

# Instruction manual for power supply no 3655.61

0 to + 500 V DC / 0 to -50 V DC / 2 - 3 - 4 - 5 - 6 - 7 V AC

20.12.10

Ae 3655.61



The power supply no. 3655.61 provides a rectified, smoothed, stabilized and regulated DC power in 2 voltage ranges: 0 to -50 V DC and 0 to +500 V DC. The built-in current-limiter limits the current to 50mA, thus protecting the apparatus against shortcircuits in both ranges.

The outputs for the 2 ranges are independently adjustable although they have the same zero-point terminal. You may select read out of voltage and current in the -50 V or the +500 V range by means of the selector next to the displays.

In addition a separat AC-outlet allows you to draw any voltage from 2 to 7 V in 1 V increments, current max. 3 A. Choose the required voltage by means of the selector. Simply set the selector to the desired voltage.

## N.B.

the following safety precautions are recommended when working with this apparatus:

## CAUTION - HIGH VOLTAGE !

- Always work with a partner.
- Wear rubber soled shoes.
- Work with one hand only.  
Keep the other hand in your pocket or behind your back.

## **Operation:**

1. The apparatus is mains operated. Plug the mains cord into the apparatus and connect it to the mains net (see label on rear of the unit).
2. Connect the appropriate output terminals of the power supply to the circuit. All 3 ranges – -50 V DC, +500 V DC and the chosen AC voltage – may be used simultaneously.
3. Turn all the adjust buttons fully counterclockwise.
4. Switch the apparatus on. The On/Off button will light to show that the power is on.
5. The 2 digital displays offers you the possibility of simultaneous readings of voltage and current. Voltage and current may be read-out for the -50 V range respectively the +500 V range.  
Voltage and current for the -50 V range may be displayed when the the LED marked "-50 V" is lit. The LED is placed above the selector to the right side of the two displays.  
Voltage and current for the +500 V range is displayed in a similar way.
6. Adjust to the desired voltage by means of the adjust buttons marked "50 V Adjust"respectively "500 Volt Adjust". Use the selector to the right of the 2 displays to set the displays to read voltage and current for one of the 2 ranges selectable – either -50 volt or +500 volt.
7. The following procedure is recommended when switching off the apparatus:

Turn the voltage adjust buttons fully counterclockwise.

Disconnect the circuit - simply unplug all test leads.

Switch the apparatus off.

The above mentioned procedure is recommended for the purpose of avoiding damage to any equipment connected to the apparatus. The reason why is that the power supply's regulation circuit will be disconnected once the mains supply is cut off.

**Note:** All output circuits are protected against (current) overload. If the power supply fails to turn on, or if it shuts down during operation because of (current) overload, check the fuses on the rear of the supply.

Replace a faulty fuse only with a similarly rated fuse.

## **Technical specifications:**

|             |  |
|-------------|--|
| Output:     | 0 to -50 V DC, max. 50 mA<br>0 to +500 V DC, max. 50 mA<br>2 - 7 V AC, max. 3 A.                             |
| Input:      | 115 V AC (mains supply),<br>50/60 Hz.  |
| Ripple:     | Less than 0,1 %.   |
| Regulation: | Less than 1 % variation,<br>1 digit, in output for a<br>combined variation in line<br>and load of up to 10%. |
| Fuses:      | 3 A automatic thermal cut-out<br>on the AC outlet.<br>2 pcs. 1 A T (no. 4090.27)<br>for the apparatus.       |
| Dimensions: | 297 x 118 x 225 mm.<br>Weight: 4,2 kg  |