

## FEATURES

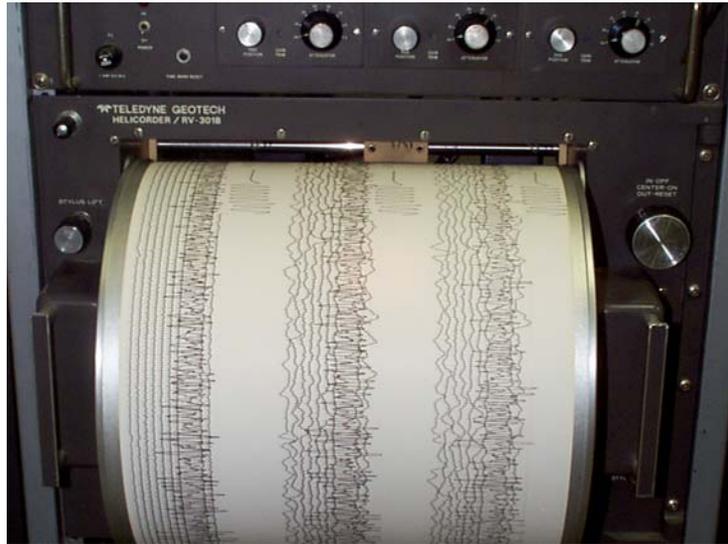
- 1 to 3 channels in a single unit
- Optional time mark generator
- 180 VA output

The Model AR-320B is a 1, 2, or 3 channel solid state amplifier designed to operate in conjunction with the Geotech Helicorder<sup>®</sup>, Model RV-301B. The basic amplifier is configured in a single channel unit, but will accept two additional amplifier modules for driving three pen versions of the Helicorder.

Each amplifier module contains two attenuators, one is continuously variable and the other is variable in 6 dB steps from zero to 36 dB. The unit will operate on 115 Vac, 50/60 Hz, or  $\pm 12$  Vdc.

The Model PA-200 Power Amplifier is designed to provide 180 VA of precision frequency regulated power to the Helicorder drive motors and other similar instruments. The unit requires a push-pull square wave drive source, which is obtained from a companion Geotech timing system and converts this signal into a nominal 115/220 Vac, 50/60 Hz square wave at its output.

## HELICORDER<sup>®</sup> AMPLIFIER MODEL AR-320B and POWER AMPLIFIER PA-200



# HELICORDER AMPLIFIER MODEL AR-320B and POWER AMPLIFIER MODEL PA-200 SPECIFICATIONS

## OPERATING CHARACTERISTICS – AR-320B

<b>Input Type</b>	Balanced or single ended
<b>Input Impedance</b>	2 Mohm (balanced)
<b>Maximum Voltage Input</b>	36 Vp-p (balanced) 20 Vp-p (single ended)
<b>Output Type</b>	Single ended (bipolar)
<b>Output Impedance</b>	15 ohm, nominal
<b>Output Current</b>	±600 mA, maximum
<b>Linearity</b>	1% of best straight line
<b>Frequency Response</b>	Flat ±1 dB from dc to 20 Hz
<b>Dynamic Range</b>	40 dB
<b>Voltage Gain</b>	1 to 50 into 50 ohm load
<b>Power Consumption</b>	250 mA @ 115 VAC 105 mA @ 220 VAC ±600 mA @ 12VDC

## CONT. – AR-320B

<b>Optional Time Mark Generator</b>	TCXO oscillator with ±1 ppm between 0 and 55 deg C; Program with hour mark 2 s, minute mark 1 s, and 10 second mark 0.25 s duration.
<b>Controls</b>	Power On/Off Attenuation in 6 dB steps Time Mark Amplitude Pen Position
<b>Dimensions</b>	
Height	8.8 cm (3.5 in)
Width	48.3 cm (19 in)
Depth	33 cm (13.1 in)

## INPUT – PA-200

<b>Type</b>	Push-pull square wave
<b>Level</b>	20 V <sub>p-p</sub>
<b>Impedance</b>	10 KΩ

## OUTPUT – PA-200

<b>Type</b>	Square wave
<b>Voltage</b>	115/220 Vac nominal (130-105/250-210 Vac, no load to full load)
<b>Power</b>	187 VA (115/220 Vac with 12.5 Vdc input)

## POWER REQUIREMENTS – PA-200

<b>Voltage</b>	+10 to +16 Vdc
<b>Current</b>	20/10 A maximum, full load

## PHYSICAL CHARACTERISTICS – PA-200

### Dimensions (nominal)

Height	13.3 cm (5.25 in.)
Width	48.3 cm (19.0 in.)
Depth	41.3 cm (16.25 in.)