

## CHARGE TERMINAL PLUS - SELFTEST

### Equipment

- small screw-driver
- metallic tweezers
- 10 cells NiCd battery-pack ( capacity about 1000 to 2000 mAh )
- True-RMS DC mV - meter ( range 200 mV )
- DC current - meter ( range 2 A )

### Prepare of selftest

No battery is connected

AC power-switch ( main 230 V ) in position **off** ( 0 )

Cell-rotary-switch ( S1 ) in position **10 cells**

Put in the AC power plug ( 230 V )

### To start selftest

There are two SMD- pads on the solderside of the front PCB - named J2 ( see picture 1 ).  
Connect these two SMD- pads ( f. e. metallic tweezers ) and switch on the charger with the main switch - called power.

Then you will start the selftest- program.

Remove the metallic tweezers.

In this program, the display will show what you have to do and/or shows measured values.  
By every press of the MODE-button you reach the next check-point.

1. First you will see "START SELFTEST".

Adjust VR1 to get best display brightness ( see picture 1 ).

Connect the 10-cells NiCd-battery-pack to the red- and black-socket.

Connect a DC-TRUE-RMS millivolt-meter ( range 200 mV ) to R17 ( see picture 1 ).

Push button

### MODIFICATION OF CHARGE-CURRENT ADJUSTMENT

2. Display will show "CHARGE = 2 A MAX".

Turn R47 ( charge current ) to the mid-position.

True-RMS-meter will show a value between 75 and 120 mV ( see picture 1 ).

Push button

3. Display will show "CHARGE = 2 A MID".

True-RMS-meter must show the same value  $\pm 10$  mV.

Push button

4. Display will show "CHARGE = 1 A LOW".

Adjust R47 to 45 ... 52 mV.

Remove true-RMS-meter.

Push button

5. Display will show "ADJUST 1.800 A".

Connect the DC-current-meter ( range 2 A ) between red-socket and battery-plus ( see picture 1 ).

Use R48 to adjust the discharge current within a range from 1.782 to 1.818 A.

Remove the DC-current-meter and the battery-pack.

Notify that during this test the battery-pack is out of full charge- and discharge- control.  
So please do this adjust/check within a short time and use a half-way charged battery-pack.

Push button

6. Display will show "IN:xxxx EMP:1200".

Note: Cell-rotary-switch ( S1 ) in position 10 cells  
xxxx must be a value more then 1200 !

Push button

Then you are in the real charger program.  
Display will show "NO AKKU TO SERVE"

### Picture 1

