

GSi75

Integrated Amplifier



A preamplifier, amplifier, phono stage, and digital to analog converter all in one chassis, the GSi75 combines with your favorite speaker to deliver a singular and simple solution to control your listening system. Unlike other integrated designs that make performance - sacrificing compromises to fulfill a price point or form factor, the GSi75 harnesses the power and technologies developed by Audio Research into an authoritative platform to reveal the performances in your media.

Powered with the new KT150 output tube, the GSi75 supplies finesse and control that belies the 75-watt per channel power rating. The digital-to-analog converter will handle almost any sampling frequency including DSD. The phono stage and headphone amplifier round out the GSi75, providing total system control and integration. The elegant, understated industrial design will complement the rest of your system both visually and sonically.

The GSi75 has been designed to provide full functionality in a convenient package. The phono stage offers two gain settings, as well as 5 impedance load settings, to accommodate nearly all cartridges on the market today. The digital-to-analog converter can decode sampling frequencies up to 384 kHz/24 bit, as well as DSD and DXD. Digital inputs include USB, toslink, and optical. Four single-ended inputs provide ample connectivity. Both 4- and 8-ohm speaker output taps allow optimized speaker connections. The simple menu system allows adjustments to multiple parameters of the amplifier.



Specifications

Power Output: 75 watts per channel continuous from 20Hz to 20kHz. 1 kHz total harmonic distortion typically 1.5% at 75 watts; 0.1% at 1 watt. (PEAK). Approximate actual power available at "clipping" 63 watts RMS (1kHz). (Note that actual power output is dependent upon both line voltage and "condition" i.e.: if power line has high distortion, maximum power will be affected adversely, although from a listening standpoint this is not very critical.)

Power Bandwidth: (-3dB points) 12Hz to 70kHz.

Frequency Response: (-3dB points at 1 watt) 4.0Hz to 70 kHz.

Analog Inputs: SE1, SE2, SE3, (Single Ended RCA connectors).

Input Impedance: 51 K Ohms Single-ended.
Input Sensitivity (Analog): 0.55V RMS Single-ended for rated output. (32.5dB gain into 8 ohms.)

Maximum Input: 8.0V RMS

Output Polarity: Non-Inverting (any input).

Output Taps: 8 ohms, 4 Ohms.

Output Regulation: Approximately 2dB; (from 8 Ohm load to open circuit (Damping factor approximately 4).

Overall Negative Feedback: 4dB.

Slew Rate: 8 volts/microsecond.

Rise Time: 5 microseconds. (0-40 Volts, 10%-90%)

Hum & Noise: Less than 1.0 mV RMS -88dB below rated output (IHF weighted, Vol down).

PHONO STAGE

Frequency Response/Phono Equalization: RIAA: $\pm .2$ dB of RIAA, 10Hz to 20kHz;

Distortion: THD Less than .005% at .50V RMS 1kHz output.

Gain: Selectable 45dB (Low), 62dB (High) at 1kHz SE. (MC & MM compatible).

Input Impedance: Selectable 47K, 1000, 500, 200, or 100 Ohms with 10pF Unbalanced.

Maximum Input Voltages: Low Gain: [10mV RMS at 1kHz; 10mV RMS at 10kHz] with 8 Ohm speakers connected. High Gain: [0.5mV RMS at 1kHz; 2mV RMS at 10kHz] with 8 Ohm speakers connected

Noise: 0.06 μ V equivalent input noise, A weighted, shorted input (85 dB below 1 mV 1 kHz input).

DAC

Digital Signal Inputs: SPDIF: TOS, RCA(BNC); digital USB

Frequency Response: +0-3dB, 6Hz to 85 kHz at rated output. 0.15dB 20Hz to 20kHz. (Balanced, 200 kOhms load)@ 384kHz sample rate.

Distortion: THD+N Less than .003% at 1.8V RMS (Internal point)

Signal-Noise-Ratio: 110dB, A-Weighted

Dynamic Range (AES17): 110dB

IMD (SMPTE): .002%

RMS Noise level: -95dBV (20-20kHz)

Gain: 7.0dB SE.

Input Impedance: (SPDIF Digital): 75 Ohms RCA; Optical: 660nm TOSLink fiber 44.1 to 96kHz.

Digital Sample Rates (Native mode):

SPDIF (RCA): 16-24 bits @ 44.1kHz to 96 kHz,
SPDIF (TOS); 16-24 bits @ 44.1kHz to 96 kHz,
USB 2.0 HS; 16-24 bits @ 44.1kHz to 384 kHz, 2.8 MHz, Native DSD 1X, 5.6 MHz Native DSD 2X; DSD DoP (0X06 0XF9 FLACS).

Up-sampling (PCM sources, 44.1 – 192 kHz): Select up-sampling or Native mode; USB, RCA, TOS up-sample to 352.8 kHz or 384 kHz.

Master Oscillator: 22.579 MHz \pm 20Hz for 44.1, 88.2, 176.4, and 352.8 kHz. 24.576 MHz \pm 20Hz for 48, 96, 192, and 384 kHz.

Intrinsic Jitter: <10ps

Channel Separation: 107dB @ 1kHz.

Jitter reduction: High-stability crystal-controlled re-clocking for all DAC signals.

Power Requirements: 100-125VAC 60Hz (200-250VAC 50/60 Hz)
450 watts at rated output, 625 watts maximum, 250 watts at "idle". 1.5 watt power off.

Tubes Required: 2-Matched pair KT150-Power Output; 2 -6H30 driver.

Dimensions: Width 19.0" (48.3 cm)
Height 10.37" (26.3 cm)
Depth 20.41" (51.8 cm)

Weight: 55 lbs (25.0 kg) Net.; 78 lbs (35.4 kg) Shipping