

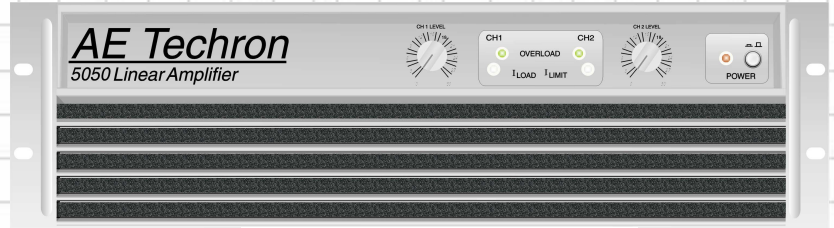
AE Techron

LVC 5050 AMPLIFIER

APPLICATION

The **LVC 5050** is a general purpose, high voltage, medium continuous current, linear power amplifier. It works best when driving loads of 2 - 16 ohms. The **LVC 5050** works well with either pulsed or continuous test signals or environments that have both

conditions. The **LVC 5050** has two (2) separate channels that can be operated independently or combined for greater maximum voltage or current. In *Bridge-mono mode* the available output voltage doubles. In *Parallel-mono mode* the amplifier operates with twice the available output current



AE Techron, Inc. LVC 5050

FEATURES

- ▶ Bi Level™ Power Supply, amplifier optimizes itself for either, high pulse voltage or low voltage high current, dynamically. The **LVC 5050** produces less heat, higher long term power, with no added distortion.
- ▶ Output of 20.0 amperes rms, or 106 volts rms, per channel depending on load.
- ▶ Frequency bandwidth of DC to 20 kHz at full power.
- ▶ Option of controlled voltage, or controlled current operation, modes changed via a jumper
- ▶ User-adjustable voltage or current limiting
- ▶ Remote switching to standby mode by contact closure
- ▶ External monitoring of voltage and current output
- ▶ Equipped with circuitry to protect the amplifier from input overloads, improper output connection (including shorts and improper loads), excessive temperature, voltage or current.
- ▶ Shipped ready to operate using single-phase, 120-volt AC mains. Also available in 100, 200, 208, 230 and 240 VAC versions.
- ▶ Installs easily into a standard 19 inch rack, or stands alone for bench top operations

INDICATORS AND CONTROLS

- ▶ Front panel LEDs indicate signal presence and output overload
- ▶ A pushbutton power "On/Off" located on the front panel
- ▶ Two gain controls on the front panel for controlled voltage applications
- ▶ A back panel slide switch to lift signal ground from chassis ground
- ▶ A back panel slide switch to choose between 2 channel, bridge mono and parallel mono operation



Call us or visit our website! When your project or product requires a low noise, low distortion, high power amplifier solution, contact **AE Techron Inc.** We are happy to help.

AE Techron Inc.

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LVC 5050 SPECIFICATIONS

PERFORMANCE (One hour continuous ratings)

Frequency response

+/- 0.1 dB from 20 Hz to 20 kHz at 1 watt

Phase response

+/- 10 Degrees (10 Hz to 20 kHz at 1 watt)

Signal-to-noise ratio

At 26 dB gain, better than 105 dB (A-weighted) below full output

THD

Less than 0.05% from 20 Hz to 1 kHz increasing linearly to 0.1% at 20 kHz at full output

I.M. Distortion

<0.05% from 410 milliwatts to full output at 26 dB gain with and 8 ohm load

Slew rate

> 31V per microsecond

Load Impedance

Rated for 16,8,4 and 2 ohm use. Safe with all load types even reactive ones.

Input Impedance

Greater than 10K ohms, balanced, and 5K ohms unbalanced.

Output impedance

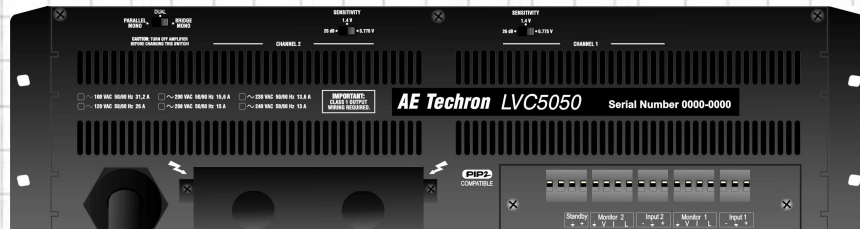
Less than 10 milliohms in series with less than 2 microhenries

OUTPUT POWER LVC 5050

	40 mSec			1 Hour Continuous		
	Ohms	Watts	Amps	Watts	Volts	Amps
2	2505	71	35	800	40	20
4	1940	88	22	576	48	12
8	1270	101	12	1205	98.2	12
16	702	106	7	702	106	7

	40 mSec			1 Hour Continuous		
	Ohms	Watts	Amps	Watts	Volts	Amps
4	5320	146	36			
8	3003	155	19	3003	155	19
16	2036	180	11	2036	180	11

	40 mSec			1 Hour Continuous		
	Ohms	Watts	Amps	Watts	Volts	Amps
1	5320	73	73			
2	4045	90	45			
4	2670	103	26	2416	98.3	25
8	1378	105	13	1324	102.9	13



PHYSICAL CHARACTERISTICS

Chassis: The Amplifier is designed for stand alone, or rack mounted, operation. The Chassis is black steel with a silver finished aluminum front panel. The unit occupies three EIA 19-inch-wide units.

Weight: 77 lbs. (35.2 kg), Shipping 88 lbs. (40.2 kgs)

AC Power: Single phase, 120 volts, 60 Hz, 30 amperes ac service. (Note: 100, 120, 200, 208, 230 or 240 volt, 50-60 Hz models are available Call for specifications.) US models come with 3 blade NEMA TT30P plug.

Cooling: Forced air cooling from the front, through removable filters, to the back.

Dimensions: 19 in. x 16 in. x 5.25 in (48.3 cm x 40.3.0 cm x 13.3 cm)

SUPPORT

When you purchase an **AE Techron** amplifier, a full complement of technical and factory support personnel join your team. **AE Techron Inc.** provides:

- ▶ Applications engineering for your technical questions and customized product needs.
- ▶ A one year limited warranty to protect your equipment investment.
- ▶ A fully equipped service center to keep your amplifier operating at original performance requirements.

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