BG3K - GUI Parameter Explanation
Low Voltage Threshold (LVT)
When the battery voltage is lower than this value, it will initiate a timer within the batteryguard to enter the low voltage shut down. If the voltage remains below this value for the "Isolation Delay" the batteryguard will disconnect the relay. If the battery voltage rises above this value the timer will reset and no disconnect will occur.

Isolation Delay
This is the total length of time the battery guard will take to disconnect upon sensing below the low voltage threshold (LVT). The allowable range can be anything from 1 to 8 minutes.

Aux Input Polarity / Aux Input Configuration
With this box checked the auxiliary input is required to read a positive signal, with the box unchecked the auxiliary input is required to read a negative input. The configuration can be chosen by the "Aux Input Configuration" drop down box.

Inhibit Disconnect Delay
A previously saved file can be opened or a configuration can be saved via this drop down box.

Remainder of page not visible, but likely contains more configuration settings.
Standard Configuration Extended

Alarm 1 Delay

Alarm 1 delay will enable the alarm 1 output on the battery guard. This will become active after the parameter value is true. For this example the alarm 1 output will become active after 2 minutes of the battery voltage sensing below 12.1 volts. If the battery voltage rises above this voltage the alarm 1 will turn off. The value for this alarm can be entered from 0 to 8 minutes dependant on the total isolation delay and what alarm 2 is set to.

The battery guard also has an audible alarm in which can be sounded to warn of low battery voltage. The frequency of this buzzer can be selected during alarm 1.

The alarm 1 can be programmed to continuously active during the alarm 1 period, flashing, trigger once “One Shot” or flash 5 times only. The alarm 1 can also be disabled and not operate at all.

The polarity of the output is determined via whether the alarm common (Slate Wire) is wired to a negative or positive. The slate wire acts as a common contact to a relay.

The alarm 1 can be operated as normally closed via the check box. The alarm 1 output can be also enabled during the alarm 2 phase via the check box.

Alarm 2 Delay

Alarm 2 delay will enable the alarm 2 output on the battery guard. This will become active after the parameter value is true. For this example the alarm 2 output will become active after a total of 3 minutes of this battery voltage sensing below 12.1 volts. If the battery voltage rises above this voltage the alarm 2 will turn off. This is achieved by adding the alarm 1 delay to alarm 2 delay. The value for this alarm can be entered from 0 to 8 minutes dependant on the total isolation delay and what alarm 1 is set to.

The battery guard also has an audible alarm in which can be sounded to warn of low battery voltage. The frequency of this buzzer can be selected during alarm 2.

The alarm 2 can be programmed to continuously active during the alarm 2 period, flashing, trigger once “One Shot” or flash 5 times only. The alarm 2 can also be disabled and not operate at all.

The polarity of the output is determined via whether the alarm common (Slate Wire) is wired to a negative or positive. The slate wire acts as a common contact to a relay.

The alarm 2 can be operated as normally closed via the check box. If the alarm 1 and alarm 2 latch mode check box is selected both outputs will latch and stay on once both alarm 1 and alarm 2 conditions are met.

BD Relay Feedback Polarity

The BD relay feedback polarity is required to be set positive when isolating a positive side of the battery through the Intellitec relay. The BD relay feedback polarity is required to be set negative when isolating a negative side of the battery through the Intellitec relay.

The BD relay feedback polarity is required to be set positive when isolating a positive side of the battery through the Intellitec relay. The BD relay feedback polarity is required to be set negative when isolating a negative side of the battery through the Intellitec relay.

Low Voltage Threshold Buzzer Frequency

When a buzzer frequency is set the audible buzzer will sound upon sensing below the LVT. This will continue to sound throughout the isolation delay unless the voltage climbs above the LVT or alarm 1 is used and the conditions are met.

Aux Input Configuration

The aux input blue wire can be programmed to several features.

1. Alarm 1
   - If the aux input configuration is set to alarm 1 once the aux input wire is triggered, positive or negative (see page 1 for polarity details) then the battery guard will force alarm 1 mode regardless of battery voltage.
2. Alarm 2
   - If the aux input configuration is set to alarm 2 once the aux input wire is triggered, positive or negative (see page 1 for polarity details) then the battery guard will force alarm 2 mode regardless of battery voltage.
3. Disconnect
   - If the aux input configuration is set to disconnect, once the aux input wire is triggered, positive or negative (see page 1 for polarity details) then the battery guard will force a disconnect if the inhibit wire is not overridden, regardless of battery voltage.
4. Mute Buzzer
   - If the aux input configuration is set to mute buzzer, once the aux input wire is triggered, positive or negative (see page 1 for polarity details) then the battery guard will mute the audible buzzer, regardless of battery voltage.

5. Split Charge Positive Sense
   - If the aux input configuration is set to split charge positive sense the aux input wire must be wired to the primary battery of the two battery banks. With this feature selected, alarm 2 is no longer used and the green wire is now used to energize a relay to join two different battery banks together for split charging. The parameters in which are required to be met to engage split charging are as follows:
     1. The inhibit orange wire must be live.
     2. The aux input blue wire must see above the split charge threshold value.
     3. The split charge delay value must be met.
6. Force Threshold
   - If the aux input configuration is set to force threshold, once the aux input wire is triggered, positive or negative (see page 1 for polarity details) then the battery guard will be forced into low voltage threshold condition. If the inhibit orange wire is active the battery guard will not be able to disconnect.