## General Purpose Amplifiers



Models GA2 & GA6A



#### GA2

- **Features**
- Ideal "music-on-hold"/line amplifier
- Only 50 millivolts needed for full output
- Compact only 5-1/2"W x 4-1/8"H x 2-1/4"D
- UL Listed

#### **GA6A**

- Two individual controls: Lo-Z balanced or unbalanced MIC, AUX
- · Built-in mixing
- · Internally adjustable tone control

#### GA<sub>2</sub>

#### **Description**

Bogen Model GA2 is a rugged, compact 1.5-watt amplifier designed to meet the requirements of continuous low-power audio applications. It is ideally suited for telephone line "music-on-hold" amplification. It can also be used to drive monitor speakers, head-phones, or as a line amplifier. With accessory transformer Model WMT1A connected to the input, the GA2 will provide amplification for a 600-ohm telephone line.

Model GA2 has a high-impedance input that is available at both a phono jack and screw terminals. Only 50mV is required for full output. A choice of 8-ohm or 600-ohm output is provided. Low distortion, wide frequency response, and low hum and noise further contribute to excellent performance. A screwdriveradjustable volume control is provided on the chassis.

The amplifier is compact and easily mounted on a wall or in any convenient location. The unit is UL listed.

#### GA6A

Bogen Model GA6A is a rugged and compact six-watt, dual-input amplifier with a wide variety of applications such as background music in a doctor's waiting room, relaying fast-food restaurant orders from counter to kitchen, or sound reinforcement in a small church.

The GA6A delivers rated power at not more than 1% total harmonic distortion from 75Hz to 15kHz into matched loads. A low-impedance balanced or unbalanced microphone input and wide-frequency auxiliary input are provided, with built-in mixing and individual front-panel controls. The unit is protected by both thermal and over-current circuit breakers.

Output connections are easily made via screw terminals on the rear panel. Tone control can be adjusted on the rear panel, and an illuminated rocker-type frontpanel power switch is provided. The chassis is fabricated from sturdy cold-rolled galvanized steel.



#### GA2

### Technical Specifications

Power Output: 1.5 watts RMS

Frequency Response: 200Hz to 15kHz

+0dB, -2.5dB

Total Harmonic Distortion: 2% @ 1.5W,

0.25% @ 1W

Output Level: +6dBm (1.5V) across balanced

600 ohms **Sensitivity:** 50mV

Input Impedance: 100 kilohms

**Hum and Noise:** -72dB below rated output **Output Impedance:** 8 ohms; 600 ohms balanced

Control: Volume, screwdriver-adjustable

Terminations:

Output — terminal strip

Input — RCA-type phono jack or terminal strip

Power Consumption: 4W, 120V AC, 60Hz Dimensions: 5-1/2"W  $\times$  4-1/8"H  $\times$  2-1/4"D

Shipping Weight: 2 lbs.

#### **GA6A**

Power Output: 6 watts RMS

Frequency Response: 30Hz to 12kHz +0dB, -3dB Total Harmonic Distortion: 1% @ rated output

Power Bandwidth: 75Hz to 15kHz

Inputs: Lo-Z MIC, balanced or unbalanced; AUX

Sensitivity: MIC 0.3mV; AUX 0.2V MIC Dynamic Range: 46dB Hum and Noise: MIC -50dB; AUX -64dB below rated output

Output Impedance/Voltage: 8 ohms; 25V and 70V line

Tone Control: 9dB treble boost at 10kHz, 9dB treble cut at 10kHz; internally selectable Protection: Thermal shutdown and 0.25A fuse Controls: MIC, AUX, illuminated POWER switch

Terminations:

Outputs and Microphone — terminal strip Auxiliary — RCA-type phono plug Power Consumption: 16W, 120V AC, 60Hz Dimensions: 8-1/2"W x 2-5/8"H x 6"D

Shipping Weight: 5 lbs.

#### GA<sub>2</sub>

# Architect and Engineer Specifications

The amplifier shall be a Bogen Model GA2, or equivalent, capable of delivering 1.5 watts at 2% THD, and 1 watt at 0.25% THD from 200Hz to 15kHz, +0dB, -2.5dB, into 8 ohms. It shall provide one high-impedance input with volume control, one 8-ohm output, and one 600-ohm output. Input impedance shall be 100 kilohms. Output level across a balanced 600 ohms shall be 8dBm/2V. Input sensitivity at full output shall be 50mV or less; hum and noise shall be at least -72dB below rated output. Inputs shall be via RCA-type phono jack or screw terminal strip. Output shall be via screw terminals.

The unit shall operate from 120V AC, 60Hz and shall consume 4 watts. The unit shall measure 5-1/2"W  $\times$  4-1/8"H  $\times$  2-1/4"D. The shipping weight: shall be 2 lbs. A 5-1/2-foot AC power cord shall be provided.

#### **GA6A**

The amplifier shall be a Bogen Model GA6A, or equivalent, capable of delivering 6 watts at not more than 1% total harmonic distortion from 75Hz to 15kHz. Frequency response shall be 30Hz to 12kHz, +0dB, -3dB. The amplifier shall provide one low-impedance, balanced or unbalanced microphone input and one high-impedance auxiliary input, with individual front panel controls and mixing capability. Microphone dynamic range shall be 46dB with mic sensitivity of 0.3mV Auxiliary input sensitivity shall be 0.2V or better. Hum and noise shall be -50dB for microphone, and -64db for auxiliary inputs. Tone adjustment shall allow 9dB treble boost or attenuation at 10kHz, located on rear panel.

Outputs shall be provided on the rear panel for 8-ohm speaker and 25V and 70V lines. Output and microphone connections shall be made at rear-panel screw terminals; auxiliary input shall be via a rear panel RCA-type phono iack.

The amplifier shall operate from 120V AC, 60Hz, and shall consume 16 watts. A rocker-type, front panel-mounted switch shall illuminate when the unit is switched on. Overload protection shall be by means of a thermally-actuated circuit breaker and a replaceable fuse. The chassis shall be constructed of zinc-plated galvanized steel with protective epoxy, and the cover from black vinyl-clad cold-rolled steel. The front panel shall be finished in black. The unit shall measure 8-1/2"W x 2-5/8"H x 6"D. The shipping weight shall be 5 pounds.

