RDL®
Radio Design Labs

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

STICK-ON® SERIES

Model ST-PA18
Audio Power Amplifier

ANYWHERE YOU NEED...

- 18 Watts RMS Audio Power Amplifier
- Output for 8 Ohm Speaker
- Maximized Audio Level at Full Power Output
- Superior Audio Quality at High Output Levels
- Line Level Balanced or Unbalanced Input
- LOOP OUT to Feed Additional Amplifiers
- Integral Audio Compressor to Control Clipping
- High Overall Audio Operating Level
- LED to Indicate Audio Compression

You Need The ST-PA18!

The ST-PA18 is a utility power amplifier in the convenient line of STICK-ON products. The durable bottom adhesive permits quick, permanent or removable mounting nearly anywhere, or it may be used with RDL's racking accessories. The ST-PA18 gives you the advantages of a quality, high efficiency audio power amplifier with the added convenience of STICK-ONs!

APPLICATION: The ST-PA18 is the ideal choice in many applications where a high quality utility amplifier is needed to drive an 8 Ω speaker.

The ST-PA18 features a balanced line level input that may be connected unbalanced. The gain control range will accommodate standard unbalanced levels as well as professional balanced levels. The module bridges the input signal. **LOOP OUT** terminals permit a balanced input to be fed to additional amplifier modules making the ST-PA18 an ideal component in distributed audio system design. The LOOP OUT may also be used to feed a subwoofer amplifier (see RDL ST-CX2S Subwoofer Filter). The ST-PA18 output will drive an 8 Ω speaker or multiple speakers connected to present an 8 Ω load to the amplifier and it is capable of driving 4 Ω loads.

A red **COMP** LED is provided to indicate the threshold of the integral compressor. Audio levels that could cause the amplified output to clip are compressed according to two dynamic time constants. Normal audio level signals remain unaffected by the compressor thereby preserving audio dynamics and preventing the compressor from increasing feedback potential when the amplifier is used for paging. The compressor is designed to remain aurally transparent while maintaining clean, unclipped amplified audio for input overloads of up to 20 dB. The ST-PA18 produces average audio levels and audio clarity normally expected of amplifiers delivering much higher output power.

The ST-PA18 operates from an external 24 VDC 1A power supply, sold separately. A **POWER** LED illuminates when the module is powered. The module provides thermal and output short-circuit protection.

Wherever an ultra-compact, high quality, high efficiency audio power amplifier is needed to provide reliability, compactness and unsurpassed versatility, the ST-PA18 is the ideal choice. Use the ST-PA18 individually, or combine it with other RDL products as part of a complete audio/video system.

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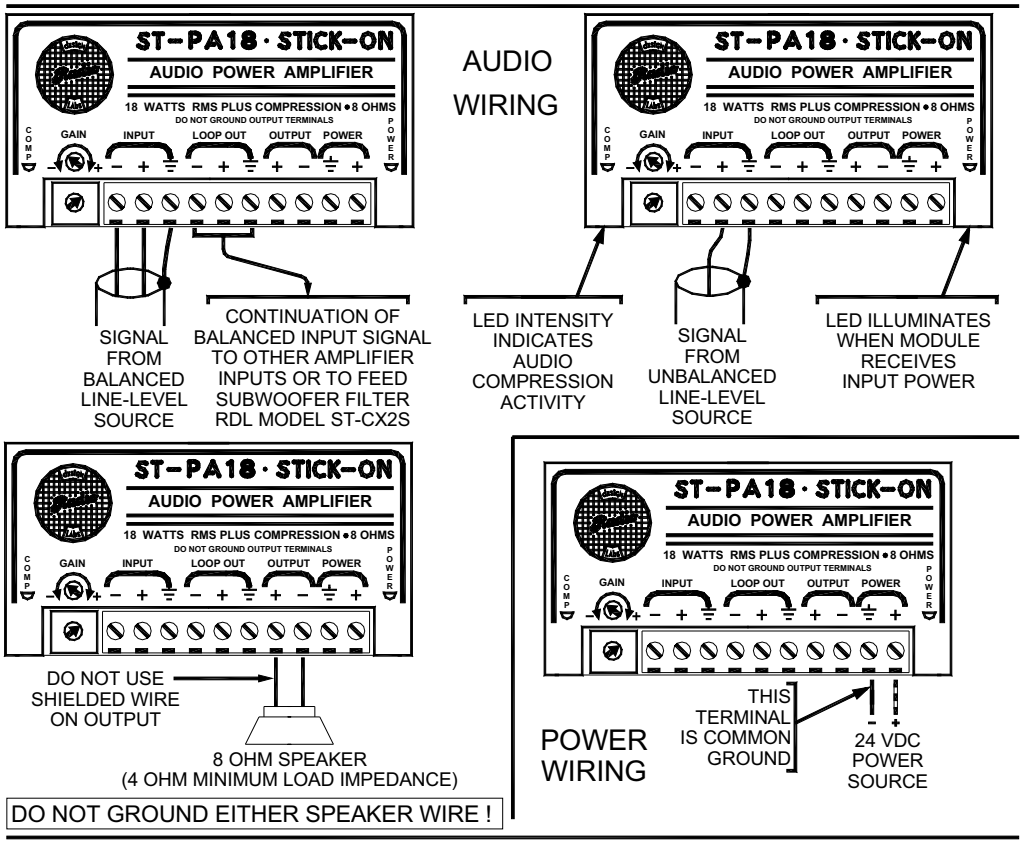
Installation/Operation

EN55103-1 E1-E5; EN55103-2 E1-E4
Typical Performance reflects product at publication time exclusive of EMC data, if any, supplied with product. Specifications are subject to change without notice.



TYPICAL PERFORMANCE

Input:	Line level (+4 dBu nominal balanced; -10 dBV nominal unbalanced)
Input Impedance:	20 kΩ balanced bridging; 10 kΩ unbalanced
Gain Adjustment:	Single turn
Minimum Input Levels:	
Balanced:	-16 dBu (to cross compressor threshold)
Unbalanced:	-18 dBV (to cross compressor threshold)
Maximum Input Levels:	
Balanced:	+25 dBu
Unbalanced:	+22 dBV
Frequency Response:	20 Hz to 20 kHz (+/- 2 dB)*
THD+N:	< 1% (50 Hz to 20 kHz)*
Compressor:	Threshold 3 dB below rated output, automatically adjusting attack and release times
Noise:	<-75 dB (below 18 W RMS)
CMRR:	> 45 dB (50 Hz to 120 Hz)
Output Power:	18 W RMS into 8 Ω
Output Circuit:	Class D
Ambient Operating Environment:	0° C to 30° C Maximum; 20° C Recommended
Power Requirement:	24 to 33 Vdc @ 1000 mA, Ground-referenced
Indicators (2):	Red LED: **COMP** LED indicates compressor activity Green LED: **POWER** on

*measured at compressor threshold level equaling 12 W RMS output power

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