

E-463

HVPZT Amplifier, 3 Channels



E-463.00

Ordering Information

E-463.00
HVPZT Amplifier, 3 Channels,
Bench-Top

Custom Designs
for Volume Buyers

- **3 Independent Channels**
- **3 x 5 W Peak Power**
- **3 LED Voltage Displays**
- **Output Voltage Range 0 to -1500 V**

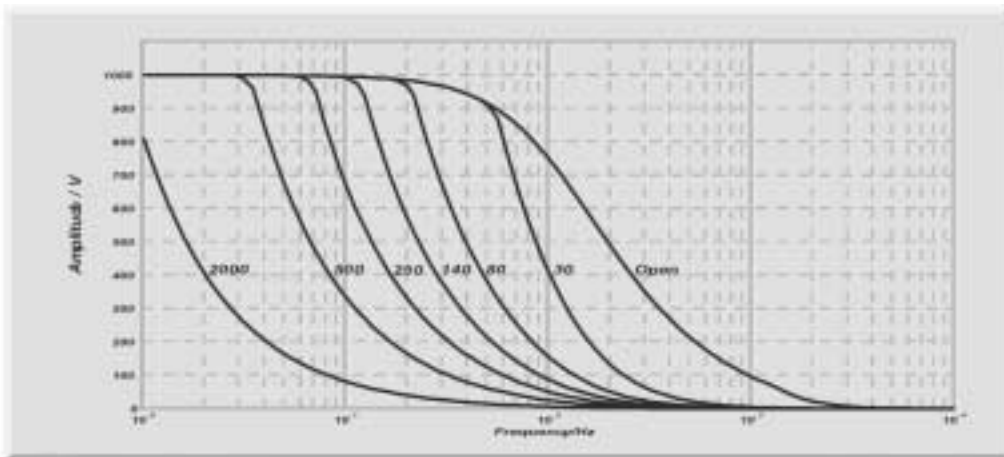
The E-463.00 is a bench-top amplifier for high-voltage PZTs. It contains three independent amplifiers that can output and sink a peak current of 4 mA and an average current of 3 mA each. The E-463.00 can be operated in two ways:

I. Manual operation: Output voltage for each channel can be set by a 10-turn DC-offset potentiometer in the range of 0 to -1000 V.

II. External operation: Output voltage is controlled by an analog signal applied to the BNC inputs, ranging from 0 to 10 V. Multiplying by the gain factor of -150, an output voltage range of 0 to -1500 V results. The DC-offset potentiometer adds a DC bias to the input, allowing continuous shifting of the input range between 0 V to +10 V and -6.66 V to 3.33 V (see page 6-40).

Three 3½-digit LED displays show the output voltage of each individual channel. For frequency response with selected HVPZTs, see graph below.

For computer-controlled closed-loop positioning electronics, refer to the E-500 system starting on page 6-20.



E-463, frequency response with various PZT loads. Values shown are capacitance in nF, measured in actual PZT.

Technical Data

Models	E-463.00
Function	Power amplifier
Channels	3
Maximum output power	5 W per channel (s. page 6-40)
Peak output current < 5 ms	4 mA per channel
Average output current > 5 ms	3 mA per channel
Current limitation	Short-circuit proof
Voltage gain	-150 ±1
Polarity	Negative
Control input voltage	0 to +10 V
Output voltage	0 to -1500 V
DC-offset setting with 10-turn pot.	0 to -1000 V at output
Input impedance	1 MΩ
Display	3 x 3½-digits, LED
Control input sockets	3 x BNC
PZT voltage output sockets	3 x LEMO ERA.0A.250.CTL
Dimensions	235 x 103 x 288 mm (s. page 6-7)
Weight	4.3 kg
Operating voltage	90-120 / 220-240 VAC, 50-60 Hz (linear P/S)