



**RDL**®  
Radio Design Labs

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

## STICK-ON® SERIES

### Model ST-HP3

### Dual High-Pass Filters

#### ANYWHERE YOU NEED...

- 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

#### *You Need The ST-HP3!*



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.

**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 combined with other RDL RACK-UP®, STICK-ON, TX™, or FLAT-PAK™ series products as part of a complete audio/video system.

# STICK-ON<sup>®</sup> SERIES

## Model ST-HP3

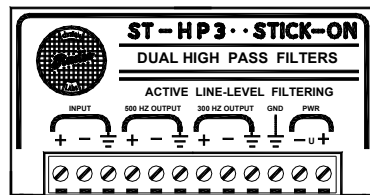
## Dual High-Pass Filters

## Installation/Operation

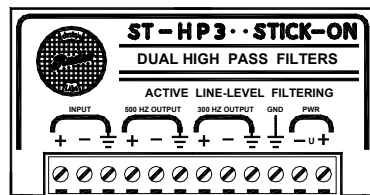
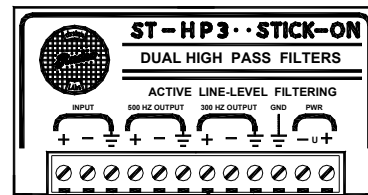


EN55103-1 E1-E5; EN55103-2 E1-E4

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



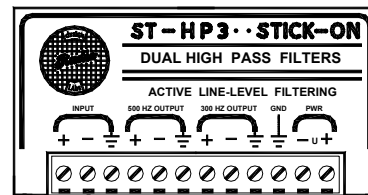
OPTIONAL JUMPER  
(WHEN USING GROUND-REFERENCED POWER SUPPLY)

RDL PS-24  
TYPE  
SUPPLY

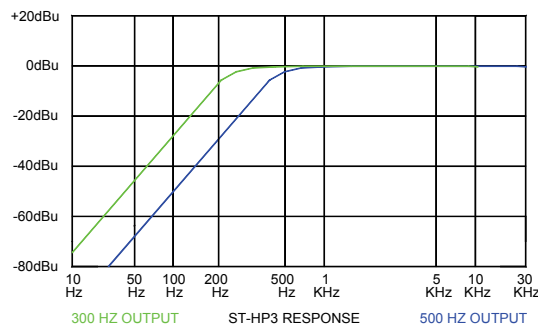
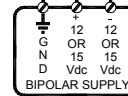
24 Vdc  
POWER  
SOURCE

SUPPLY  
WIRING

DO NOT  
GROUND  
NEGATIVE  
FOR FLOATING  
OR BIPOLAR  
POWER  
INSTALLATION  
OR  
GROUND  
NEGATIVE  
FOR GROUND-  
REFERENCED  
POWER  
INSTALLATION



AUXILIARY  
BIPOLAR  
SUPPLY



## 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 (+/- 0.5 dB)  
 -3 dB Frequency: 225 Hz

## 500 Hz Output:

Frequency Response: 500 Hz to 30 kHz (+/- 1.0 dB)  
 -3 dB Frequency: 450 Hz  
 Power Requirement: 24 to 33 Vdc @ 30 mA