

# **APPLICATION**

The LVC2016HF is a special extended frequency version of the LVC2016 linear power amplifier. The LVC2016HF will safely drive a wide range of loads from less than 2 ohm to an open circuit. The LVC2016HF amplifier works well with continuous or pulse test signals.

The LVC2016HF has two (2) separate channels than 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.



LVC2016HF Specification Sheet

#### **FEATURES**

- •Long term output of 8.0 amperes RMS or 64 volts RMS per channel into 80hm load
- •Frequency bandwidth of DC 30kHz 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 overlands, improper output connnection (including shorts and improper loads), excessive temperature, voltage or current, and under-current conditions
- Shipped ready to operating using single-phase, 120 volt, 20 ampere or 230 volt, 10 ampere AC mains
- •Installs easily into a standard 19-inch rack or stands alone for benchtop operation

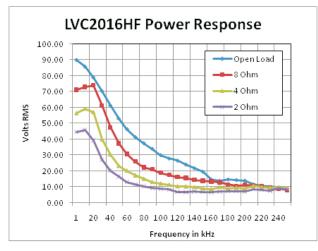
# **OPTIONS** - Factory Installed

- •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 GRAPH



The LVC2016HF improves upon the high-frequency performance of the LVC2016.

To see if the LVC2016HF is right for your application, please contact your AE Techron sales representative.

# **INDICATORS & CONTROLS** (Front)

- Front panel LEDs indicate signal presence and output overload
- A push-button power "On/Off" switch
- Two gain controls on front panel for controlled voltage applications



# **INDICATORS & CONTROLS** (Back)

- Two circuit breaker resets
- Panel slide switch to choose between 2 channel, bridge mono and parallel mono operation



# PERFORMANCE (1-Hour Continuous Rating)

# Frequency Response

- +/- 0.1 dB from DC 20kHz at 1 watt
- -3 dB at 340kHz at 1 watt

## Phase Response

+/- 10 degrees 10Hz - 20kHz at 1 watt

### Signal-to-Noise Ratio

At a voltage gain of 20, better than 105 dB (A-weight) below full output

#### THD

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

#### I.M. Distortion

<0.05% from 410 milliwatts to full output at a voltage gain of 20 into an 8-ohm load

#### Slew Rate

>20V per uSec

# 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, balance. 5K ohms, unbalanced

# Output Impedance

Less than 10 milliohms in series with less than 2 microhenries

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

# One Channel Driven (All Values RMS)

	40mSec Burst			1 Hour Continuous			
Ohms	Watts	Volts	Amps	Watts	Volts	Amps	
4	800	57	14	87	18.7	5	
8	520	64	8	525	64.8	8	
16	406	81	5	406	80.6	5	

#### Two Channel Bridged to Mono (All Values RMS)

	40mSec Burst			1 Hour Continuous		
Ohms	Watts	Volts	Amps	Watts	Volts	Amps
4	2070	91	23			
8	1585	113	14	114	30.2	4
16	1035	129	8	994	126.1	8

# Two Channel Paralleled to Mono

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

# PHYSICAL CHARACTERISTICS

#### Chassis

The amplifier is designed for stand-alone or rackmounted operation. The chassis is black steel with a silver finished aluminum front panel. The unit occupies 2 EIA 19-inch wide units.

### Weight

52 lbs (23.5kg)

Shipping Weight - 66 lbs (30kg)

## AC Power

Single phase, 120 volt, 60Hz, 20 ampere AC service. (Note: 220-240VAC, 50-60Hz models are available, call for specifications)

#### Cooling

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

# **Dimensions**

19in x 16in x 3.5in (48.3cm x 40.6cm x 8.9cm)

#### **SUPPORT**

When you purchase an AE Techron amplifier, a full complement of support personnel joins your team.

### AE Techron, Inc. provides:

- •Applications engineering for your technical questions and customized product needs
- •Fully equiped service center to keep your amplifier operating at original performance requirements
- •1-Year limited warranty to protect your equipment investment