



- 1 AC Source – When illuminated this LED shows the presence of AC input voltage from either a motor generator or the mains grid, whichever is applicable.*
- 2 AC Transfer – Illuminated when an external AC source is connected to AC loads. If the AC source LED is illuminated but not the transfer LED it would generally indicate that the input is out of tolerance – that is that either the voltage or the frequency of the source is unacceptable. If the source is a motor generator check if it needs servicing; if the mains grid check with your supplier for a problem or that the tolerances within the inverter have not been set too tight.
- 3 AC Load – When illuminated this LED shows the presence of AC voltage ready to supply loads. If, in normal running conditions, it is not illuminated it indicates there is a fault within the system.*

* These LEDs can operate even if your SP Pro is not switched on.
An external power source can activate these LEDs.

- 4 Generator state LED – One of the most informative, but sometimes complex, LEDs. If this LED is flashing green the generator is in the process of starting, when it glows steadily green the generator has started. If it flashes yellow it indicates that the generator is not available to start. If it flashes red there is a generator fault – initiated by the generator controller. This may mean that the generator requires servicing.
- 5 Generator Start/Stop button – A brief press of this button will start or stop the generator.
- 6 Export – This LED indicates, in a grid connected system, that the SP PRO is exporting power to the grid.
- 7 Inverter Mode LED – When green the inverter is performing normally, when flashing green it is in econo mode and is waiting for a load to be presented. If the Mode LED is red a unit fault has occurred and no output is possible.
- 8 The Output Mode push button turns the unit on, when it is an idle state and returns it to idle when it is on or in “Low DC Override” mode.
- 9&10 Are Charging source indicators. If LED 9 is illuminated the charging to the batteries is being provided by an external AC source such as a motor generator or the mains grid, while if 10 is illuminated the charging is being received from a renewable source such as solar or wind power. Both LEDs may be illuminated.

- 11 Is your “fuel gauge”. When in State of Charge mode this meter represents the percentage of usable charge in the batteries. When all LEDs are illuminated the SoC is 86% or above, when only the bottom LED is illuminated (red) there is only 5% of usable charge left within the battery pack. The second LED from the bottom will glow yellow to indicate a warning that this situation is approaching.

If all battery LEDs are flashing red it indicates that the low DC volts override (or “Just Go” function) has been activated. This feature enables the inverter to be forced to work even when the battery voltage is too low in emergency situations, of course this will only apply until the battery voltage will no longer keep the inverter running. We remind you, using this emergency feature may damage your batteries or connected equipment.

When in voltage control mode all LEDs on indicate a voltage of 2.2V/cell (that is 26.4 volts in a 24 volt system, 52.8 volts in a 48 volt system etc) and the bottom LED indicates 1.9V/cell (ie 22.8 volts in a 24 volt system and 45.6 volts in a 48 volt system etc).

- 12 The Alarm Silence button cancels any audible alarm.
- 13 Overtemp – When this LED glows yellow the inverter is approaching an over temperature situation, while when red it indicates the inverter has shut down because of an over temperature event.
- 14 Shutdown - When this LED glows yellow the inverter is approaching a shutdown situation, while when red it indicates the inverter has shut down.
- 15 Service Required – There are a number of preventative steps that can avoid a premature fault situation within the inverter – such as the fan filter requiring cleaning. When this LED illuminates consult the “Data View” section of SP LINK to determine the reason for the alert.

The Charging Mode panel, comprising LEDs **16, 17, 18 & 19** indicate the stage of the charging process that is presently being performed, or the stage that will be started at the next starting of the generator or the connection of the mains grid. The SP PRO calculates the input from renewable sources to help arrive at the appropriate charge stage.