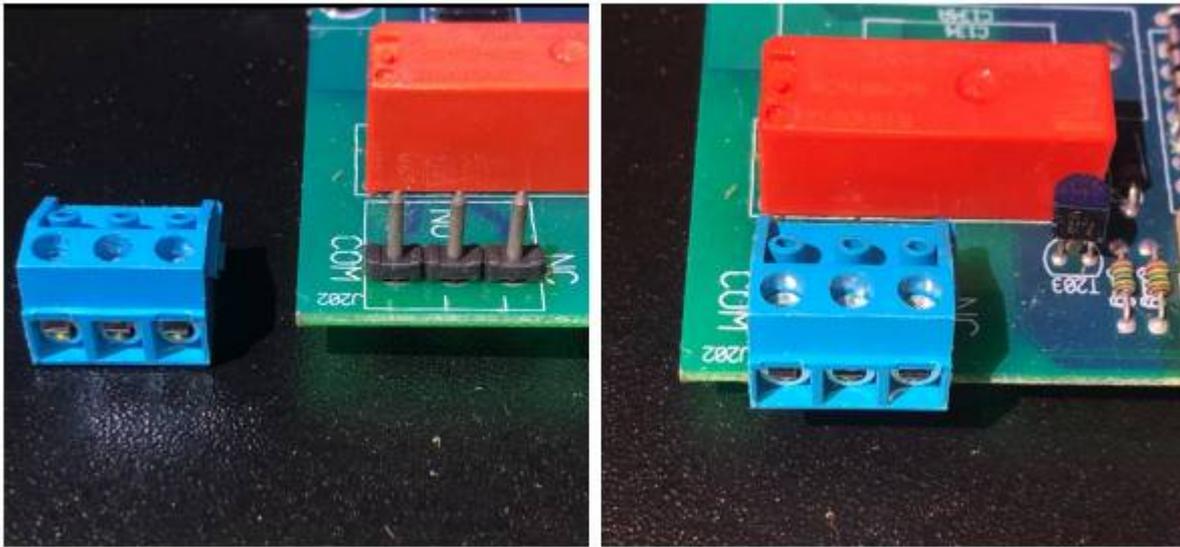
The relay and connector block that needs to be wired to the generator control input is named the Alarm relay; in the various manuals.

1.1 MultiPlus and Quattro models of 3000VA and above

To do the wiring easily; be aware that its detachable: you can pull the block off; do the wiring; and then push it back on.

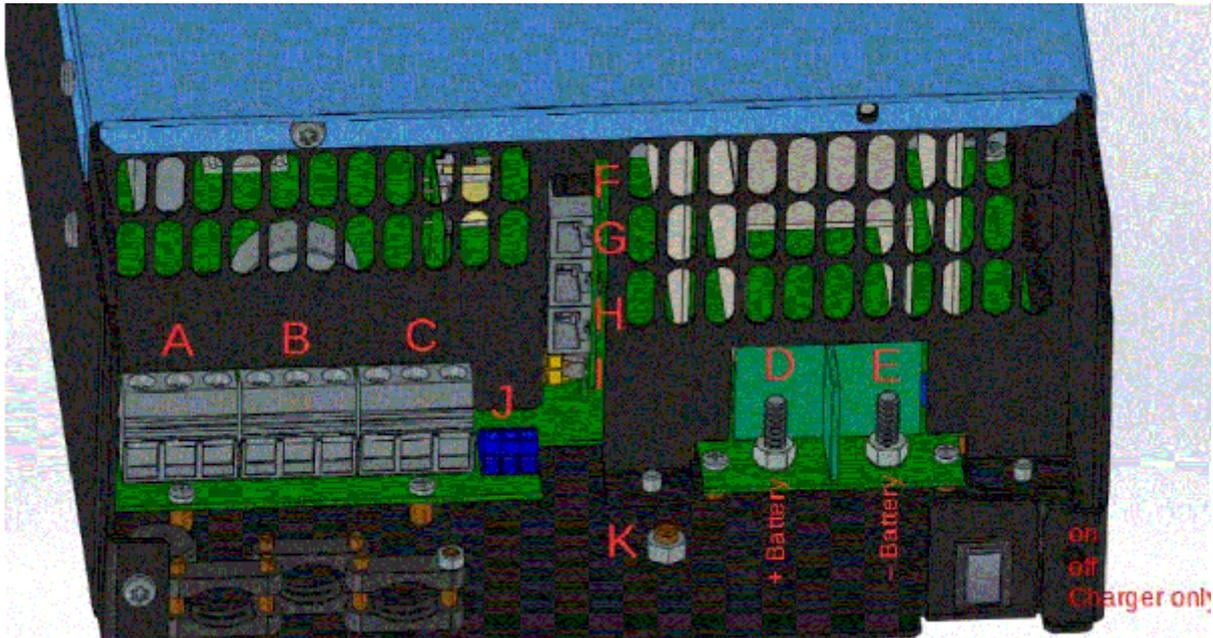
Note that there are three contacts; left to right: Normally Closed (NC) , Normally Open (NO), Common (COM).





