

OPERATING INSTRUCTIONS

Electronic Module System 12 VAC/DC Amplifier Power Supply No. 32386

1. Introduction

The 32386 12 VAC/DC Amplifier/Power Supply is the hub of the Cenco Electronic Modular System. It serves to power a variety of accessory units via a side port connector, provides variable low voltages for experiments from its output plugs, and is a variable gain (0-100) amplifier.

A discrete -6 volt output can be accessed via a front banana plug for a variety of low voltage applications. In addition, a variable output between -6 volts to +6 volts can be produced at the amplifier output by adjusting the gain knob to zero (to minimize noise), and adjusting the "DC offset" control knob.

2. Description

The control panel of the amplifier/power supply has the following connection plugs and control dials:

- Red and black input plugs
- Red and black output plugs, for the amplifier output or the variable DC output when the gain is set at "zero".
- "-6 volt" plug that provides -6 volts when referenced to either one of the black ground plugs.
- "Gain" control knob that provides amplifier gain adjustment between 0 and 100.
- "DC Offset" control knob, used to adjust DC component of amplifier input if the gain is above zero. It also adjusts the DC output voltage if the gain is set at "zero".
- "DC/AC" switch that blocks any DC voltage at the amplifier input when it is set to the AC position.
- "On/Off" switch.

The amplifier/power supply has its own 6-foot extension cord with a 3-prong plug and is housed in a 5 x 3-1/2 x 4-1/4" high sturdy aluminum box.

Specifications:

6VDC Supply:

Voltage:

Discrete -6 volts

Current:

15mA

Amplifier output using DC Offset:

Voltage:

Variable, -6 to +6 volts

Current:

15mA

3. Operation

Note: The input voltage and the input current must be limited to provide the maximum outputs of -6 to 8 volts and current levels below 120 milliamperes.

To amplify DC voltages, set the "DC Offset" knob to zero and the "AC/DC" switch to DC. Adjust the "Gain" control knob to the gain desired, keeping in mind that the maximum output voltage of 8 volts requires input voltages less than 8 volts divided by the gain setting. Any adjustments to the "DC Offset" knob will then change the level at which the input voltage causes the amplifier to overdrive.

Set the "AC/DC" switch to the AC position and otherwise follow the same procedure to amplify AC voltages.

4. Maintenance

The 12VAC/DC Amplifier/ Power Supply needs no special maintenance. If you should experience any difficulty with this piece of equipment, please contact Central Scientific Company, giving details of the problem. To ensure better service, please do not return any apparatus to Central Scientific Company until we have sent you authorization.

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