

## Use 1140 interface to set shore limit assistant

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When having a variable speed generator, flywheel generator or waterturbine, the available AC power depends on the rpm. Stalling of the alternator may be often caused when the setpoint for shorepower is chosen too high, too little power will be used when the setpoint is set too low. Therefore it might sometimes be useful to measure rpm of this power source and calculate available power according to this.

### In order to do this we can use the 1140 converter ASS030510000

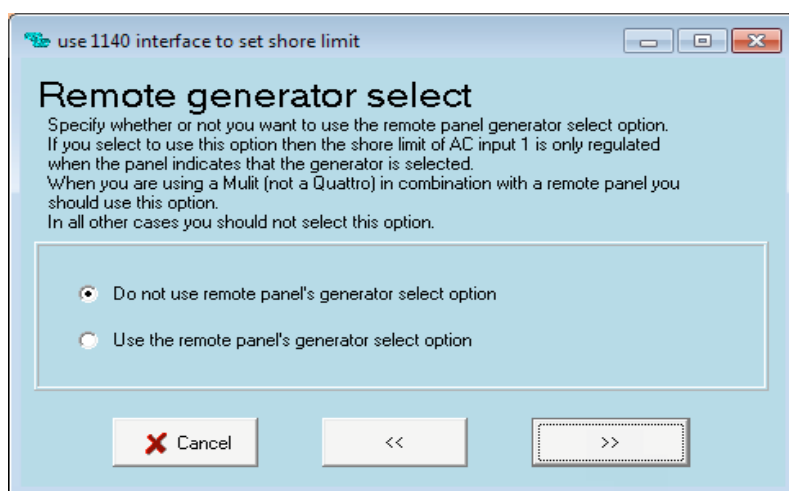
When this is connected to the alternator AC it can measure ripple/frequency. The assistant "Use 1140 interface to set shore limit assistant" can be used in Multi(C) or a Quattro. It is connected just as a mk2 with use of an utp cable. Remark: the unit must have firmware xxx2xx or higher in order to use assistants.

### Settings to be made in the assistant:

First select if the terminal block on the remote panel must be used or not.

When working with something like transfer switch the software needs to know when to use the assistant or not. (when using shore power)

If there is a Quattro this is done automatically so select "do not use".



*When having a Multi and you want to select whether the power is coming from a genset or shore, select "Use remote panel selection" (this can be connected on the rear terminal block of a multi panel)*

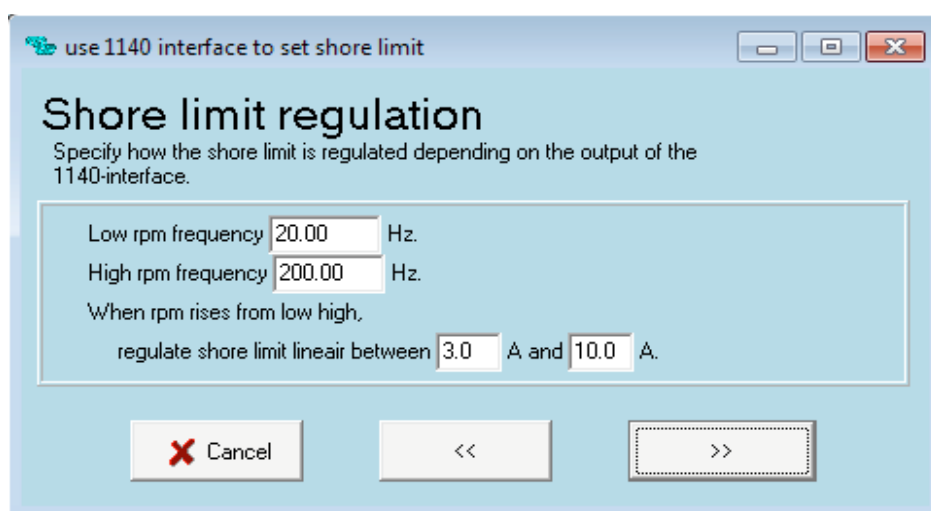
### Settings for rpm vs input power

Set low\_freq for the minimal current Imin what the genset can do running idle.

