



The ultimate intelligent home charging station with battery management, for charging and discharging NC, NiMH, lead-acid and lithium batteries, now in a revised version (V2).

### What's new?

- Quiet, high-quality, temperature-controlled cooling fan
- More finely divided current increments
- Optional beeper On / Off
- Pure discharge program

### Functions:

#### NC and NiMH batteries

- These batteries are charged using the special Reflex charge process, which helps to prevent the harmful “memory and lazy battery effect” at an early stage, i.e. during the charge process itself. The accurate automatic digital Delta Peak charge termination circuit switches the process off at the correct time.
- The great advantage of the Reflex charge process is that it prevents the development of different charge structures between the existing charge and the new charge when the pack is undergoing the charging process. Powerful discharge pulses during the charge process produce a homogenous charge structure in the battery.
- **Addition advantages::**
  - No preliminary discharge required
  - More charge cycles

- Revives rarely used batteries
- Greater capacity

Batteries charged using this process are more willing to give up the charged-in energy when required.

#### Charge programs:

- 1 Charge, automatic mode
- 2 Charge, manual mode
- 3 Discharge only, automatic mode
- 4 Discharge only, manual mode
- 5 Discharge / charge, automatic mode
- 6 Discharge / charge, manual mode
- 7 Discharge / charge, automatic mode, three cycles
- 8 Discharge / charge, manual mode, three cycles
- 9 Revive program: automatic discharge followed by C/5 charge, time-controlled according to pre-selected battery capacity.

The following parameters can be varied using the buttons with their well-defined trigger points:

- Charge current • discharge current
- cell count • battery capacity
- battery type: NC, NiMH, lead-acid, Lithium
- charge programs 1 ... 9

#### Display of:

- Status, charge output 1 ... 4
- Active charge / discharge cycle
- Battery voltage
- Charge current / discharge current
- Charge time / discharge time
- Discharged / charged-in capacity

# Profi Home Charger V2



## Lead-acid batteries

- Various automatic and manual charge / discharge programs are available for this battery type.  
A DC current charge is employed with a voltage-dependent automatic charge termination circuit.

## Lithium and Li-Po batteries

- The modern battery types such as Lithium-Ion and Lithium-Polymer can also be charged and discharged using the Profi Home Charger.  
Various charge / discharge programs are provided for these cells, in order to ensure that the different Lithium battery types are charged as efficiently as possible.  
A particularly important aspect of this is the use of an extremely accurate cut-off voltage, as this avoids overcharging these sensitive cells.

## General functions:

- **“Auto-start function”**: when the battery is connected, the charge process starts automatically, and ends automatically when the battery is disconnected. The unit switches itself off when the charge is complete.
- **“Working display”**: after the auto-start, a working display appears which at a glance informs the user of the current charge process; the screen displays charge current, charge voltage, capacity and charge time.
- **In automatic mode** the charge current and discharge currents are automatically detected and set to the optimum value.
- **Charge outputs 1 ... 4**, these can be programmed independently of each other, either for four identical battery types or four different battery types or charge programs.  
The outputs carry out their processes sequentially, i.e. when one charge / discharge process terminates, or a battery is disconnected, the program moves on to the next charge output to which a battery is connected.

- The menu system is displayed on the large integral **backlit 2 x 16 character dot matrix LCD screen**; text can be displayed in German, English or French.

1: CH5.0A DC5.0A  
D/C Li 04C 5.0Ah

2: CH5.0A DC3.0A  
D/C NC 04C 2.5Ah

4: CH1.0A DC1.0A  
DCM NC 16C 2.0Ah

## Specification:

<b>Input:</b>	<b>230 V – AC, 50 Hz</b>
<b>Outputs 1 ... 4:</b>	
<b>Cell count:</b>	
NC batteries:	1...16 cells
NiMH batteries:	1...16 cells
Lead-acid batteries:	1...6 cells
Lithium batteries:	1...4 cells
<b>Charge current:</b>	<b>0.1...5 A</b>
0...8 Volts:	5A
8...10 Volts:	4A
10...13 Volts:	3A
13...20 Volts:	2A
20...40 Volts:	1A
<b>Discharge current:</b>	<b>0.1...5 A</b>
0...6 Volts:	5A
6...8 Volts:	4A
8...10 Volts:	3A
10...16 Volts:	2A
More than 16 Volts:	1A
<b>Battery capacity:</b>	<b>0.1...20 Ah</b>
<b>Trickle charge current:</b>	<b>Automatic</b> (NC, NiMH and lead-acid batteries only)
Dimensions:	200 x 230 x 87 mm
Weight:	approx. 2 kg
Protective functions:	Reversed polarity / short-circuit protection