



**RDL**<sup>®</sup>  
Radio Design Labs

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

## STICK-ON<sup>®</sup> SERIES

### Model ST-HP3

### Dual High-Pass Filters

- Horn Loudspeaker Protection
- Low-Frequency Attenuation below 300 Hz
- Low-Frequency Attenuation below 500 Hz
- Line-Level Input and Outputs
- Filtering Requiring no Field Adjustment
- RDL SupplyFlex™ Power Input Configuration



The ST-HP3 is part of the group of versatile STICK-ON products from Radio Design Labs. STICK-ONs feature the advanced circuitry for which RDL products are known, combined with unequalled versatility in mounting possibilities. The durable adhesives provided with the ST-HP3 permit permanent or removable mounting. Numerous available mounting accessories, brackets and rack-mount chassis are optionally available to facilitate any system design. STICK-ONs are designed, built and rated for continuous duty in professional A/V systems.

**APPLICATION:** The ST-HP3 is the ideal choice where line-level audio filtering needs to be provided at the input of a power amplifier for protection of public address horns against damage from low frequencies.

The ST-HP3 has one input and two filtered outputs: 300 Hz high pass and 500 Hz high pass. Both the input and output are balanced, and each may be wired unbalanced if required. The input accepts line-level (+4 dBu nominal) audio. The module operates at unity gain (balanced input and output).

Each output is filtered through a separate 18 dB per octave low-noise active audio filter. The -3 dB frequency of the 300 Hz output is 225 Hz. The -3 dB frequency of the 500 Hz output is 450 Hz. The two outputs may be used simultaneously.

The ST-HP3 features RDL's SupplyFlex power input configuration for operation directly from ground-referenced, floating or bipolar 24 Vdc power.

Wherever a public address high-pass filter is needed, the ST-HP3 is the ideal choice. Use the ST-HP3 individually, or combined with other RDL products as part of a complete audio/video system.



## STICK-ON<sup>®</sup> SERIES

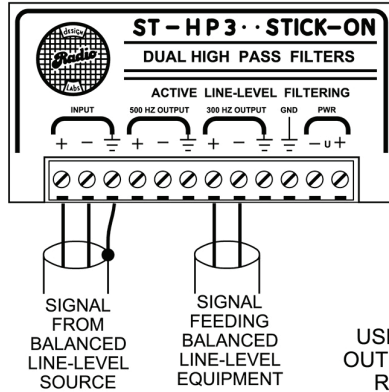
### Model ST-HP3

### Dual High-Pass Filters

## Installation/Operation

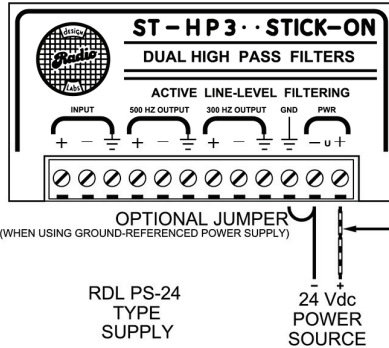
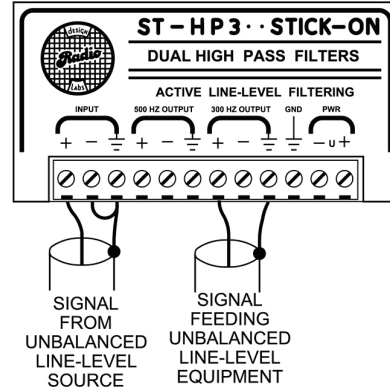


EN55103-1 E1-E5; EN55103-2 E1-E4  
 Typical Performance reflects product at publication time exclusive of EMC data, if any, supplied with product. Specifications are subject to change without notice.



### AUDIO WIRING

USE LOOP THRU OUTPUTS TO FEED RDL ST-CX1S

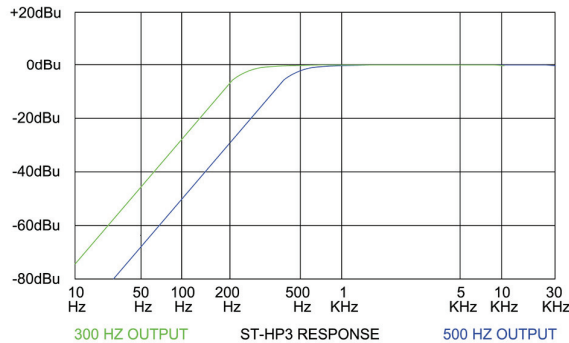
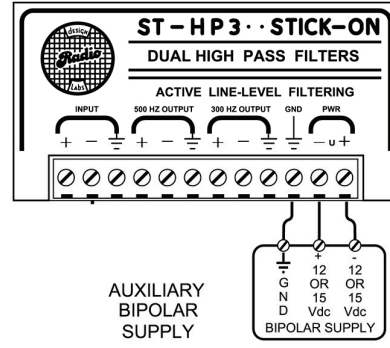


### SUPPLY WIRING

DO NOT GROUND NEGATIVE FOR FLOATING OR BIPOLAR POWER INSTALLATION

OR

GROUND NEGATIVE FOR GROUND-REFERENCED POWER INSTALLATION



### TYPICAL PERFORMANCE

Input: 20 k $\Omega$  balanced line level (+4 dBu)  
 Outputs (2): 150  $\Omega$  balanced line level (+4 dBu)  
 Headroom: > 18 dB  
 Attenuation Curve: 18 dB/octave  
 THD+N: < 0.01%  
 Residual Noise: < 90 dB (referred to +4 dBu)  
 Insertion Loss: < 2 dB  
 Headroom: 18 dB

**300 Hz Output:**  
 Frequency Response: 300 Hz to 30 kHz ( $\pm$  0.5 dB)  
 -3 dB Frequency: 225 Hz

**500 Hz Output:**  
 Frequency Response: 500 Hz to 30 kHz ( $\pm$  1.0 dB)  
 -3 dB Frequency: 450 Hz  
 Ambient Operating Environment: 0 $^{\circ}$  C to 55 $^{\circ}$  C  
 Power Requirement: GROUND-REFERENCED or FLOATING, 24 Vdc @ 30 mA