

# Gold Seal Series Public Address Amplifiers

## Model GS250



### Description

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 expensive add-on modules. The GS250 model enhances the Gold Seal line with 250 watts of power in the same 2 rack space package as the other Gold Seal amplifiers.

Unlike other typical amplifier lines, the professional sound contractor need not purchase a higher-powered amplifier just to get more extensive features or flexibility. Each of the Gold Seal Series amplifiers — 250W, 150W, 100W, 60W and 35W models — incorporate the exact same set of features.

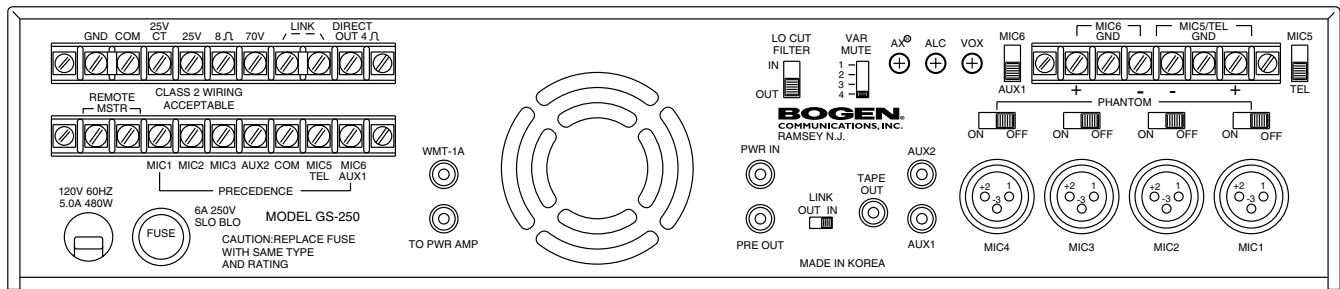
In addition to its extensive input flexibility, the Gold Seal Series amplifiers offer a combination of features not found in any other commercial amplifier.

### 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 transformer-coupled outputs
- Rack mountable — 2RU package for all models
- 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
- Preamp 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
- 3-speed fan cooling
- Tamper resistant front cover (GSTRC) available
- Rack mounting kit (GSRPK) available
- Remote volume control (GSRVC) available

**BOGEN®**

Specifications subject to change without notice.  
© 1997 Bogen Communications, Inc.  
Part No. 54-7882-03R2 Printed in U.S.A. 0105  
Aphex Aural Exciter is a trademark of Aphex Systems, Ltd.



## Technical Specifications

<b>Power Rating (RMS):</b>	250 watts
<b>Frequency Response:</b>	65Hz to 20kHz +0/-2dB @ -2dB
<i>Transformer Output —</i>	20Hz to 20kHz, +0/-1dB @ rated power
<i>Direct —</i>	
<b>Distortion:</b>	0.5% (max.), 0.3% (typ.), 20Hz to 20kHz
<i>Direct —</i>	0.5% (max.), 0.3% (typ.), 65Hz to 20kHz @ -2dB
<b>Signal-to-Noise Ratio:</b>	Fundamental: -94dB or better; Aux 1 & 2: -70dB; Tel: -70dB or better @ 600 ohms; Mic 1 - 6: -60dB or better @ 200 ohms
<b>Inputs/Outputs:</b>	Mic — 6 Lo-Z balanced via 4 XLR connectors and 2 screw terms. Sensitivity: 0.35mV (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 — 687mV @ Rated Output via RCA jack
<b>Output Impedance:</b>	All models: balanced or unbalanced 8-ohm, 25V, 25VCT, 70V, 4-ohm direct
<b>Output Regulation:</b>	Better than 2dB from no load to full load
<b>Variable Mute Range:</b>	4 steps, -60, -21, -10, 0dB (Aux 1 & 2)
<b>ALC:</b>	Distortion - less than 0.5%; Compression - 25dB
<b>VOX Threshold:</b>	Tel Input 20mV (VOX control max. CW position)
<b>Mic Precedence:</b>	Via terminal strip. -60dB: Mic 1, 2, 3, 5/Tel 6/AUX 1, AUX 2
<b>Preamp Out/Power Amp In:</b>	In - 1V; Out - 1V
<b>Loudness Contour:</b>	+8dB @ 100Hz, +4dB @ 10kHz (AUX 1 & 2 control at 1/4 CW position)
<b>Aphex Aural Exciter:</b>	Type A9
<b>Overload Protection:</b>	Electronic with automatic reset
<b>Thermal Protection:</b>	105°C (220°F) thermistor attached to heat sink
<b>Line Fusing:</b>	6A/125V AC Slo-Blo
<b>Power Consumption:</b>	480 watts, 120V AC, 60Hz
<b>Dimensions:</b>	16-1/2" W x 3-1/2" H x 12" D
<b>Shipping Weight:</b>	33 lbs.

## Architects and Engineers 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 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 20Hz to 20kHz +0/-1dB at rated power. Distortion shall be 0.3% typically, from 20Hz to 20kHz direct at rated power, and from 65Hz to 20kHz transformer @ -2dB.

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 control or acoustic shaping and shall include 10 center-detent slide controls providing ±12dB of boost or cut from 62.5Hz to 16kHz in acoustic mode and from 125Hz to 8kHz 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 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. It shall be UL and CSA listed and shall be backed by a 3-year warranty.

**BOGEN**  
COMMUNICATIONS, INC.

50 Spring Street, Ramsey, New Jersey 07446, U.S.A.  
Tel. 201-934-8500; FAX: 201-934-9832; www.bogen.com