Set high\_Hz at a certain high Imax level from which on the genset can do maximal power.

Function:

- If the rpm/hz is as low as low\_Hz shore current is set at minimal.
- If the rpm/hz is as high as high\_Hz shore current is set at maximal
- If the rpm/hz is in between the two setpoints a linear line will be followed to calculate the shore current setting



*If the Imin is set lower then the actual minimal current of the unit, the unit will remain in inverter mode until the rpm/hz is at the point of the minimal current, this setpoint is done automatically and depends on the model multi/Quattro.*

### Optional settings in VE Configure

- |         |                            |                                     |
|---------|----------------------------|-------------------------------------|
| Multi   | → in VE configure, general | → overruled by panel Off            |
| Quattro | → in VE configure, general | → AC input 1 overruled by panel OFF |
|         |                            | → AC input 2 overruled by panel ON  |

Dynamic current limiter must be UN checked

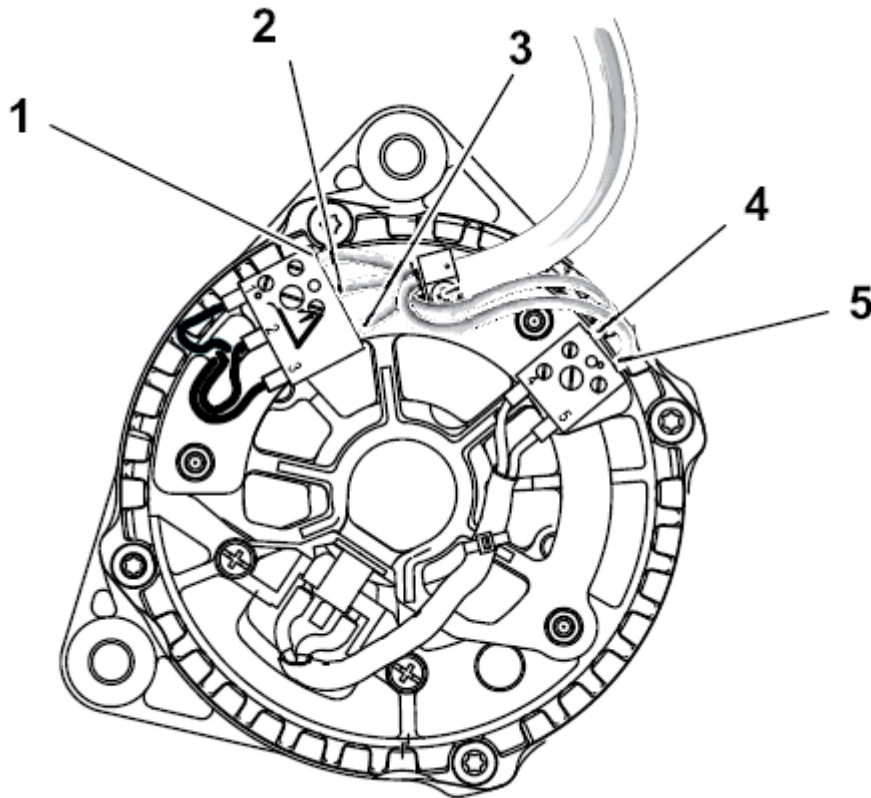
The assistant can not be used together with a BMS assistant.

The assistant must be loaded in all units when used in a three phase setup.

### Connecting to a travelmate

Steps to perform:

1. Connect the 2 wires from the INTERFACE 1140 to connections 1 & 2 (see picture) of the alternator.  
Warning: High voltage is present on these wires! Make a solid connection and take care that the wires are not subject to mechanical stress.  
(When having another alternator it is important to connect to the output before inverter/rectifier).



2. Connect a UTP cable to the INTERFACE 1140 and make a connection to the Multi.  
If using an external relay for switching between generator and shore current then connect the remote panel as shown in the figure below.