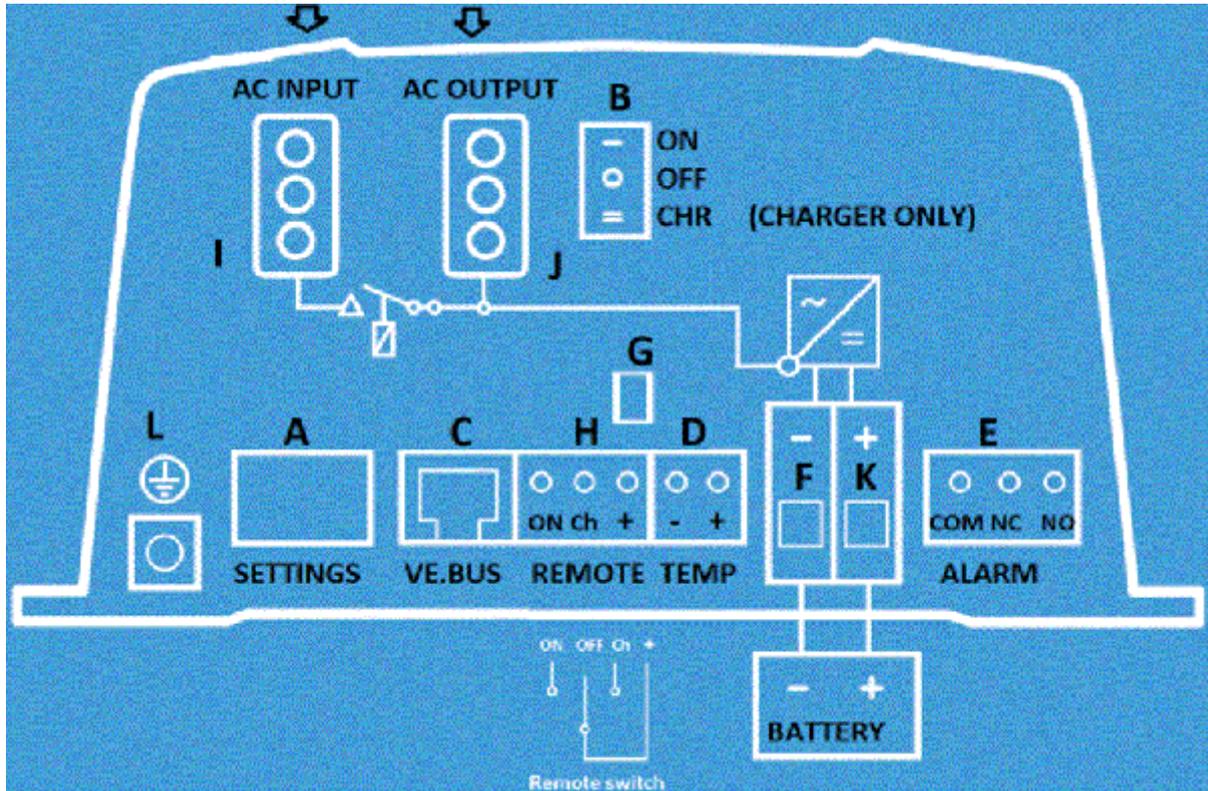
1.2 MultiPlus-II models

The connector is J in the picture. Left to right: NO, NC, COM.

