

PZT Actuators
PZT Flexure NanoPositioners
PZT Active Optics / Steering Mirrors
Tutorial: Piezoelectrics...
Capacitive Position Sensors
PZT Control Electronics
MicroPositioners / Hexapod Systems
Photonics Alignment & Packaging Systems
Motor Controllers
Index

<http://www.pi.ws>
info@pi.ws

E-663

LVPZT Amplifier, 3 Channels

Ordering Information

E-663.00
 LVPZT Amplifier, 3 Channels,
 Bench-Top
 Custom Designs
 for Volume Buyers

- 3 Independent Channels
- 3 x 14 W Peak Power
- 3 LED Voltage Displays
- Output Voltage Range
 -20 to 120 V

The E-663.00 is a bench-top amplifier for low-voltage PZTs. It contains three independent amplifiers that can output and sink a peak current of 140 mA and an average current of 60 mA each. The E-663.00 can be operated in two ways:

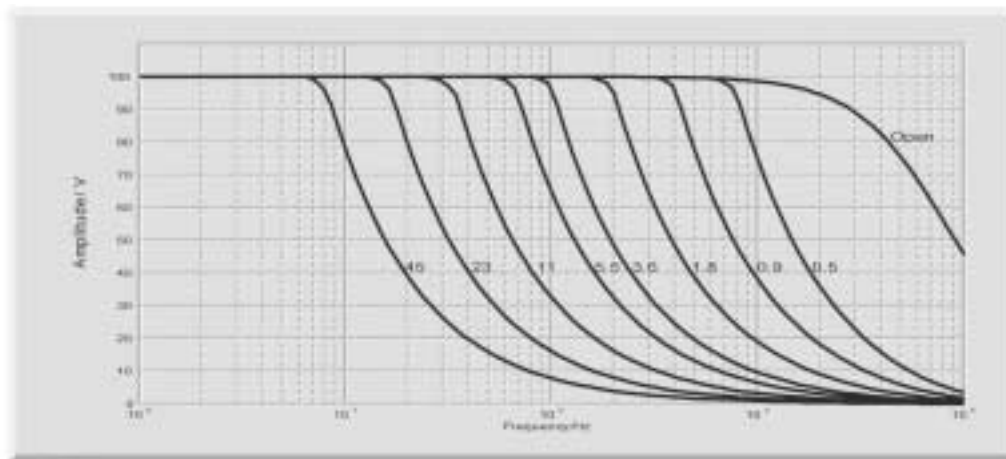
I. Manual operation: Output voltage for each channel can be set by a 10-turn, DC-offset potentiometer in the range of 0 to 100 V.

II. External Operation: Output voltage is controlled by an analog signal applied to the BNC inputs, ranging from -2 to 12 V. Multiplying by the gain factor of 10, an output voltage range of -20 to 120 V results. The DC-offset potentiometer adds a DC bias to the input, allowing continuous shifting of the input voltage range between -2 V to +12 V and -12 V to +2 V (see page 6-40).

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



E-663.00



E-663, frequency response with various PZT loads.
 Values shown are capacitance values in μF , measured in actual PZT.

Technical Data

Models	E-663.00
Function	power amplifier
Channels	3
Maximum output power	14 W per channel (s. page 6-40)
Average output power	6 W per channel
Peak output current < 5 ms	140 mA per channel
Average output current > 5 ms	60 mA per channel
Current limitation	Short-circuit proof
Control input voltage	-2 to +12 V
Output voltage	-20 to 120 V
Polarity	positive
DC offset setting	0 to 100 V with / 10-turn pot.
Voltage gain	10 \pm 0.1
Input impedance:	100 k Ω
Display	3 x 3½-digit, LED
Control input socket	BNC
PZT voltage output socket	LEMO ERA.00.250.CTL
Dimensions	235 x 103 x 288 mm (s. page 6-7)
Weight	4.6 kg
Operating voltage	90-120 / 220-240 VAC, 50-60 Hz (linear P/S)