

# Gold Seal Series Public Address Amplifiers

## Model GS250



### Description

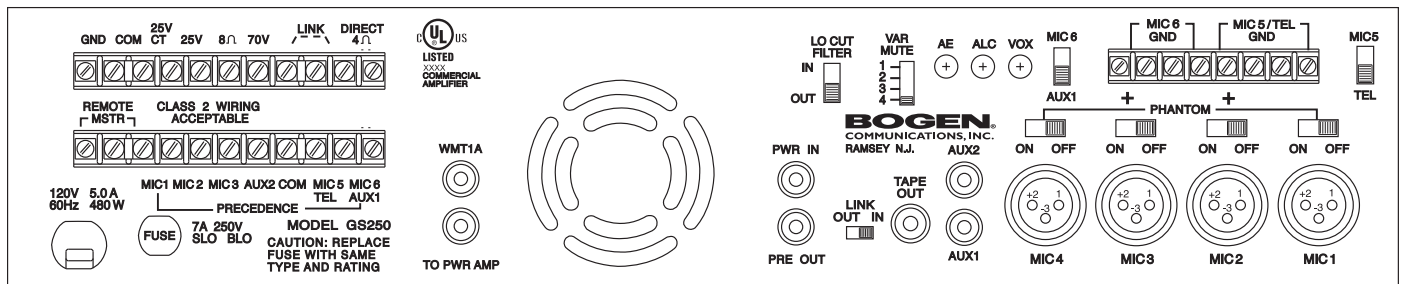
The Bogen Gold Seal Series amplifiers were designed with the sound contractor in mind. They provide extensive flexibility and versatility, without the need for add-on modules. The GS250 model enhances the Gold Seal Series line with 250 watts of power in the same 2 rack space package as the other Gold Seal Series 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 for improved intelligibility
- Switchable phantom power (per MIC input)
- Variable AUX input muting
- Remote master volume control capability
- Automatic level control
- Input muting via contact closure 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
- 3-Speed fan cooling
- Thermal and overload protection
- UL and C-UL listed
- Tamper-resistant front cover (GSTRC) available
- Rack mounting kit (GSRPK) available
- Remote volume control (GSRVC) available

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## Technical Specifications

**Power Rating (RMS):** 250 watts

**Frequency Response**

*Transformer Output:*

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

*Direct:*

20 Hz to 20 kHz, +0/-1dB @ rated power

**Distortion**

*Direct:*

0.5% (max.), 0.3% (typ.), 20 Hz to 20 kHz

*Transformer:*

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

**Signal-to-Noise Ratio:**

Fundamental: -94 dB or better; AUX 1 & 2: -70 dB; TEL: -70 dB or better @ 600 ohms; MIC 1 to 6: -60 dB or better @ 200 ohms

**Inputs/Outputs:**

6 MIC: Lo-Z balanced via 4 XLR connectors and 2 screw terminals; Sensitivity: 0.35mV (200 ohms)

2 AUX: 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: 687mV @ Rated Output via RCA jack

Acoustic Mode - 62.5 Hz, 125, 250, 500, 1 kHz, 2, 4, 8, 12, 16

Feedback Mode - 125 Hz, 200, 315, 500, 800, 1.2 kHz, 2, 3.1, 5, 8

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

Better than 2 dB from no load to full load

4 steps: -60, -21, -10, 0 dB (AUX 1 & 2)

**ALC:**

Distortion: less than 0.5%; Compression: 25 dB (TEL)

**VOX Threshold:**

TEL Input: 20mV (VOX control max. CW position)

**MIC Precedence:**

Via terminal strip. -60 dB: MIC 1, 2, 3, 5/TEL 6/AUX 1, AUX 2

**Loudness Contour:**

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

**Audio Enhancement:**

Type A9

**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)

**Thermal Emissions (Full Power):**

847 BTU/hr.

**Line Fusing:**

7A/125V AC Slo-Blo

**AC Input Voltage:**

120V AC

**AC Current:**

5.0A

**Power Consumption:**

480 watts, 120V AC, 60 Hz

**Dimensions:**

16-1/2" W x 3-1/2" H x 13-1/2" D

**Product Weight:**

30 lb.

## Architect and Engineer Specifications

The amplifier shall be a model GS250, rated at 250 watts RMS, with three-speed fan cooling.

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 TEL; MIC 6 shall be 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's TEL input shall include automatic level control to provide consistent output regardless of who is paging, and a four-step VOX-activated AUX mute level. Provisions shall also be included for remote volume control, using an accessory control unit.

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 Pre-amp 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.

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