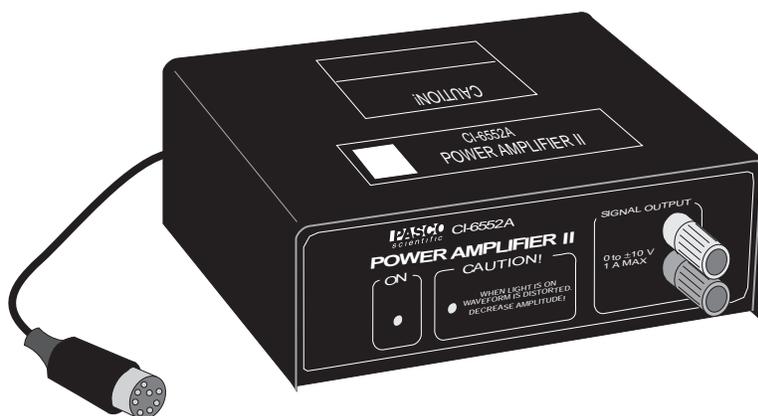


**Instruction Sheet
for the PASCO
Model CI-6552A**

POWER AMPLIFIER II



Introduction

The PASCO CI-6552A Power Amplifier II is an accessory to the PASCO Signal Interfaces, Series 6500 and Mac65. It amplifies the output of the computer, allowing it to be used as a controlled DC power source or an AC function generator.

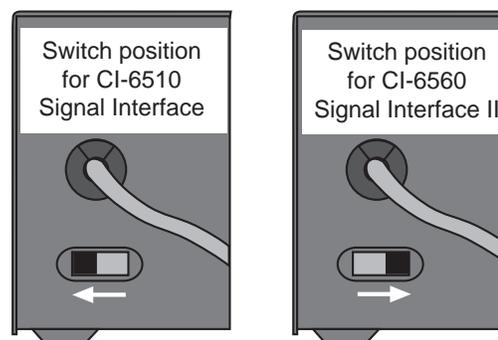
With the Power Amplifier II plugged into one of the analog channels of the Signal Interface, the appropriate software (*Power Amplifier for DOS*, *Power Amplifier for APPLE II*, or *Science Workshop*) can be used to generate the following types of waves (up to $\pm 10V$ peak at 1A, up to 5,000 Hz):

- sine,
- square,
- triangle, and
- sawtooth.

This means the computer can now be used as an AC signal generator to power external circuits while it monitors its own output current as well as other inputs. The *Science Workshop* software can also generate a DC output.

Filter Select Switch

The CI-6552A Power Amplifier II has a filter select switch which is preset for use with the CI-6560 Signal Interface II (Mac65). The bandwidth at that switch position is about 100KHz, limited by the power amplifier's feedback compensation section and the load. When using the Power Amplifier II with the CI-6510 Signal Interface (Series 6500), the bandwidth needs to be limited to 1.5KHz. To change the switch position push the filter select switch in the back panel slot to the left, as shown in the illustration below.



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This instruction edited by Robert Morrison

Using Power Amplifier II

To install the Power Amplifier II, plug in its power cord and plug the DIN plug into Channel A, B, or C of the appropriate PASCO Signal Interface box (CI-6510 or CI-6560).

► **NOTE:** Using Power Amplifier II with Series 6500, the *Power Amplifier* program is calibrated for channel C. The Power Amplifier II can also be plugged into Channel A or B but these channels are not automatically calibrated to read the current as is Channel C.

To use the output of the Power Amplifier II, connect the load to the banana jacks on the front of the Power Amplifier II. There is a power switch on the back left hand corner of the Power Amplifier II.

► **WARNING!** Do not turn on the power switch until a program (*either Power Amplifier, Data Monitor or Science Workshop*) has been run and the desired output voltage has been selected.

When the computer is in DOS, the Power Amplifier will output 10 Volts if the power switch is on and this could overload a circuit that might be connected to it. The software controls this voltage: The Data Monitor Program sets the default voltage to zero and the Power Amplifier Program sets the default AC peak voltage to 5 Volts.

When the Power Amplifier II is operating, a green power indicator light on the front panel of the Power Amplifier II will be lit. There is also a red current overload light which comes on whenever the maximum current of 1 A is exceeded. If this warning light is on, the waveform is distorted and you should reduce the output voltage.

Limited Warranty

PASCO scientific warrants this product to be free from defects in materials and workmanship for a period of one year from the date of shipment to the customer. PASCO will repair or replace, at its option, any part of the product which is deemed to be defective in material or workmanship. This warranty does not cover damage to the product caused by abuse or improper use. Determination of whether a product failure is the result of a manufacturing defect or improper use by the customer shall be made solely by PASCO scientific. Responsibility for the return of equipment for warranty repair belongs to the customer.

Equipment must be properly packed to prevent damage and shipped postage or freight prepaid. (Damage caused by improper packing of the equipment for return shipment will not be covered by the warranty.) Shipping costs for returning the equipment, after repair, will be paid by PASCO scientific.

Equipment Return

Should this product have to be returned to PASCO scientific, for whatever reason, notify PASCO scientific by letter or telephone BEFORE returning the product. Upon notification, the return authorization and shipping instructions will be promptly issued.

► **NOTE:** NO EQUIPMENT WILL BE ACCEPTED FOR RETURN WITHOUT AN AUTHORIZATION.

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER ON UNIT. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.