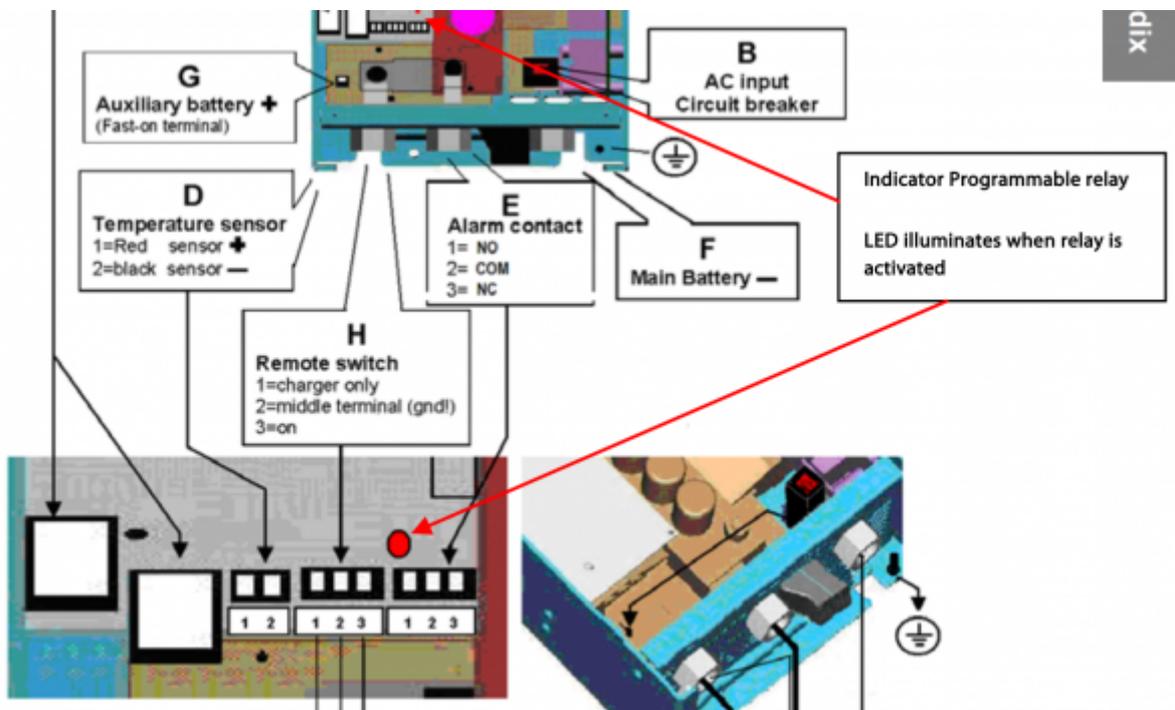


1.3 MultiPlus 500VA to 1600VA models

And, on our Multi 500, 800, 1200 and coming 1600, is contact E; here:



