

Gold Seal Series Public Address Amplifiers

Models GS-35, GS-60,
GS-100 & GS-150



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- Features
- 150, 100, 60 & 35 watt models available
 - 6 Microphone inputs, 2 Aux inputs plus provisions for Tel input
 - Exclusive dual equalizer for feedback control or acoustic shaping
 - Aphex Aural Exciter® circuit
 - True variable contour control
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Description

The Gold Seal Series amplifiers are designed to meet the rigorous requirements of today's sophisticated sound systems. Designed specifically with the Sound Contractor in mind, they combine unique and useable features with ultra high reliability and pro performance at a minimum price.

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.

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

The Gold Seal amplifiers provide a frequency response from 20Hz to 20KHz $\pm 0/-1$ dB at rated power. Distortion is 0.3% typically, from 20Hz to 20KHz (direct) at rated power, and from 65Hz to 20KHz (transformer) @ -2dB.

Each amplifier features the Aphex Aural Exciter circuit, a variable loudness contour control and exclusive dual function equalizer. The Aural Exciter circuit enhances paging intelligibility by harmonic regenera-

tion. The contour control follows psychoacoustic curves of hearing to enhance the lows and highs lost at low volume. The dual function equalizer can be used for feedback control or acoustic shaping. It has 10 center-detent slide controls providing ± 12 dB of boost or cut from 62.5Hz to 16KHz in acoustic mode and from 125Hz to 8KHz in feedback control mode.

Additional features to enhance flexibility include automatic level control to provide consistent output regardless of who is paging, automatic muting with a VOX circuit, and a variable mute level. Provisions are also included for remote volume control, using an accessory control unit (model GSRVC).

Outputs are provided for 4- and 8-ohm speakers and for 25V, 25VCT, 70V and 100V distributed systems. Additional outputs are provided to feed a booster amp and tape recorder. A dedicated output lets you feed a 600-ohm telephone line using a WMT-1A accessory transformer. A Preamp out/power amp in circuit is provided to insert signal processing equipment.

In addition to unique features and outstanding performance, the Gold Seal Series amplifiers are built following a stringent quality assurance program which encompasses 100% feature/function/performance testing at assembly. They are UL and CSA listed and are backed by a 3-year warranty.

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Technical Specifications

Power Rating (RMS):	GS-35 - 35 watts; GS-60 - 60 watts; GS-100 - 100 watts; GS-150 - 150 watts
Frequency Response:	
<i>Transformer Output</i> —	65Hz to 20KHz +0/-2dB @ -2dB
<i>Direct</i> —	20Hz to 20KHz,+0/-1dB @ rated power
Distortion:	
<i>Direct</i> —	0.5% (max.),0.3% (typ.),20Hz to 20KHz
<i>Transformer</i> —	0.5% (max.),0.3% (typ.),65Hz to 20KHz @ -2dB
Signal-to-Noise Ratio:	Fundamental:-94dB or better; Aux 1 & 2:-70dB; Tel:-70dB or better @ 600 ohms; Mic 1 - 6:-60dB or better @ 200 ohms
Inputs/Output:	Mic:6 balanced,Lo-Z,4 XLR connectors,2 screw terminal; Aux:2 RCA jacks; Telephone:screw terminals;Power Amp:RCA jack;Power In/Pre Out:2 RCA jacks WMT-1A:RCA jack;Tape Out:RCA jack
Output Impedance:	500/600 ohm line matching transformer (with WMT-1A accessory); All models:balanced or unbalanced 8-ohms,25V,25VCT,70V,100V,4-ohm direct
Output Regulation:	Better than 2dB from no load to full load
Variable Mute Range:	0dB to -30dB (Aux 1 & 2)
ALC:	Distortion - less than 0.5%; Compression - 25dB
VOX Threshold:	Input 20mV (VOX control max.CW position)
Mic Precedence:	Via terminal strip. -60dB: Mic 1,2,3,5/Tel,6/Aux,Aux 2
Preamp Out/Power Amp In:	In - 1V; Out - 1V
Controls:	<i>Front panel</i> — Mic 1 through 4,Mic 5/Tel,Mic 6/Aux 1,Aux 2; Master Volume; 10 EQ controls with Acoustic/Feedback switch; Aphex; Contour; Power. <i>Rear panel</i> — Phantom power; Aux 1/Mic 6; Mic 5/Aux 1; Lo-Cut,Link; Variable Mute; VOX; ALC; Aphex; Mic precedence connections,Remote volume +8dB @ 100Hz,+4dB @ 10KHz (Aux 1 & 2 control at 1/4 CW position)
Loudness Contour:	Type A9
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:	16.5"W x 3.5"H x 12"D All Models
Shipping Weight:	GS-35 - 19 lbs; GS-60 24 lbs.; GS-100 - 28 lbs.; GS-150 - 31 lbs.

Architects and Engineers Specifications

The amplifier shall be a model _____,rated at _____ watts RMS (insert GS-35/35 watts,Gs-60/60 watts,GS-100/100 watts or GS-150/150 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 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 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.

Outputs shall be provided for 4- and 8-ohm speakers and for 25V,25VCT,70V and 100V 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 WMT-1A). 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.



COMMUNICATIONS, INC.

50 Spring Street,P.O.Box 575,Ramsey,New Jersey 07446
(201) 934-8500 FAX: (201) 934-9832