AUDIO, high fi

The Model 103 Stereo System Control Center

Like all BGW products, the Model 103 Stereo System Control Center has been designed to be of the highest quality and manufacture. And too, like other BGW products, the Model 103 shares the same world-respected reputation of fine professional sound products which has made BGW a leader in accurate, reliable and advanced audio components.

Utilizing the most recent circuit design techniques, low noise parallel bi-polar semiconductors have been integrated into a discrete component format. The critical phono stage provides a level of performance unmatched in a reasonably priced preamplifier. This advanced design phono section features adjustable input capacitance for optimum cartridge loading. Integrated circuits cannot match the performance of a discrete design and are not used in the new Model 103 preamp.

A full-featured preamplifier, it embodies all necessary facilities for the advanced audiophile. Two precision detented tone controls select active equalization circuitry which contributes no distortion and provides a wide range of control. A tone control defeat switch is provided. The detented Volume and Balance controls are calibrated to enable accurate and repeatable settings.

The 103 uses a highly sophisticated regulated power supply. Ten transistors and a toroidal power transformer used in a novel circuit provide absolutely pure power to the critical circuitry. This technique along with the parallel input circuitry allow the 103 to achieve an impressive 84dB signal-to-noise ratio (unweighted 20 Hz-20 kHz referred to 10 millivolts).

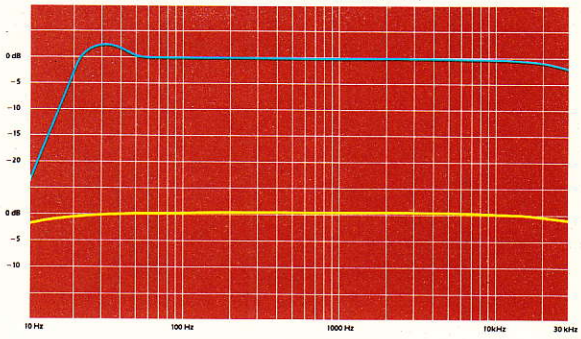
Surrounding the Model 103's input selector control are light-emitting diodes which assist in easy and positive source identification.

Compatible with any signal source, the Model 103 incorporates an active 18dB/octave subsonic filter. This feature reduces annoying turntable rumble and irritating low frequency feedback. Front panel tape monitoring with a headphone jack permits selection of either of two tape machines. A powerful output stage capable of driving 600 ohm lines allows the user to place the power amplifier at a considerable distance from the 103 with no high frequency signal loss.

Inside the 103 you'll find military grade/glass epoxy circuit boards. On the rear panel of the 103's heavy-gauge steel enclosure there are facilities for easy hook-up of external equalizers and the latest noise reduction or delay systems.

The 103's full pro-width, black anodized and grained front panel matches any companion BGW power amplifier. An optional walnut veneer enclosure is available.

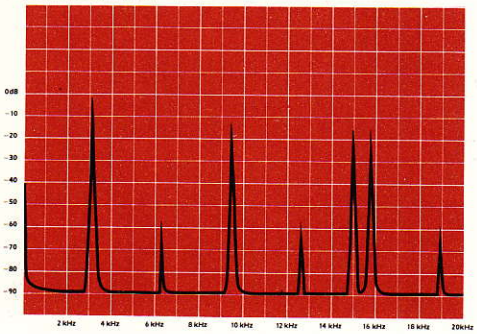
SUBSONIC FILTER FREQUENCY RESPONSE (Top)
LINE AMP FREQUENCY RESPONSE (Bottom)



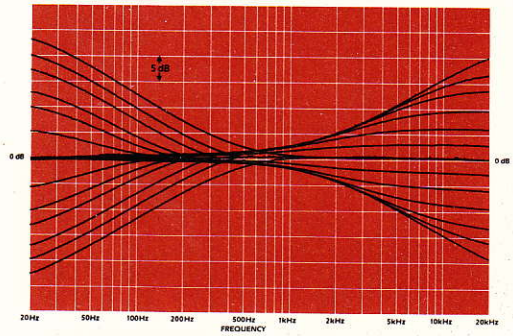
Test Equipment Utilized:
Hewlett Packard 339A Distortion Analyzer
Hewlett Packard 3585A Spectrum Analyzer
Hewlett Packard 3325A Sweep Generator
Khrone-Hite 4100A Square Wave Source
Hewlett Packard 7035B X-Y Recorder
Tektronix DM 502 Ac-Log Converter
Valhalla 2000-1 Digital Wattmeter

