Version 8.50 of the software includes an expanded function which is not covered by the Operating Instructions for **Version 8.41**.

This relates solely to the automatic current calculation feature in the Nickel-Metal-Hydride charge programs (NiMH - Auto C, Auto CD, Aut3CD, Aut3DC, AutoDC).

First an explanation:

In comparison with the Ni-MH cells of the last few years (e.g.: Sanyo RC3000H/3300HV, KAN 950, Panasonic HHR-300SCP/350SCP (3,0/3,5 Ah)), modern Ni-MH cells (e.g.: Intellect 3800 & 4200, GP130/370/430SCHR (1,3/3,7/4,3 Ah)) exhibit an enormous reduction in internal resistance, due in particular to improved contact techniques between the internal cell winding and the surrounding container as well as to changes in the chemical make-up of the cell.

Since - unfortunately - the automatic current calculation circuit is unable without outside help to detect which generation of cells is connected to it, we have incorporated a special feature in the automatic current circuit as of software Version 8.50:

After the initial charge phase, as described in Version 8.41 (which is still carried out at a very high current), this feature limits the current to a maximum charge current value which you define.

Setting the maximum charge current value:

A new menu point is not required for this. Instead the maximum current value corresponds to the maximum charge quantity which you define for the safety charge cut-off circuit (e.g.: 1000 mAh = 1000 mA). This value should correspond to the battery's capacity value, plus a certain addition to allow for poor charge efficiency, as previously. This addition should be in the range 20% … 50%, as shown in the table values for the safety cut-off circuit.

Safety notes:

It is essential to set the maximum charge quantity correctly, as this is the only way to ensure that the automatically calculated charge current does not exceed the stipulations for charging Ni-MH batteries, as stated in Section 4.3, of around 1 C … 1.6 C. This is necessary to prevent the battery overheating.

If the charger should switch off by **"quan"**tity when connected to brand-new or deep-discharged cells: please don't connect the pack again for charging. Instead carry out a discharge process first (e.g. using the Auto DC program).

Please also note that you must NOT use the automatic current calculation feature to charge the high-capacity cells mentioned towards the end of Section 4.3, as this will result in the calculation of an excessively low current (below 1 C), which would cause the charger to detect the "battery full" condition incorrectly.