

High Voltage DC Power Supply 5kV, 0V - 5kV.



Characteristics:

Designation: High Voltage Power Supply
0V - 5kV

Application: High voltage for Laboratory tests

Power: 5V (USB)

Price: low-cost

Special: The power supply unit is operated with 5V. The display corresponds to the voltage on the object. Not dangerous to touch. But be careful if a capacity is charged with it. Discharge can be dangerous when touched!

Fig. Power Supply ready to use

Description

High voltage generator for DC voltages from 0V to >5kV. The high voltage generator is powered by an external +5V (USB) voltage source.

A switch next to the supply plug is used to switch the high voltage generator on and off. The adjustment of the desired voltage is done by two knobs "Coarse" and "Fine".

Setting of low voltages:

For low output voltages, the "Coarse" knob must be set to 0. The "Fine" knob is used to set the voltage between 0V and approx. 1.5kV.

Setting of high voltages:

For voltages above this, up to more than 5kV, use the "Coarse" button.

Display:

The display instrument shows the set output voltage in kV. The displayed voltage corresponds to the voltage at the output socket of the generator.

If the output is loaded, e.g. by a measuring probe or in the event of a short circuit, the instrument displays the corresponding actual voltage.

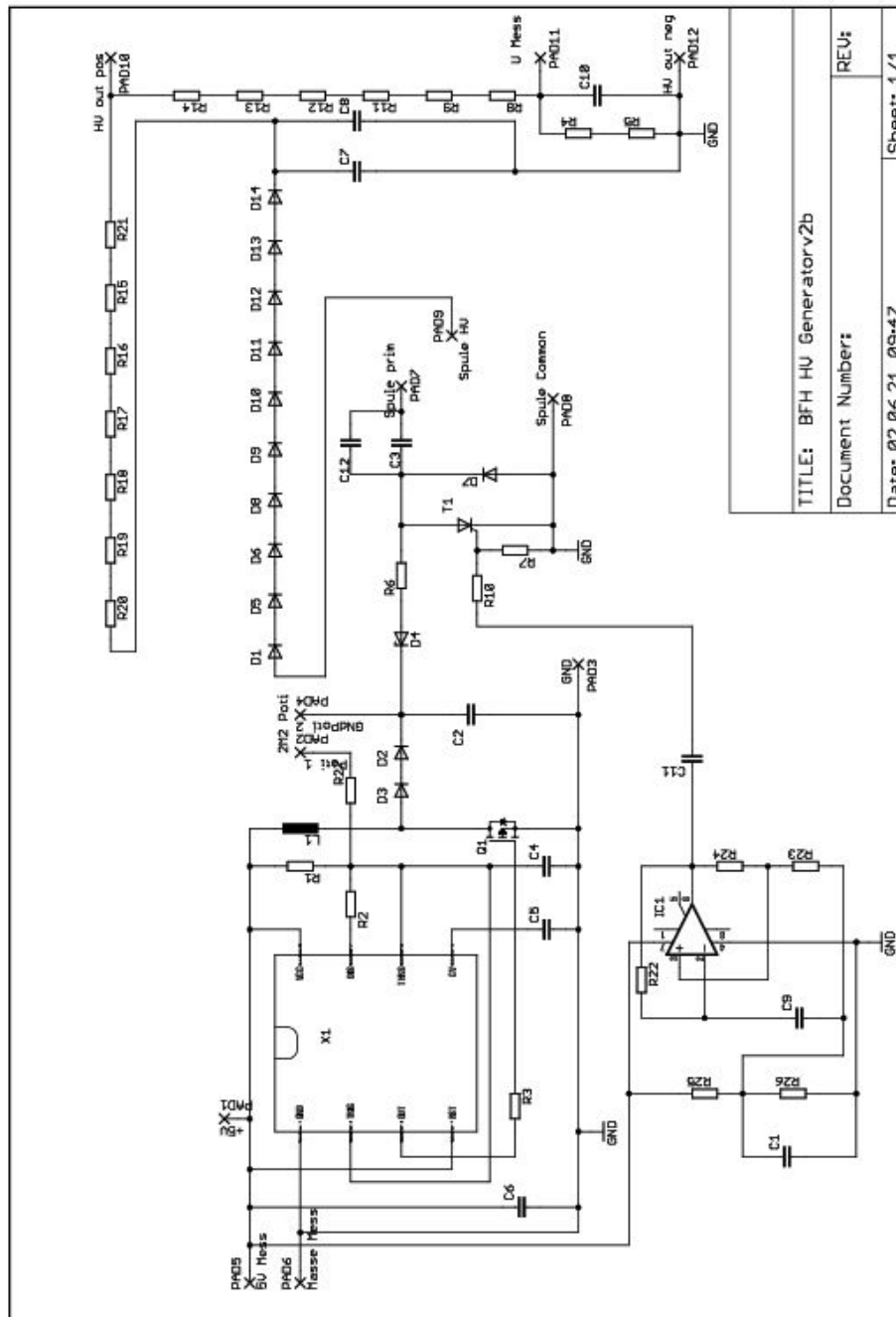
Caution HIGH VOLTAGE!

Caution is required when handling the generator!

Touching the high voltage is not dangerous, since the current is limited, but it is unpleasant.

But be careful if a capacity is charged with it. Discharge can be dangerous when touched!

Circuit Diagram of the 5kV Generator



The voltage display was calibrated with the values of the resistors R4 and R5 using an external measuring device.

5kV generator inside view

