

产品参数

[名称]: 低功耗精密运算放大器
音频专用前级

[尺寸]: 50mm X 50mm

[供电电压范围]: 最大 $\pm 18V$

产品特点 | Highlights

布局工整, 用材大方, 并且本宝贝可以随意的改成正向放大, 反向放大, 射随, 积分电路等形式。

OPA1611超低噪声, 属于音频系统强悍前级。大家看参数就明白了。



模块介绍

opa1611 (单) 和 opa1612 (双) 的双极型输入运算放大器实现低 $1.1\text{nv}/\sqrt{\text{Hz}}$ 在 1kHz 0.000015% 超低失真 Hz 的噪声密度。opa1611 和 opa1612 提供轨到轨输出摆幅在 600mV 用 $2\text{K}\Omega$ 负荷, 从而增加净空高度和最大动态范围。这些器件还具有高输出驱动能力 $\pm 30\text{mA}$ 。

这些器件工作在一个非常广泛的供应范围 $\pm 2.25\text{V}$ 至 $\pm 18\text{V}$, 只有 3.6 的供应每通道电流。opa1612 opa1611 和运算放大器的单位增益稳定, 并提供优良的动态行为较广泛的负载条件。

双版本的最低串音和自由完全独立的电路之间的相互作用的渠道, 即使过载或过载。opa1611 和 opa1612 在 $50-8$ 封装可指定从 -40 到 $+85^\circ\text{C}$ 。

主要特性

卓越的声音质量

超低噪声：1.1nv / $\sqrt{\text{Hz}}$ 在1kHz

超低失真：0.000015% 1kHz

高转换率：27V/ μ

带宽：40MHz (G = +1)

开环增益：130dB

单位增益稳定

低静态电流：3.6每通道

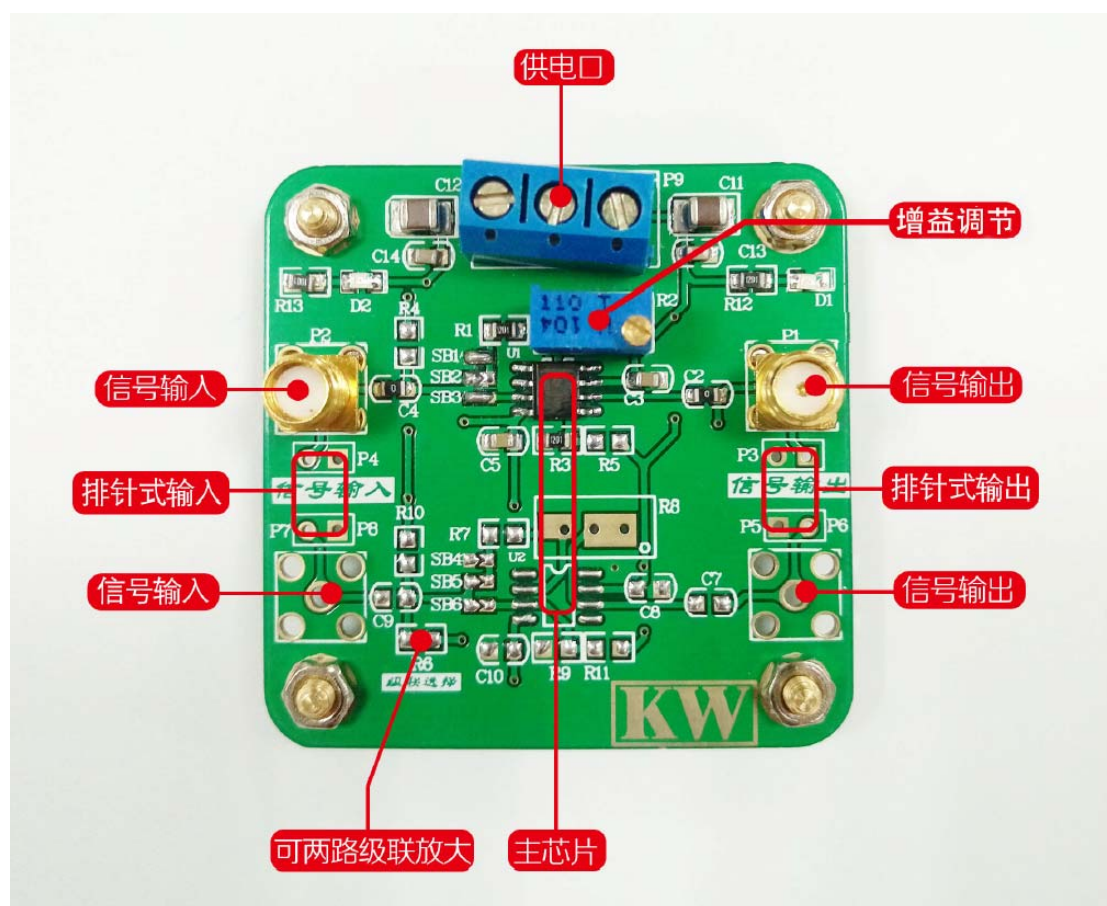
轨到轨输出

宽电源范围：±2.25V至±18V

单路和双路版本

应用： 专业音频设备
模拟和数字混合控制台
音频测试与测量

preamplifiers 麦克风
广播录音设备
高端的A / V接收机



SoundPLUS™ High-Performance, Bipolar-Input
AUDIO OPERATIONAL AMPLIFIERS

Check for Samples: [OPA1611](#), [OPA1612](#)

FEATURES

- SUPERIOR SOUND QUALITY
- ULTRALOW NOISE: $1.1\text{nV}/\sqrt{\text{Hz}}$ at 1kHz
- ULTRALOW DISTORTION: 0.000015% at 1kHz
- HIGH SLEW RATE: $27\text{V}/\mu\text{s}$
- WIDE BANDWIDTH: 40MHz (G = +1)
- HIGH OPEN-LOOP GAIN: 130dB
- UNITY GAIN STABLE
- LOW QUIESCENT CURRENT: 3.6mA PER CHANNEL
- RAIL-TO-RAIL OUTPUT
- WIDE SUPPLY RANGE: $\pm 2.25\text{V}$ to $\pm 18\text{V}$
- SINGLE AND DUAL VERSIONS AVAILABLE

APPLICATIONS

- PROFESSIONAL AUDIO EQUIPMENT
- MICROPHONE PREAMPLIFIERS
- ANALOG AND DIGITAL MIXING CONSOLES
- BROADCAST STUDIO EQUIPMENT
- AUDIO TEST AND MEASUREMENT
- HIGH-END A/V RECEIVERS

DESCRIPTION

The OPA1611 (single) and OPA1612 (dual) bipolar-input operational amplifiers achieve very low $1.1\text{nV}/\sqrt{\text{Hz}}$ noise density with an ultralow distortion of 0.000015% at 1kHz. The OPA1611 and OPA1612 offer rail-to-rail output swing to within 600mV with a 2k Ω load, which increases headroom and maximizes dynamic range. These devices also have a high output drive capability of $\pm 30\text{mA}$.

These devices operate over a very wide supply range of $\pm 2.25\text{V}$ to $\pm 18\text{V}$, on only 3.6mA of supply current per channel. The OPA1611 and OPA1612 op amps are unity-gain stable and provide excellent dynamic behavior over a wide range of load conditions.

The dual version features completely independent circuitry for lowest crosstalk and freedom from interactions between channels, even when overdriven or overloaded.

Both the OPA1611 and OPA1612 are available in SO-8 packages and are specified from -40°C to $+85^{\circ}\text{C}$.



