

SLICE-DHV

Dual High Voltage Amplifier

The SLICE-DHV is a low-noise, high-bandwidth amplifier for controlling piezoelectric transducers. Designed for controlling PZT-driven tuning elements in lasers and cavities, it interfaces easily with laser systems, allowing optimum control.



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The SLICE-DHV features two gain levels. The first is a traditional 20x which gives the user access to the full 0-200 V range with a 0 to 10 V input signal. The SLICE-DHV can also operate at a gain of one (in conjunction with a DC bias), allowing lower-noise control of a ± 10 V range. A wide output range (0-200 V), high current capacity (± 200 mA), and low noise (450 μ V rms) make this amplifier ready to take on any number of high-voltage applications.

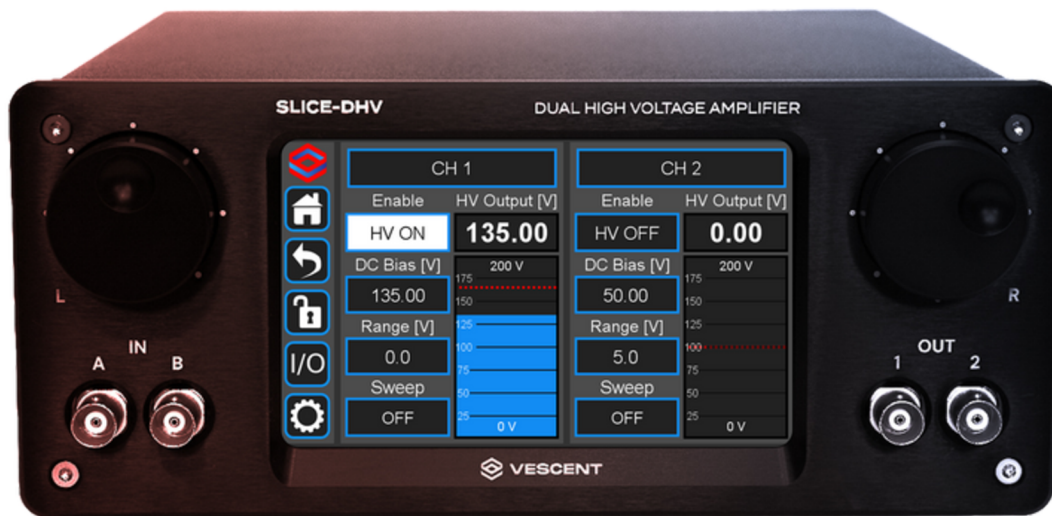
Proprietary power supply technology eliminates bulky and expensive linear power supplies while maintaining low-noise performance. The SLICE-DHV supports small-signal bandwidths greater than 200 kHz and full scale (0-200 V) bandwidths of 10 Hz.



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SLICE-DHV Touchscreen GUI



SLICE-DHV Back Panel

Features

- Outputs up to 200 V per channel
- High bandwidth
- Low noise
- PZT damage prevention circuit

Applications

- ECDL tuning & locking
- EOM phase eater
- Fiber stretcher
- Micro-positioning



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SLICE-DHV Specifications

Parameter	Value
Performance	
Number of Channels	2
Control Interfaces	Touchscreen, USB 2.0
Output Voltage Range	0-200 V
Gain Ranges ¹	Unity Gain: ± 10 V Full Range: 0-200 V
Modulation Gains	Unity Gain: 1 V/V Full Range: 20 V/V
Bandwidth	Small Signal: >1 MHz ² Large Signal: >10 Hz ³
Output Current	± 200 mA
Modulation Input Voltage Range	± 10 V
Voltage Noise ⁴	<450 μ V rms
Accuracy	$<1\%$
Drift	0.2 mV/ $^{\circ}$ C
Triggering	5V TTL
Input Voltage	
Input Line Voltage	100-240 VAC
Frequency	50-60 Hz
Phase	1 phase
User-serviceable Fuse	T 2.0 A L 250V
Environmental	
Operating Temperature	>15 and <30 $^{\circ}$ C
Humidity	$<60\%$
Dew Point	<15 $^{\circ}$ C

¹ Unity Gain around a user-settable voltage.

² Unloaded

³ $C_{load} < 0.5$ μ F

⁴ 1 Hz – 100 kHz