



# OBXG Series Generator Support Owner's Manual Addendum

## Purpose

This document describes additional features added to the OBXG Series Inverter/Chargers. These features were not included in the OBX Owner's Manual, which is used for this product.

## Scope

This document applies to all OBXG Series Inverter/Chargers with firmware rev. 002.092.000 or higher. Only OBXG Series Inverter/Chargers provide the Generator Support feature.

## Generator Support

When this feature is enabled, the inverter limits the current draw from an AC source, augmenting it with additional current from the batteries when necessary. This helps prevent overload of a small AC breaker or generator during short-term use.

- Initially, the AC source current is used for both loads and battery charging. The **ac1/grid limit** or **ac2/gen limit** settings dictate the maximum AC draw. If the AC draw exceeds this setting, the inverter reduces its charge rate to give priority to the loads.
- The charge rate will reduce as much as necessary. If the loads equal the amperage setting, the charge rate will be zero.
- If the AC loads **exceed** the amperage setting, the charger will begin operating in reverse. It will take power **from** the batteries and use it to support the incoming AC current.



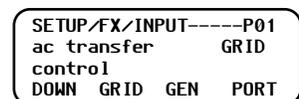
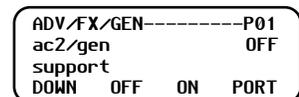
### IMPORTANT:

If the AC loads exceed the amperage limit setting, the inverter will drain the batteries. The inverter will stop functioning at the Low Battery Cut-Out (LBCO) set point. Backup power may not be available until the batteries are recharged. To prevent this situation, load use should be planned accordingly.

## Programming

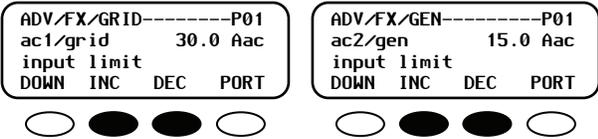
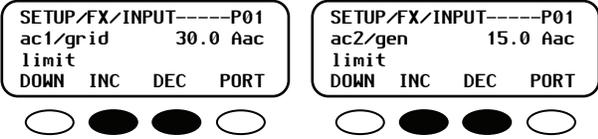
This feature is activated by the **ac2/gen support** menu item, located in the ADVANCED menus.

- The default selection is ON. It can be switched OFF using the <OFF> soft key.
- Although the menu item is titled "**ac2 gen support**", it functions equally well whether the AC source is generator or utility grid.
- Choose between generator or grid criteria using the **ac transfer control** menu item in the SETUP menus. The default is GRID. The <GRID> and <GEN> soft keys will toggle between these respective options.



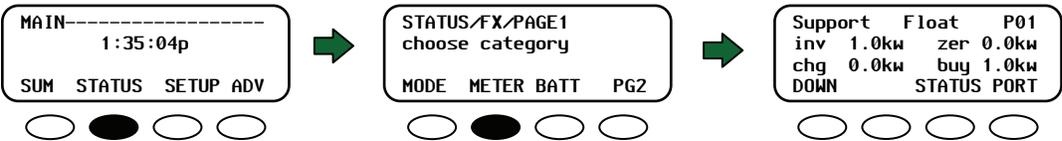
The support level is set using the grid or generator limit settings. These settings should be adjusted to match the size of the input breaker or circuit which is to be supported. If the **ac transfer control** menu is set to GRID, the inverter uses the grid settings. If the menu is set to GEN, the inverter uses the generator settings.

- The grid and generator limit settings are found in both the SETUP and ADVANCED menus under slightly different names. In each case, the limits are adjusted using the <INC> and <DEC> soft keys.
- The limits in the SETUP menus are linked with the ADVANCED items. Only one needs to be changed. If **ac1/grid limit** is changed in SETUP, the change will also apply to **ac1/grid input limit** in ADVANCED, and so on.

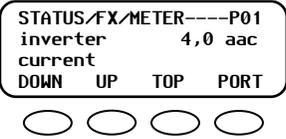


## Monitoring

This feature can be monitored in the METER menu, which is selected under the STATUS series of menus.



- The top line of the METER menu shows current status (left) and target status (center). **Support** will appear as the current status when this feature is operating. The target status is the voltage (usually a charging stage) which the inverter is either trying to reach or to maintain. If a battery charging cycle was interrupted to provide AC support, the menu will show the appropriate charge stage as its target.
- During AC support, if the unit begins drawing power from the batteries, it is considered to be inverting. The **inv** field will display the number of kilowatts consumed.
- The **inverter current** field, elsewhere in the METER menu, also shows the number of AC amps consumed.
- Additionally, the INVERTER status LEDs on the MATE and the inverter itself will illuminate while this feature is operating.



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