

7IP1250 Power Supply

USER MANUAL

OPTICS FOCUS

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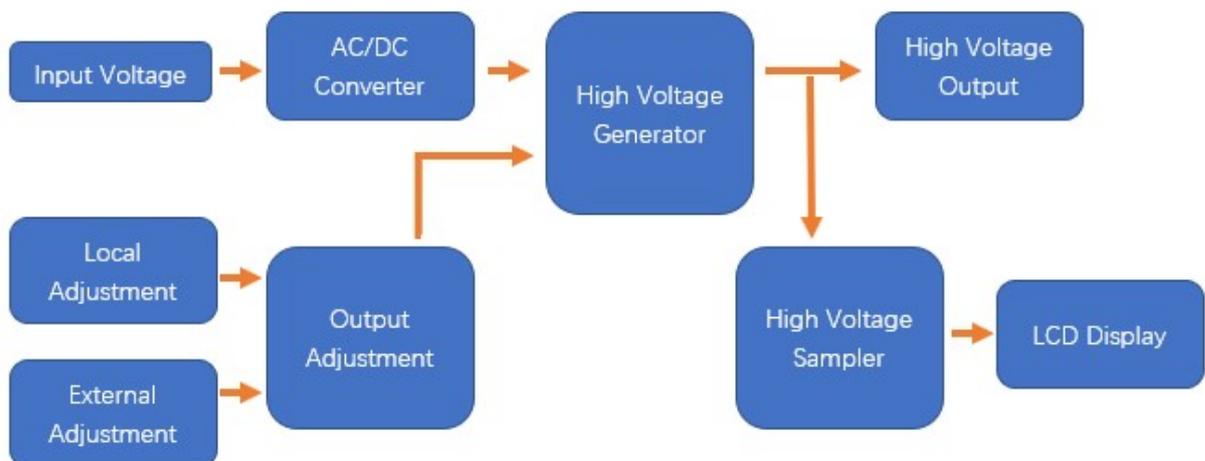
1. Overview

7IP1250 high voltage regulated power supply is specially designed for supporting the photomultiplier tube.

2. Features

1. Adjustable high voltage output up to -1250V
2. High stable output
3. The output can be adjusted manually or by external voltage
4. Three and a half LCD voltage display
5. Separate high voltage start button, enhance the safety of personal and equipment.

3. System structure

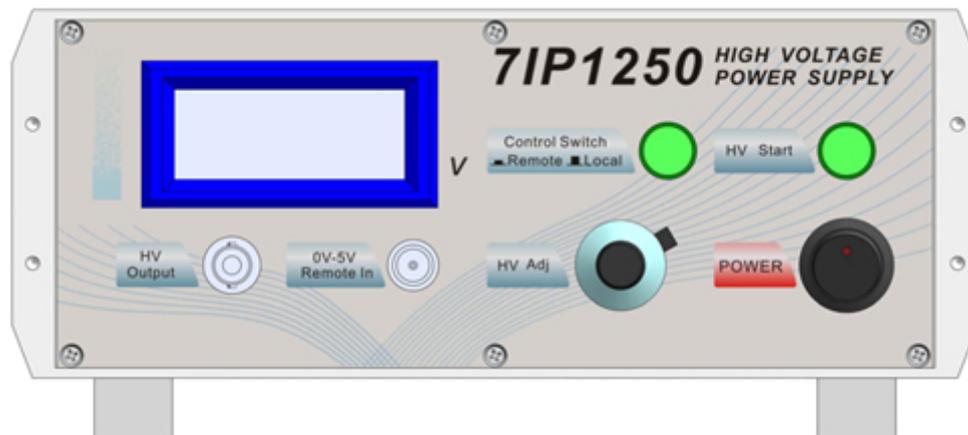


4. Technical indicators

- 1) Input voltage: 220VAC / 50Hz
- 2) Output voltage: 0 ~ - 1250 VDC
- 3) Output current: 0.5 mA Max.
- 4) Time drift: $\pm 0.03\%$ / h Max.

- 5) Input adjustment rate: $\pm 0.1\%$ Max.
- 6) Preheating time: $\cong 30$ min
- 7) High voltage start time: 200ms Typ.
- 8) Operating temperature: $+ 5 \sim + 40$ °C
- 9) Storage temperature: $- 5 \sim + 50$ °C
- 10) Output adjustment mode:
 - a) Local adjustment: Knob
 - b) External adjustment: $0 \sim + 5$ VDC
- 11) Output voltage display: Three and a half LCD

5. Instructions



- 1) Panel description:
 - a) Power: Turns on or off the input power.
 - b) HV Start: The LCD displays after the power supply is turned on, but there is no high voltage output. The high voltage output can be started only after the HV Start button is pressed.
 - c) Control Switch: When this button is lifted, the output voltage will be controlled internally through HV Adj adjustment knob. When this button is pressed, the output is adjusted by the external voltage

through the BNC input plug.

- d) HV Adj: It's used to control output voltage manually. The output voltage will increase when turning clockwise, and please lock it after adjusting to avoid accidental change of high voltage output.
 - e) (0V to 5V) Remote In: BNC plug for external adjustment of input voltage.
 - f) HV Output: Output voltage BNC plug is used to connected to photomultiplier tube.
- 2) Operation method:
- a) Connect HV Output to photomultiplier tube.
 - b) Counterclockwise adjust HV Adj to minimum.
 - c) Turn on the power.
 - d) Press HV Start to start high voltage output.
 - e) Manually adjust HV Adj to needed voltage.
 - f) For external voltage control, please connect the external control signal to (0V~5V) Remote In and press the Control Switch.
- 3) Cautions:
- a) The maximum power output is -1250V voltage, please pay attention to the use of safety.
 - b) High voltage output connection cable is high voltage resistant equipment, please do not use wrongly.
 - c) Do not expose the photomultiplier tube to strong light at high voltage to avoid damage.
 - d) Before turning on the power supply, it is best to turn the HV Adj knob counterclockwise to make the output voltage minimum.

- e) When the Control Switch is pressed, it is for external control adjustment. At this time, 0-5V DC voltage can be input through the remote plug to control the output high voltage.
- f) It is best to connect the earth wire to protect the safety of equipment and operators.