# Gold Seal Series Public Address Amplifiers



#### Models GS35, GS60, GS100 & GS150

#### Description

The Gold Seal Series amplifiers are designed to meet the rigorous requirements of today's sophisticated sound systems. They combine unique and useable features with ultra high reliability and professional performance.

The amplifiers are available in 35, 60, 100 and 150 watt models, each with exactly the same features to provide power and performance no matter how large or small the application.

The Bogen Gold Seal Series amplifiers are an extraordinary addition to Bogen's line of quality audio amplifiers. Designed with the sound contractor in mind, they provide unparalleled flexibility and versatility, without the need for add-on modules.

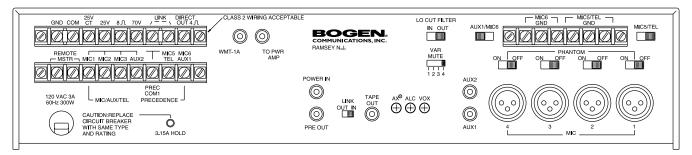
In addition to its extensive flexibility, the Gold Seal Series amplifiers offer a combination of features not found in other commercial amplifiers.

#### Features

- 4 dedicated microphone inputs (XLR connectors)
- 1 selectable Mic/Tel input
- 1 selectable Mic/Aux input
- 1 dedicated Aux input
- 4-ohm direct coupled output
- 8-ohm, 25V, 25VCT, and 70V transformercoupled outputs
- 2 rack spaces
- Dual-function, 10-band graphic equalizer (Acoustic EQ/Feedback Control)
- True loudness contour function
- Aphex® Aural Exciter for improved intelligibility
- · Switchable phantom power supply
- Variable Aux input muting

- Remote master volume control capability
- Input muting via contact on all inputs
- Voice activated aux muting on Tel input
- · Aux fade back after Tel page
- · Pre-amp out/Power amp in connections
- · Booster amp output connection
- Tape output connection
- Balanced line driver output (using WMT1A accessory)
- · Low-cut filter for Mic channels
- Tamper-resistant front cover available (GSTRC)
- · Rack mounting kit available (GSRPK)
- Remote volume control available (GSRVC)





### Technical Specifications

Power Rating (RMS): GS35 - 35 watts; GS60 - 60 watts; GS100 - 100 watts; GS150 - 150 watts

Frequency Response:

Transformer Output — 65 Hz to 20 kHz, +0/-2 dB @ -2 dB

Direct Output — 20 Hz to 20 kHz +0/-1 dB @ rated power.

Direct Output — 20 Hz to 20 kHz, +0/-1 dB @ rated power Distortion:

Transformer Output — 0.5% (max.), 0.3% (typ.), 65 Hz to 20 kHz @ -2 dB Direct Output — 0.5% (max.), 0.3% (typ.), 20 Hz to 20 kHz

Signal-to-Noise Ratio: Fundamental: -94 dB or better; Aux 1 & 2: -70 dB; Tel: -70 dB or better @ 600 ohms

Mic 1 - 6: -60 dB or better @ 200 ohms

Inputs/Outputs: Mic - 6 Lo-Z balanced via 4 XLR connectors and 2 screw terminals

Sensitivity: 0.35 mV (200 ohms)

Aux - 2 Hi-Z RCA jacks. Sensitivity: 0.085V (10k ohms)
Telephone - Screw terminals. Sensitivity: 0.07V (600 ohms)
Output to Power Amp - 5V @ Rated Output via RCA jack
WMT1A Output - 25V @ Rated Output via RCA jack
Tape Output - 687 mV @ Rated Output via RCA jack

Output Impedance: All models: balanced or unbalanced 8-ohms, 25V, 25VCT, 70V, 4-ohm direct

Output Regulation: Better than 2 dB from no load to full load

Variable Mute Range: 0 dB to -30 dB (Aux 1 & 2)

ALC: Distortion - less than 0.5%; Compression - 25 dB Input 20 mV (VOX control max. CW position)

Mic Precedence: Via terminal strip. -60 dB: Mic 1, 2, 3, 5/Tel, 6/Aux, Aux 2

Power In/Pre Out: In 1V/Out 1V via RCA jacks

Loudness Contour: +8 dB @ 100 Hz, +4 dB @ 10 kHz (Aux 1 & 2 control at 1/4 CW position)

Aphex Aural Exciter: Type A9

Overload Protection: Electronic with automatic reset

**Thermal Protection:** 105°C (220°F) thermistor attached to heat sink

Line Fusing: Resettable circuit breaker

**Dimensions:**  $16-\frac{1}{2}$ " W x  $3-\frac{1}{2}$ " H x 12" D All Models

**Shipping Weight:** GS35 - 19 lb.; GS60 - 24 lb.; GS100 - 28 lb.; GS150 - 31 lb.

## Architect & Engineer Specifications

The amplifier shall be a model \_\_\_\_\_, rated at \_\_\_\_\_ watts RMS (insert GS35/35 watts, GS60/60 watts, GS100/100 watts or GS150/150 watts).

The amplifier shall accommodate up to 6 Lo-Z balanced microphones, 2 Hi-Z auxiliary sources and a telephone paging input (Mic 5 shall be switch-selected for mic or telephone line; Mic 6 switch-selected for microphone or Aux 1). Mics 1 through 4 shall use XLR-type connectors; Aux input shall be via RCA phono jacks and all other connectors shall use screw terminals. Phantom power shall be supplied for use with condenser microphones. Microphone precedence connections shall be included for Mic 1, 2, 3, 5/Tel, 6/Aux 1 and Aux 2.

The amplifier shall provide a frequency response from 20 Hz to 20 kHz +0/-1 dB at rated power. Distortion shall be 0.3% typically, from 20 Hz to 20 kHz direct at rated power, and from 65 Hz to 20 kHz transformer @ -2 dB.

The amplifier shall include an Aphex Aural Exciter circuit, variable loudness contour control, and dual function equalizer. The equalizer shall be switch selectable for feedback con-

trol or acoustic shaping and shall include 10 center-detent slide controls providing  $\pm 12\,$  dB of boost or cut from 62.5 Hz to 16 kHz in acoustic mode and from 125 Hz to 8 kHz in feedback control mode.

The amplifier shall include automatic level control to provide consistent output regardless of who is paging, automatic muting complete with a VOX circuit, and a variable mute level. Provisions shall also be included for remote volume control, using an accessory control unit (GSRVC).

Outputs shall be provided for 4- and 8-ohm speakers and for 25V, 25VCT, and 70V distributed systems. Additional outputs shall be provided to feed a booster amp and tape recorder. A dedicated output shall permit feeding a 600-ohm telephone line using an accessory transformer (Model WMT1A). A Preamp out/power amp in circuit shall be provided to insert signal processing equipment.

The amplifier shall be rack mountable using an accessory rack panel kit (GSRPK). It shall be UL and CSA listed and shall be backed by a 3-year warranty.

