

HOME

PRODUCTS

SUPPORT

TOOLS

CONTACT

ABOUT

LVC623HF LINEAR AMPLIFIER

APPLICATION

The **LVC623HF** is a special extended frequency version of the LVC623 linear power amplifier. The **LVC623HF** will safely drive a wide range of loads from less than 1 ohm to an open circuit. The **LVC623HF** amplifier works well with continuous or pulse test signals.



The **LVC623HF** 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 double the output current.

FEATURES

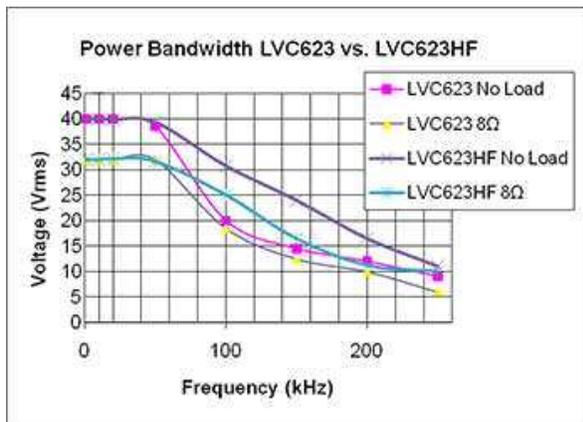
- Output of 8.0 amperes RMS or 16 volts RMS per channel into 2ohm load
- Frequency bandwidth of DC - 20kHz at full power, DC - 250kHz at reduced voltage
- Controlled Voltage operation
- Remote force to standby mode by contact closure
- External buffered monitoring of voltage and current output
- Protection provided against, input overloads, improper output connection (including shorts and improper loads), excessive temperature, voltage or current, and under voltage conditions.
- Shipped ready to operate using single-phase, 120-volt, 20Amp AC mains.
- Installs easily into a standard 19 inch rack, or stands alone for bench-top operation

OPTIONS - Factory Installed

- DC Coupled (DC Enabled) or AC Coupled (DC Blocked)
- Fixed voltage gain (20, 44.5, 79.5) or Variable (0 – 20, 0-44.5, 0 – 79.5)

OPTIONS - User Configurable

- Channel configuration – two independent channels, two channels paralleled to Mono, two channels bridged to Mono



POWER BANDWIDTH COMPARISON

The LVC623HF improves upon the high-frequency performance of the LVC623. It provides an increase of almost %50 in voltage potential between 100kHz - 150kHz. To see if the LVC623HF is right for your application, please contact your AE Technon sales representative.



INDICATORS AND CONTROLS (Front)

- Front panel LEDs indicate signal presence and output overload.

OUTPUT POWER

Measurements taken at 1 kHz at .05% THD with amplifiers operating in controlled voltage mode.

One Channel Driven

Ohms	40mSec Burst, RMS			1 Hour Continuous, RMS		
	Watts	Volts	Amps	Watts	Volts	Amps
2	354	27	13	98	14	7
4	240	31	8	196	28	7
8	148	34	4	145	34	4
16	89	38	2	89	37.8	2

Two Channel Bridged to Mono

Ohms	40mSec Burst, RMS			1 Hour Continuous, RMS		
	Watts	Volts	Amps	Watts	Volts	Amps
4	538	46.4	12	196	28	7
8	431	58.7	7	392	56	7
16	290	68	4	290	58.1	4

Two Channel Paralleled to Mono

Ohms	40mSec Burst, RMS			1 Hour Continuous, RMS		
	Watts	Volts	Amps	Watts	Volts	Amps
1	520	22.8	23	196	14	14
2	420	29	14	392	28	14
4	290	34	9	289	34	9
8	166	36	5	165	36.3	5

PHYSICAL CHARACTERISTICS

- A pushbutton power "On/Off" located on the front panel.
- Two gain controls on the front panel for controlled voltage applications.



INDICATORS AND CONTROLS (Back)

- Two circuit breaker resets on the back panel.
- A back panel slide switch to choose between 2 channel, bridge mono and parallel mono operation.

PERFORMANCE (One hour continuous ratings)

Frequency response: +/- 0.1 dB from DC to 20 kHz at 1 watt.

Phase Response: +/- 10 Degrees (10 Hz to 20 kHz at 1 watt).

Signal-to-Noise Ratio: At Voltage gain of 20, 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 with a voltage gain of 20 into an 8 ohm load.

Slew Rate: >20V per microsecond.

Load Impedance: Rated for 16, 8, 4, 2 and 1 ohm use. Safe with all load types, including reactive loads.

Input Impedance: Greater than 10K ohms, balanced, and 5K ohms unbalanced.

Output Impedance: Less than 10 milliohms in series with less than 2 microhenries.

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 two EIA 19-inch-wide units.

Weight: 52 lbs. (23.5 kg), Shipping 66 lbs. (30 kg)

AC Power: Single phase, 120 volts, 60 Hz, 20 amperes AC service.

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

Dimensions: 19 in. x 16 in. x 3.5 in (48.3 cm x 40.3.0 cm x 8.9 cm)

SUPPORT

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