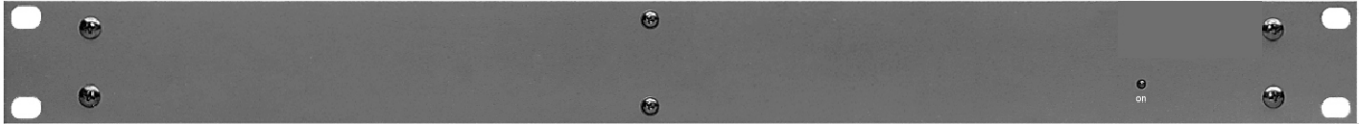


HE-1 Series

NOISE MASKING PROCESSOR



The HE-1 Noise Masking Processor provides a digital pink-noise generator, a balanced line-level audio input, and a 2-channel DSP processor, all in a single rack-space unit. Noise & audio levels, plus two channels of EQ, gain management, & delay, are adjusted via computer software. Sixteen presets can be recalled via contact-closures, RS-232, or other remote control options. The HE-1 Noise Masker carries a five-year warranty.

FEATURES

pink-noise & audio input with 2-channel DSP processor
noise generator spectral purity ($\pm 0.1\text{dB}$ @ $0\text{Hz}\sim 20\text{kHz}$)
precision pink-noise filtering (-3dB per octave low-pass)
extended 'non-apparent' repeat time of noise (200 minutes)
combined 1/3-octave & parametric equalization per channel
selectable high & low frequency shelving filters per channel
HPF & LPF with variable frequency & slope per channel
leveling, compression, limiting, & soft-gating per channel
output delay, with distance/delay calculation, per channel
two independent matrixes for channel-to-channel mixing
variable noise, input, & output levels with software metering
sixteen non-volatile memory presets store/recall settings
balanced input & outputs on plug-in barrier strip connectors
BiampWin programming software & serial cable included
no manual controls on front panel, to prevent tampering
remote control via RS-232 & programmable logic inputs
accessory units allow control via pots (RCU) or buttons (RT)
incorporates AES recommended grounding practices
CE marked and UL / C-UL listed power source
covered by AVL's five-year warranty

ARCHITECT'S & ENGINEER'S SPECIFICATION

The noise masking processor shall provide a digital pink-noise generator, and a balanced line-level audio input, and a dual-channel DSP processor, all in a single rack-space unit. The pink-noise generator shall have a spectral purity of $\pm 0.1\text{dB}$ from 0Hz to 20kHz with precision low-pass filtering of -3dB per octave, and an extended 'non-apparent' repeat time of 200 minutes. The DSP processor shall provide two independent channels of gain management, equalization, delay, & channel-to-channel matrixing. Gain management shall include leveling, compression, limiting, & soft-gating. Equalization shall be combined 1/3 octave & parametric, plus high/low shelving filters, and HPF/LPF with variable frequency & slope. Delay time shall be adjustable for each output, with automatic distance/delay calculation.

Balanced line-level input & outputs shall be provided on plug-in barrier strip connectors. Noise, input & output levels shall be variable, with complete software level metering capability. Sixteen non-volatile memory presets shall be available to store/recall processor settings. Sixteen logic inputs shall be provided, for remote control via external contact-closures.

Serial & link ports shall allow RS-232 control, with Windows 95/98/NT/2000 programming software & serial cable provided. No manual controls shall be provided. All processor controls & indicators shall be provided via software graphic interface. Remote control shall be via RS-232, programmable logic inputs, or via accessory units allowing potentiometer or push-button control. Frequency Response shall be $+0/-0.5\text{dB}$ ($20\text{Hz}\sim 20\text{kHz}$ @ $+4\text{dBu}$). THD+N shall be less than 0.002% ($20\text{Hz}\sim 20\text{kHz}$ @ $+4\text{dBu}$). Dynamic Range shall be greater than 100dB ($20\text{Hz}\sim 20\text{kHz}$ @ unity gain). Power Consumption shall be less than 15 watts. Dimensions shall be 1.75 high, 19 wide, & 7 deep. Weight shall be 4.5 lbs. Warranty coverage shall be 5-years. The noise masking processor shall be CE marked, include a UL / C-UL listed power source, and incorporate AES recommended grounding practices.

The noise masking processor shall be an AVL HE-1 Noise Masking Generator

HE-1 Noise Masking Generator

SPECIFICATIONS

Frequency Response (20Hz~20kHz @ +4dBu)	+0/-0.5dB	Sampling Rate:	48kHz
THD+Noise(20Hz~20kHz @ +4dBu)	< 0.002%	A/D & D/A Converters:	128x oversampled 24-bit sigma delta
Dynamic Range (20Hz~20kHz)	> 100dB	Power Consumption:	< 15 watts
Maximum Gain:	20dB	Dimensions:	
Input Impedance (balanced)	20k ohms	height (1 rack space)	1.7544mm
Maximum Input (balanced)	+24dBu	width	19 " (483mm)
Output Impedance (balanced)	200 ohms	depth	7(178mm)
Maximum Output (balanced)	+24dBu	Weight:	4.5 lbs. (2.04kg)

HE-1 Generator Rear Panel Diagram

