



RDL®
Radio Design Labs

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

STICK-ON® 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 unequaled 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[®] SERIES

Model ST-HP3

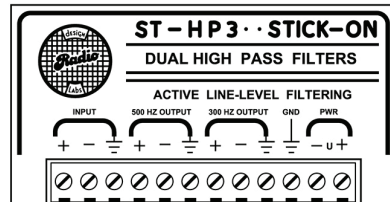
Dual High-Pass Filters

Installation/Operation



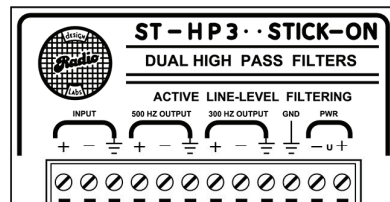
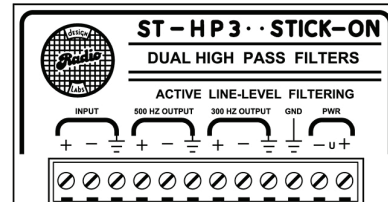
EN55103-1 E1-E5; EN55103-2 E1-E4

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



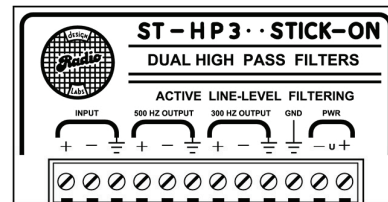
RDL PS-24
TYPE
SUPPLY

24 Vdc
POWER
SOURCE

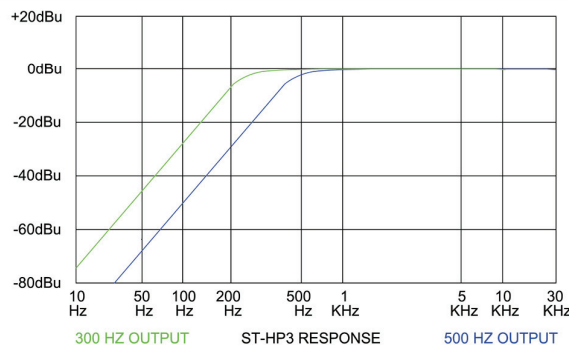
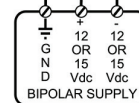
SUPPLY WIRING

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 Ω balanced line level (+4 dBu)
Outputs (2): 150 Ω 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:
-3 dB Frequency:

300 Hz to 30 kHz (± 0.5 dB)
225 Hz

500 Hz Output:

Frequency Response:
-3 dB Frequency:

500 Hz to 30 kHz (± 1.0 dB)
450 Hz

Ambient Operating Environment:
Power Requirement:

0° C to 55° C
GROUND-REFERENCED or FLOATING,
24 Vdc @ 30 mA