+ 4 dBm Input Level,
Aux Input,
30 Hz Bandwidth

TRANSIENT INTERMODULATION DISTORTION
INPUT SIGNAL

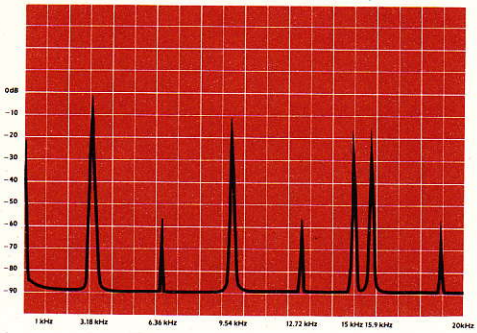


TONE CONTROL FREQUENCY RESPONSE



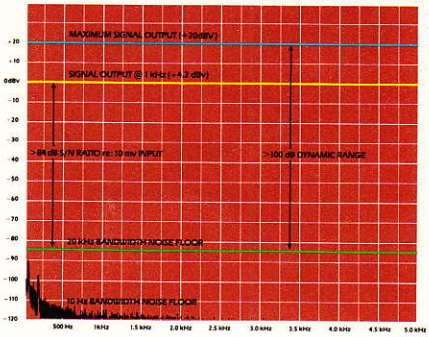
0 dB = −10 dBv Output

T.I.M. RESPONSE OF PHONO PREAMP/LINE AMP

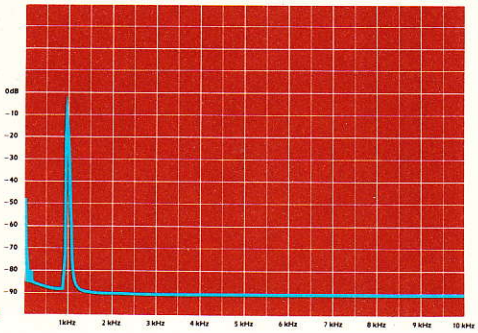


Output level: +4 dBm,
30 Hz Bandwidth

PHONO PREAMP NOISE CHARACTERISTICS



T.H.D. SPECTRUM (1 kHz)



+ 4 dBm Output Level,
Phono In/Line Amp Out

SPECIFICATIONS

Gain:	Phono to Tape Output: 40 dB at 1 kHz High Level Input to Line Output: 20dB
Input Impedance:	Phono: 47,000 ohms in parallel with 200pF, 275pF, or 450pF. High Level Inputs: 90,000 ohms
Input Overload:	Phono: 100mV @ 1 kHz High Level: 6.0 volts
Dynamic Range (Phono Section):	95dB @ main output (phono thru main out)
Maximum Output Voltage:	Line Out: 8 volts RMS into 600 ohms (+20dBm) Phono At Tape Output: 10 volts RMS into 5,000 ohms.
Total Harmonic Distortion:	Less than 0.01% at rated output 20Hz-20kHz.
Noise:	Phono equivalent input noise = .4 microvolt with input shorted over 20Hz-20kHz. S/N ratio = better than 80 dB (unweighted). High level to line output greater than 90 dB below rated output.
Tone Control Equalization:	±15dB at 50Hz and 15kHz, front panel defeat switch removes tone controls from circuit.
Subsonic Filter:	−3dB at 20Hz. Active 3-pole, 18 dB per octave.
Frequency Response:	±2.5dB 20Hz to 20kHz from high level inputs. ±2.5dB of RIAA 20Hz to 20kHz from phono inputs.
Inputs:	Four high level inputs (1 tuner, 1 auxiliary, 2 tape, 1 equalized phono).
AC Outlet:	One switched, two unswitched.
Power Requirements:	Approximately 15 watts at 90-130 or 180-260 VAC, 50/60Hz.
Dimensions:	3½" X 19" X 10½" (H.W.D.) (8.9 cm X 48.3 cm X 26.7 cm) *
Weight:	13.5 lbs net (5.8 kg) 17 lbs (7.3 kg) shipping

All specifications and features are subject to change without notice.
*optional walnut enclosure not included

BGW SYSTEMS

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