Overview

Status LED External Power Supply ("DC-IN")

Reconnect Output ("Connect Vout")

Selector Switch Charge Mode

Start Charge Cycle ("Start charging")

Status LED Charge Cycle ("Charge status")

Connector PCAN-LWL (Output)

Connector External Power Supply (Input)

Connector External Power Supply (Input)

Vin (+) 12 – 15 V DC
GND (-)

When the input is supplied with voltage, the green status LED "DC-IN" indicates this. If the selector switch for the charge mode is set to N (default, see below), the input voltage is connected to the output.

Start Charge Cycle

You have two possibilities to start a charge cycle:

1. When you connect an external power supply and the batteries have a voltage lower than 6.9 V, the charge cycle is started automatically.

2. You can initiate a charge cycle manually by pressing the corresponding push button "Start charging" (assumed that an external power supply is connected).

In both cases the charge cycle proceeds according to the setting of the selector switch for the charge mode (see below).
Selector Switch Charge Mode

By using a small flat tip screwdriver you can select one of three charge modes:

- **N**: At normal charge mode (default) after a short battery check (the status LED blinks red for a few seconds) the batteries are fast charged (status LED shines red) until the charge reaches about 80% of the full battery capacity (status LED shines green, after about 1 hour). Then a slow charge is done until the full battery capacity is reached (about 1 hour), followed by a continuous trickle charge (not indicated separately).

- **E**: The exercise mode is used for maintenance of the storage batteries. At this procedure the storage batteries are actively discharged (status LED blinks red) before a normal charging process is started. You should execute an exercise cycle about every 3 months. We suggest that you connect a PCAN-LWL module or another load to the output in order to speed up the discharging process. Please do not forget to set the selector switch back to N after the exercise cycle is finished.

- **R**: If the batteries are run-down significantly quicker at normal operation after a normal charge cycle, you may want to try a reconditioning cycle to gain back the full capacity of the batteries. It works like the exercise cycle (see above), but the batteries are deep-cycled. You should use the reconditioning cycle only in the mentioned case and not regularly. We suggest that you connect a bigger load (about 10 W, e.g. a halogen lamp) to the output in order to speed up the discharging process. Please do not forget to set the selector switch back to N after the reconditioning cycle is finished.
Reactivate Output
LWL-Batt has a protection circuit switching off the output as soon as either an overcurrent, a short circuit, or an undervoltage is detected there. After you've eliminated the cause of failure you can reactivate the output by pressing the push button “Connect Vout”.