

# MultiPlus FAQ

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What to do when a MultiPlus does not accept generator power

Even when a MultiPlus operates perfectly on shore (or mains) power, it may refuse to operate correctly on generator power.

This is generally caused by inferior quality of the generator power: when generator power quality is insufficient,

The MultiPlus will reject it.

In fact, this current will go through the MultiPlus only if it meets minimal quality requirements; in that way the MultiPlus protects the electrical supply of delicate equipment.

The sensitivity of a MultiPlus to power quality can be easily modified with VE-Configure, and adapted settings generally allow acceptance of poor quality current.

**Warning:** changing these settings will allow to feed-through current of insufficient quality for the electrical requirements of your equipment.

The main parameters are the following:

## 1. In the “General” tab of VE-Configure:

### 1.1 Frequency stability

**Accept wide input frequency range (45-65Hz):** The MultiPlus accepts frequencies from 45 to 65Hz (default = enabled).

If the generator is extremely stable and if that same stability is required on the output of the MultiPlus, this setting may be disabled.

### 1.2 Minimum voltage levels

**AC low disconnect:** low limit: below this value, the MultiPlus will disconnect (default = 180Vac).

**AC Low connect:** minimum value: at this value or any higher value, the MultiPlus will reconnect after having disconnected (default = 187Vac).

### 1.3 Maximum voltage levels

**AC high disconnect:** high limit: above this value, the MultiPlus will disconnect (default = 270Vac).

**AC high connect:** maximum value: at this value or any lower value, the MultiPlus will reconnect after having disconnected (default = 265Vac).

### 1.4 Wave shape quality

**UPS Function:** (default = enabled)

When the sine wave is of good quality, the Inverter of the MultiPlus will hook up on it, thus allowing a synchronised and fast transfer when the generator stops.

Many generators have more or less ill-shaped sine waves, in particular during sudden load changes. In these situations, the MultiPlus will disconnect frequently or not connect at all. The UPS function must then be deactivated. The drawback is a slightly longer transfer time.

### 1.5 Load impact limitation

**Dynamic current limiter :** (default = disabled)

This feature is intended to reduce load impacts on low-power generators, such as portable inverter technology models. These generators may be unable to respond to sudden load impacts.

By activating the limiter, the **PowerAssist**<sup>®</sup> function of the MultiPlus will absorb the change in load and transfer it smoothly to the generator, giving it time to react.

## 2. In the "Charger" tab of VE-Configure:

### **Derating of the power factor**

Some generators have a waveform which makes it difficult to charge with the normal charge mechanism. Through activating the "**Weak AC input**" function, another mechanism is used which will enable the MultiPlus to charge under practically any condition.

Disadvantage of using this option is that the input power factor, normally equal or close to 1, will be degraded. This function should be used only when the preceding ones are ineffective.

### **Important note:**

A detailed description of all settings is available in the VE-Configure help menu, and more instructions are available in our manuals.