

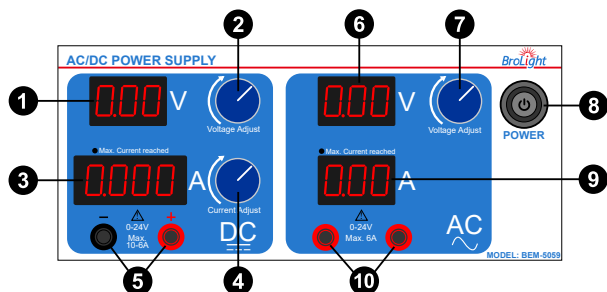
AC/DC Power Supply

SE-9584

Introduction

The AC/DC Power Supply has been designed specifically for use in teaching science. The power supply can provide both direct current (DC) and alternating current (AC). Both types of current can be provided at the same time, and the two voltages can be adjusted independently. Separate displays are provided for the DC and AC outputs.

Features



- ❶ DC voltage display
- ❷ DC voltage adjust knob
- ❸ DC current display
- ❹ DC current limit adjust knob
- ❺ DC output jacks
- ❻ AC voltage display
- ❼ AC voltage adjust knob
- ❽ Power button
- ❾ AC current display
- ❿ AC output jacks

Safety

The AC/DC Power Supply's connection jacks are safety-type 4 mm banana plug connectors and are well suited for use with students. The connectors will also accept leads with ordinary banana plugs.

The included power cord features a ground wire, and the apparatus should be connected to a power outlet with ground. If no outlets with ground are available, the device **MUST** be connected to ground via the grounding port on the back of the device. Do **NOT** operate the power supply in any situation where it is not grounded.

Under conditions of high temperature combined with high load for a long period of time, the power supply will automatically shut down when a given internal temperature is reached. These extreme conditions will rarely occur under normal use. The device will automatically turn on again when the temperature falls back under safe limits.

❗ **IMPORTANT:** Never connect two AC/DC Power Supply outputs to the same circuit in parallel. This applies whether the outputs belong to the same apparatus or to separate units.

Operation

1. Use the provided power cable to connect the AC/DC Power Supply to an appropriate standard grounded electrical outlet.
2. Set both voltages to zero by rotating the voltage adjust knobs counterclockwise until they stop, then press the power button to turn the power supply on. Both the button and the LED voltage and current displays will light up.
3. Turn the Current Adjust knob all the way clockwise so the current is not limited.
4. Connect the DC *or* AC output to the circuit which will be driven.
5. Turn the voltage adjust knob for the connected output until you reach the desired voltage.

✎ **NOTE:** If the device's internal temperature surpasses certain limits, a cooling fan will automatically turn on to lower the temperature.

Set a DC current limit

If desired, you can set a limit on the amount of current the DC output is able to produce, preventing it from producing more current than needed for your experiment. To do so:

1. Disconnect the AC/DC Power Supply from the test circuit and make sure the DC output is producing the desired voltage.
2. Short circuit the DC output connectors with a test lead. In this state, the current displayed on the DC current LED display is equal to the current limit.
3. Use the current limit adjustment knob to increase or decrease the current limit.
4. Remove the short circuit from the DC output.

When the current limit is reached, the DC output's current will plateau at this limit and cannot be increased any further, regardless of the position of the voltage adjust knob. If this occurs, the light labeled "**Max. current reached**" above the DC current display will light up. By default, the DC output can produce up to 10 A of current at up to 12 V, with this maximum linearly decreasing to 6 A at the maximum voltage of 24 V.

✎ **NOTE:** The AC current does not have an adjustable current limit. Instead, its current limit is fixed at 6 A. The AC current will be truncated and the "**Max current reached**" light above the AC current display will light up if this limit is exceeded.

Replace the fuse

If the AC/DC Power Supply's fuse burns out, it should be replaced *only* with an identical 250V T 8A fuse. An extra fuse is provided with the product and is stored in the fuse compartment. To replace the fuse:

1. Make sure the AC/DC Power Supply is **completely** unplugged from the wall and all other devices.
2. The fuse is located on the back of the device, in a slot adjacent to the port for the power cord. Using a fingernail or a slotted screwdriver, pry open the slot's lid and remove the fuse holder.
3. Remove the burnt out fuse from the holder and discard it appropriately.
4. Remove the new fuse from its storage position and insert it into the position previously occupied by the old fuse.
5. Insert the holder back into its slot. Press inward to make sure that the holder is secured in place again.

Specifications and accessories

Visit the product page at [pasco.com/product/SE-9584](https://www.pasco.com/product/SE-9584) to view the specifications and explore accessories.

Technical support

Need more help? Our knowledgeable and friendly Technical Support staff is ready to answer your questions or walk you through any issues.

- Chat [pasco.com](https://www.pasco.com)
- ☎ Phone 1-800-772-8700 x1004 (USA)
+1 916 462 8384 (outside USA)
- ✉ Email support@pasco.com

Limited warranty

For a description of the product warranty, see the Warranty and Returns page at www.pasco.com/legal.

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Product end-of-life disposal



This electronic product is subject to disposal and recycling regulations that vary by country and region. It is your responsibility to recycle your electronic equipment per your local environmental laws and regulations to ensure that it will be recycled in a manner that protects human health and the environment. To find out where you can drop off your waste equipment for recycling, please contact your local waste recycle or disposal service, or the place where you purchased the product. The European Union WEEE (Waste Electronic and Electrical Equipment) symbol on the product or its packaging indicates that this product must not be disposed of in a standard waste container.

CE statement

This device has been tested and found to comply with the essential requirements and other relevant provisions of the applicable EU Directives.