

# 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.

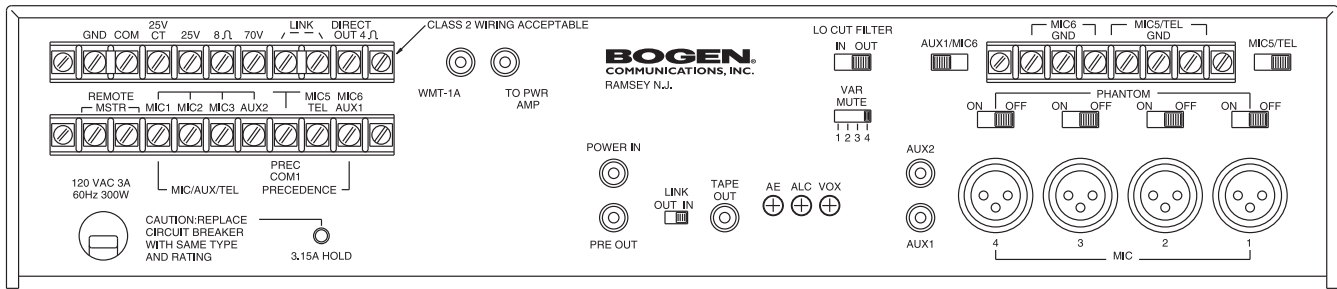
In addition to its extensive flexibility, the Gold Seal Series amplifiers offer a combination of features not found in other commercial amplifiers.

- Features**
- 4 dedicated MIC inputs
  - 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 transformer-coupled outputs
  - Rack mountable – 2RU package
  - Dual-function, 10-band graphic equalizer (Acoustic EQ or Feedback Control modes)
  - True loudness contour function
  - Audio Enhancement circuit for improved intelligibility
  - Switchable phantom power supply (15V DC)
  - 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 (insert) 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)
  - Also available – GS250 (250 watts)



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Specifications subject to change without notice.  
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## 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

**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 through MIC 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  
 Power In/Pre Out: In 1V/Out 1V via RCA jacks  
 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  
 Better than 2 dB from no load to full load

**Output Regulation:**

120V AC

**AC Input Voltage:**

**AC Current:**

GS35: 0.9A; GS60: 1.3A; GS100: 2.2A; GS150: 3.0A

**Thermal Emissions (Full Power):**

GS35: 122.9 BTU/hr.; GS60: 283.5 BTU/hr.; GS100: 365.4 BTU/hr.; GS150: 642.1 BTU/hr.

**Variable Mute Range:**

0 dB to -30 dB (AUX 1 & 2)

**ALC:**

Distortion - less than 0.5%; Compression - 25 dB

**VOX Threshold:**

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)

**Overload Protection:**

Electronic with automatic reset

**Thermal Protection:**

105°C (220°F) thermistor attached to heat sink

**Operating Temperature Range:**

-10°C (14°F) to 60°C (140°F)

**Line Fusing:**

Resettable circuit breaker

**Dimensions:**

16-1/2" W x 3-1/2" 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 MIC or AUX 1). MIC 1 through 4 shall use XLR-type connectors; AUX inputs 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 @ rated power, and from 65 Hz to 20 kHz transformer @ -2 dB.

The amplifier shall include an Audio Enhancement circuit, variable loudness contour control, and dual function equalizer. The equalizer shall be switch selectable for feedback control or acoustic shaping and shall include 10 center-detent slide controls providing ±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 carry the necessary safety agency listings for both the US and Canada.

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