Gold Seal Series Public Address Amplifiers

Models
GS500D, GS250D, GS150D, GS100D, GS60D & GS35D

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. These amplifiers are available in 500, 250, 150, 100, 60 and 35 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 their extensive flexibility, the Gold Seal Series amplifiers provide a combination of features not found in other commercial amplifiers. The Gold Seal Series amplifiers also offer Class D Amplification for increased operating efficiency.

Features
- 4 dedicated MIC inputs
- 1 selectable MIC/TEL input
- 1 selectable MIC/AUX input
- 1 dedicated AUX input
- 4-ohm, 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 (13V DC)
- Variable AUX input muting
- Remote master volume control capability
- Automatic level control
- Input muting via contact on 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; sold separately)
- Low-cut filter for MIC channels
- Listed to UL Standard 60065 for U.S. and Canada
- Rack Mounting Kit (GSDRPK; sold separately)
- Remote Volume Control (GSRVC; sold separately)
- Security Cover (GSTRC; sold separately)

Specifications subject to change without notice.
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Technical Specifications

**Power Rating (RMS):** GS35D: 35 watts; GS60D: 60 watts; GS100D: 100 watts; GS150D: 150 watts; GS250D: 250 watts; GS500D: 500 watts

**Frequency Response:** Transformer Output: 65 Hz to 20 kHz, +0/-2 dB @ -2 dB

**Distortion:** Transformer Output: 0.5% (max.), 0.3% (typ.), 65 Hz to 20 kHz

**Signal-to-Noise Ratio:**
- **Fundamental:** -70 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:** 11mV (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:** Input 1V/Output 1V via RCA jacks
- **WMT1A Output:** 25V @ Rated Output via RCA jack
- **Tape Output:** 700 mV @ Rated Output via RCA jack

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

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

**AC Input Voltage:** 120V~ 60 Hz

**AC Current:**
- GS35D: 0.8A; GS60D: 1.3A; GS100D: 2.1A; GS150D: 2.5A; GS250D: 4.0A; GS500D: 6.5A

**Thermal Emissions (Full Power):**
- GS35D: 78.5 BTU/HR.; GS60D: 119.5 BTU/HR.; GS100D: 191.3 BTU/HR.; GS150D: 136.6 BTU/HR.; GS250D: 239.1 BTU/HR.; GS500D: 467.9 BTU/HR.

**Variable Mute Range:** -60, -21, -10, 0 dB (AUX1 & 2)

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

**VOX Threshold:** TEL Input 20 mV (VOX control max., clock-wise position)

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

**Power Input/Pre Output:** Input 1V/Output 1V via RCA jacks

**Phantom Power:** 13V DC

**Lo-Cut:** 3 dB@100 Hz

**Loudness Contour:** +8 dB @ 100 Hz, +4 dB @ 10 kHz (AUX 1 & 2 control at 1/4 clock-wise position)

**Overload Protection:** Electronic with automatic reset

**Thermal Protection:** Thermistor attached to heat sink

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

**Shipping Weight:**
- GS35D: 13.5 lb.; GS60D: 14.3 lb.; GS100D: 16.4 lb.
- GS150D: 18.5 lb.; GS250D: 19.5 lb.; GS500D: 26.5 lb

The amplifier shall be a model _____, rated at ____ watts RMS (GS500D/500 watts, GS250D/250 watts, GS150D/150 watts, GS100D/100 watts, GS60D/60 watts, and GS35D/35 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 pluggable 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 65 Hz to 20 kHz +0/-2 dB at rated power. Distortion shall be 0.3% typically.

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 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 (GSDRPK). It shall carry the necessary safety agency listings for both the US and Canada.