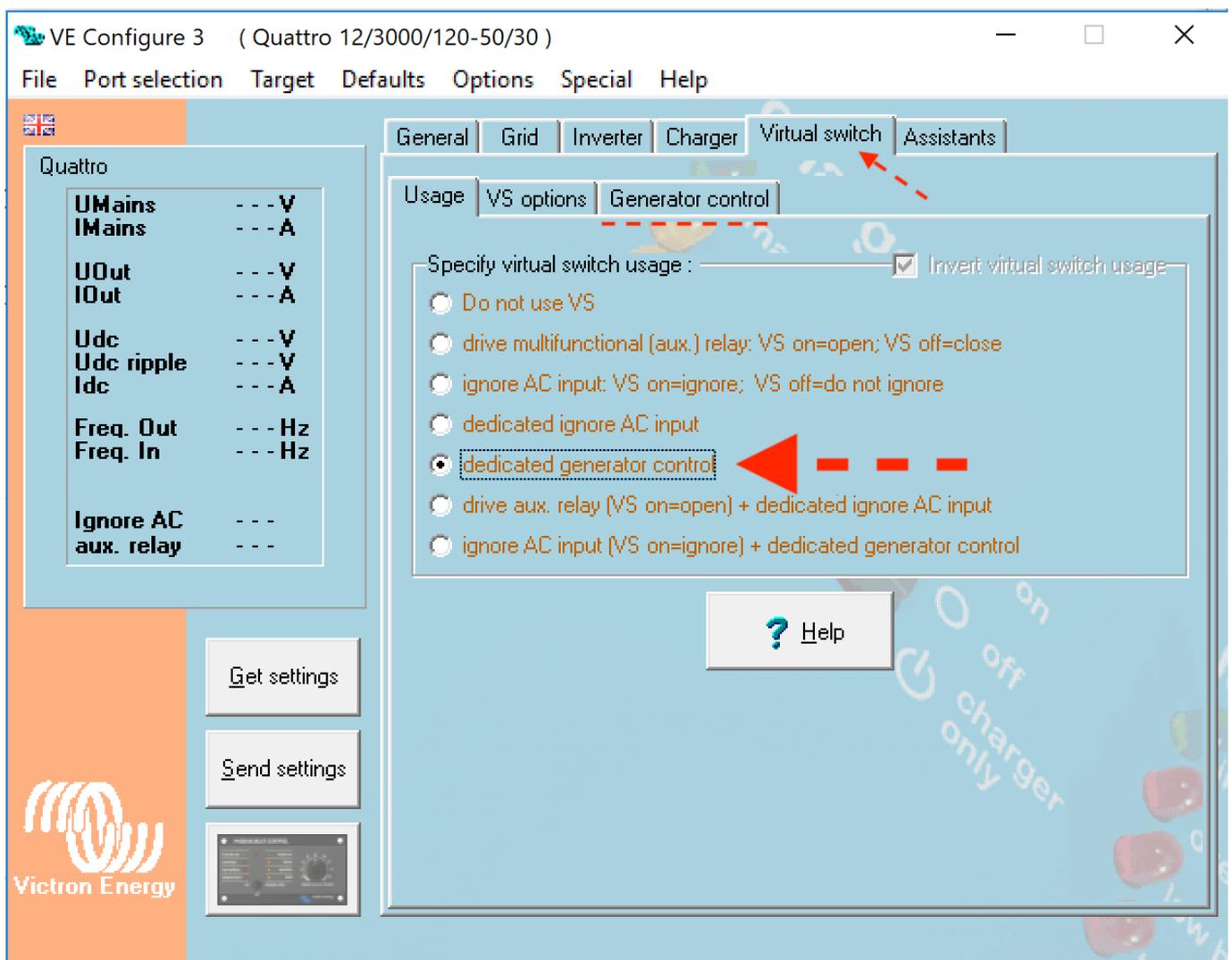
1.4 MultiPlus Compact models



2. Configuration

2.1 enable the feature

Open VEConfigure, navigate to the Virtual Switch, and there select 'dedicated generator control'.



2.2 configure the feature

Note that below are just example values; configure them to match the type of batteries and rest of system.

The 'stop generator when AC2 available' feature is for Quattros; used in a backup system with generator. Wire the generator to AC-in 1; and mains to AC-in 2. With that box checked; the system will automatically stop the generator once mains is available again.

The screenshot shows the 'Virtual switch' configuration page for a Quattro inverter. The interface includes a sidebar with status indicators and a main panel with configuration tabs.

Quattro Status Indicators:

- UMains --- V
- IMains --- A
- UOut --- V
- IOut --- A
- Udc --- V
- Udc ripple --- V
- Idc --- A
- Freq. Out --- Hz
- Freq. In --- Hz
- Ignore AC aux. relay ---

Configuration Tabs: General, Grid, Inverter, Charger, Virtual switch, Assistants

Virtual switch Sub-tabs: Usage, VS options, Generator control

Generator control settings:

- Load conditions:**
 - Start generator when load higher than: 2548 W for 30 seconds
 - Once started due to load condition, stop generator when load lower than: 637 W for 2 minutes
- Battery conditions:**
 - Start generator when Udc lower than: 11.75 V for 20 seconds or when state of charge lower than: 50.0 %
 - Once started due to a battery condition, stop generator when: Udc higher than 14.00 V for 30 minutes
- stop generator when AC2 available
- invert driving of auxiliary relay (i.e. generator starts when relay NOT driven)

Buttons: Get settings, Send settings

Log: A small window showing system logs is visible at the bottom of the sidebar.

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