



High Voltage Module, HVPS4

### Introduction

Our updated High Voltage Module, HVPS4 is an integrated high voltage power supply featuring a high voltage isolated output capable of producing and adjustable output voltage of 2kV to 10kV with an output current up to 5mA maximum. The HVPS4 operates at 12VDC input.

### Typical Applications:

- Capacitor charging
- Marx generators
- Jacob's ladders
- General high voltage applications

### Electrical Specifications

The following table summarizes the electrical specifications of the power supply:

Specifications	
Input Voltage Range	+12VDC +/- 1V
Input Current	TBD
Output Voltage Range	2kV to 10kV Adjustable via potentiometer
Max. Output Power	20 W (Max. current = 5mA)

### Short Circuit Operation

We do not recommend operating these units into a short circuit. We recommend using current limiting resistors to limit the charge current to less than 5mA.

### PIN-OUT

This diagram shows the pin out of the device.

Pin	Function
Terminal Block IN+	12VDC Input+
Terminal Block IN-	12VDC Input-
High Voltage Red Wire	HV Output +
High Voltage White Wire	HV Output -

### Adjusting High Voltage

Use the black potentiometer on the PCB board to vary the output voltage from approximately 2kV to 10kV. The output is non-regulated and the voltage will also vary depending on what load is connected to the output.

### SAFETY WARNING

High voltage power supplies present a serious risk of personal injury if not used in accordance with design and / or use specifications, if used in applications on products which they are not intended or designed, or if they are used by untrained or unqualified personnel. These high voltage power supplies should only be operated by trained and experience professionals and never by anyone under the age of 18. We reserve the right to refuse sale of these high voltage modules to anyone.

### ENERGY STORAGE WARNING

These devices have internal energy storage capacitors at the output. Be sure to properly discharge the output of these devices by shorting them together prior to handling as they will continue to hold a charge after power is removed from the input.