

M10-HV25000A

HIGH VOLTAGE ADJUSTABLE DC POWER SUPPLY

Shanghai MCP Corp.

(j) If the output voltage is overload the power supply indicator (6) turns to red. The power supply stops to work.

This state usually occurs when you turn the voltage adjustor too fast and the output voltage keep increase until over voltage.

To solve the problem, you must turn off the power supply switch (1) and turn the voltage adjustor (5) to the Min. position (anticlockwise turn the adjustor to the end) then turn on the power supply again.



Green The power supply works properly.

Pink Output voltage is not zero. The power supply stops to work.

For safety, the output voltage must be zero when the power supply be turned on otherwise the state LED will turn to pink and there is no output.

To solve the problem, turn the voltage adjustor to the Min. position (anticlockwise turn the adjustor to the end) and the indicator turns back to green.

Red Output voltage overload. The power supply stops to work.

This state usually occurs when you turn the voltage adjustor too fast and the output voltage keep increase until over voltage.

To solve the problem, you must turn off the power supply and turn the voltage adjustor to the Min. position (anticlockwise turn the adjustor to the end) then turn on the power supply again.

3. CAUTIONS

- 3.1 The power supply output an ultra high voltage so make sure to cut off the output before connect, disconnect or change the load!
- 3.2 When operating is finished, put it in a dry place of good ventilation, and keep it clean. If it is not in use for a long period, pull off the power supply plug for storage.
- 3.3 For maintenance, input voltage must be cut off.

4 ACCESSORIES

4.1 Instruction manual 1 copy 4.2 Fuse 2pcs 4.3 Power cable 1pc

SAFETY PRECAUTIONS

These instruments fulfill the regulations of CE-LVD (EN-61010:2001) and CE-EMC (EN-55022:1998/+A1:2000; EN 55024:1998; EN61000-3-2:2000; EN61000-3-3:1995)

To ensure safe operation of the equipment and eliminate the danger of serious injury due to short-circuit (arcing), the following safety precautions must be observed.

Damages resulting from failure to observe these safety precautions are exempt from any legal claims whatever.

- * Prior to connection of the equipment to the mains outlet, check that the available mains voltage corresponds to the voltage setting of the equipment.
- * Connect the mains plug of the equipment only to a mains outlet with earth connection.
- * Do not place the equipment on damp or wet surfaces.
- * Do not subject the equipment to direct sunlight or extreme temperatures.
- * Do not subject the equipment to extreme humidity or dampness
- * Replace a defective fuse only with a fuse of the original rating. Never short circuit fuse or fuse housing
- * Do not exceed the maximum permissible input rating.
- * Conduct measuring works only in dry clothing and in rubber shoes, i.e. on isolating mats.
- * Comply with the warning labels and other info on the equipment.
- * Do not insert metal objects into the equipment by way of the ventilation slots
- * Do not place water-filled containers on the equipment (danger of short-circuit in case of knock over of the container)
- * Do not operate the equipment near strong magnetic fields (motors, transformer etc.)
- * Do not subject the equipment to shocks or strong vibrations
- * Keep hot soldering iron or guns away from the equipment
- * Allow the equipment to stabilize at room temperature before taking up measurem ent (important for exact measurement)
- * Do not modify the equipment in any way
- * Do not place the equipment face-down on any table or work bench to prevent damaging the controls at the front.
- *Opening the equipment and any service and repair work must be performed by qualified service personal. Repair work should be performed in the presence of a second person trained to ad minister first aid, if needed.
- * Power supplies do not belong to children hands.

CLEANING THE CABINET

Prior to cleaning the cabinet, withdraw the mains plug from the power outlet. Clean only with a damp, soft cloth and a commercially available mild household cleaner. Ensure that no water gets inside the equipment to prevent possible shorts and damage to the equipment.

M10-HV25000A is an ultrahigh voltage DC regulated power supply with continuously adjustable voltage output from 0 to Max.25kVDC.

It has output safety protection function to keep using the power supply safety for an ultra high output voltage.

1.TECHNICAL DATA

1.1 Input voltage: $220VAC\sim240VAC\pm10\%/50Hz$

1.2 Output voltage: 0~25kV

1.3 Output current: 0.5mA (1mA)

1.4 Ripple: 0.05%

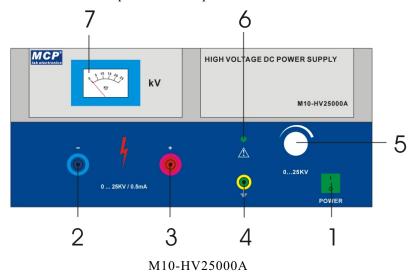
1.4 Display accuracy: 2.5 class

1.5 Dimensions: $372(W) \times 185(H) \times 260(D)$

1.6 Weight: 4.8kg

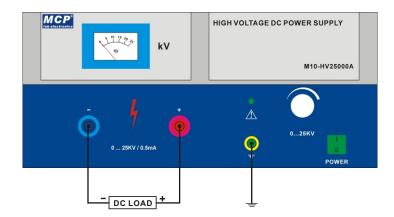
2. OPERATION

2.1 Controls and description of front-panel



- (1) Power switch
- (2) Output terminal (-): connecting the negative terminal of load
- (3) Output terminal (+): connecting the positive terminal of load
- (4) Case grounding: connect the case to ground
- (5) Voltage adjustor: adjusting DC output voltage
- (6) Power supply output state indicator: indicate the output state of the power supply whether it is safety to use
- (7) Volt display: indicating output voltage by Analog meter

2.2 Load connection and operations:



Load is connected as shown above.

The power supply output an ultra high DC voltage so for safety, you must follow the operation instructions step by step.

- (a) Turn off the power supply switch (1).
- (b) Connect the power cable and make sure the connection is tight.
- (c) Turn the voltage adjustor (5) to the Min. position (anticlockwise to the end).
- (d) Connect the DC load to the power supply output terminal (positive pole to (3) and negative pole to (2)) with high-voltage isolation cable. Make sure the connection is tight.
- (e) Turn on the power supply switch (1). Make sure the output voltage display (7) is zero and the power supply output state indicator (6) is green.
- (f) There is a delay when the output voltage reach to the value you want. So turn the voltage adjustor very slowly and when the output voltage is stable, increase or decrease the value again until the output voltage display (7) show the value you want.
- (g) The output terminal (2)(3) output the displayed DC voltage stable.
- (h) After finish using the power supply, turn off the power supply switch (1) and turn the voltage adjustor (5) to the Min. position (anticlockwise turn the adjustor to the end) first, then disconnect the DC load and power cable.
- (i) If the voltage adjustor (5) is not in the Min. position. when you turn on the power switch, the state LED(6) will turn to pink and the power supply stops to work.

To solve the problem, turn the voltage adjustor (5) to the Min. position (anticlockwise turn the adjustor to the end) and the indicator (6) turns back to green.