

PUBLIC ADDRESS AMPLIFIERS

Gold Seal Series Amplifiers

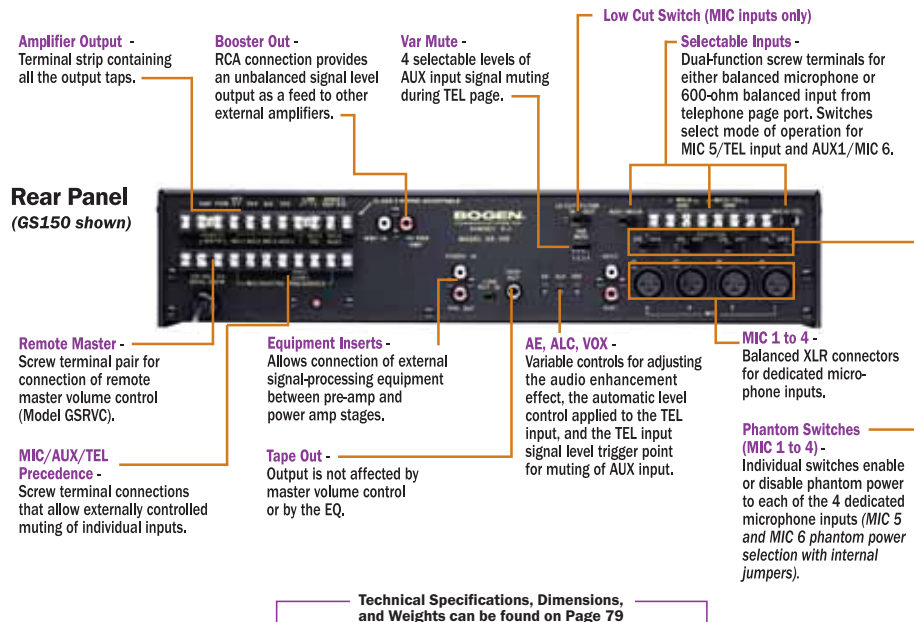
GS35, GS60, GS100, GS150, GS250



Gold Seal Series amplifiers were designed with the sound contractor in mind, offering professional performance and installation convenience. Each Gold Seal Series amplifier offers a unique combination of built-in features, ultra-high reliability, and extensive input flexibility and input options.

Product Features:

- 35-, 60-, 100-, 150-, and 250-watt models
- 7 inputs: 4 MIC (Lo-Z), 1 AUX (Hi-Z), 1 MIC/TEL, 1 MIC/AUX
- 4-ohm, 8-ohm, 25V, 25VCT, and 70V outputs
- Dual-function, 10-band graphic equalizer (acoustic EQ/feedback control)
- True loudness contour function
- Audio enhancement circuitry
- Automatic level control
- 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 connections
- Booster amp output connection
- Tape output connection
- Low Cut filter for MIC channels
- Thermal and overload protection
- 3-speed cooling fan (GS250 only)
- Rack-mountable w/accessory mounting kit (2 rack spaces)
- Listed to UL Standard 60065 for US and Canada



Accessories



Dual Band EQ

The unique dual-function equalizer can be used for acoustic shaping or for feedback control.

• **Acoustic Shaping** - Full range equalization is provided for correcting general frequency response issues that exist in the application venue. The full audio spectrum is covered on 1-octave centers with a boost/cut of 12 dB. In this mode, the equalizer can be used to compensate for room acoustics, or to satisfy the listening preference of the user.

• **Feedback Control** - In this mode, the equalizer's control range is reduced to cover only the lower half of the audio spectrum (where feedback howls occur), but the individual filters are now on closer 2/3-octave spacing. This allows narrower bands of frequencies to be controlled, which is particularly useful to reduce feedback of live sources that can increase the effective loudness the system can achieve.

Variable Music Mute

This feature allows control over the level of background music (fed though the AUX inputs) heard during a telephone page announcement. The convention used to be to completely mute background music during pages. The Gold Seal Series amplifiers provide full muting as well as no muting and intermediate attenuation levels of -10 dB and -21 dB. After the telephone page has ended, the background music smoothly fades back to its original level for a very professional sound.

Telephone Paging Control

Input 5 serves a dual function as either a balanced MIC input or a 600-ohm balanced telephone input. The TEL input includes both voice-activated triggering for muting the AUX inputs and automatic level control for providing constant paging level. ALC compensates for different voice levels and speaking styles of the individuals using the system. Controls are provided on the rear of the amplifier to adjust trigger threshold of the voice-activated muting so that it will not falsely trigger from noise on the input. An ALC adjustment is also provided to allow control over the amount of compression applied to loud signals to keep them at a nominal signal level.

Audio Enhancement

Crisp, clean, intelligible sound is the goal of every paging system. The audio enhancement circuit adds back the high frequency harmonics that are lost through the handsets and speakers. With one simple control, you can adjust the amount of high frequency content the audio enhancement circuit adds back until optimum intelligibility is reached.

AMPLIFIER FEATURES CHART

Amplifier Output Power Rating/ Channel	Model Numbers	Amp Channels	Input Types						Signal Processing						Music Muting				Night Ringer	Remote Volume	Output Meter	Mounting			Page Number								
			TEL Input [†] 600-ohm Balanced	MC Input [†] Lo-Z Balanced	AUX Input [†] Hi-Z Unbalanced	Balanced Inputs Hi-Z	Modular Inputs	Audio Enhancement	Loudness Contour	ALC	EQ	Bass/Treble	Tone Control	Variable Mute	Auto Mute	Manual Mute	Wall Mount	Shelf Mount				Rack Mount											
1.5W	GA2	1		1																												42	
5W	GAG	1		1																												42	
10W	C10	1	1	2 (1)	0 (1)																											42	
15W	TPU15A	1	1		1																											43	
20W	C20	1	1	2 (1)	0 (1)																											42	
35W	C35	1	1	2 (1)	1 (2)																											42	
35W	GS35	1	0 (1)	6 (4)	1 (2)																											41	
35W	TPU35B	1	1	1	1																											43	
35W	V35	1	1	1	1	8																										38	
60W	BPA60	1																															46
60W	C60	1	1	2 (1)	1 (2)																												42
60W	GS60	1	0 (1)	6 (4)	1 (2)																												41
60W	TPU60B	1	1	1	1																											43	
60W	V60	1	1	1	1	8																											38
100W	C100	1	1	2 (1)	1 (2)																												42
100W	GS100	1	0 (1)	6 (4)	1 (2)																												41
100W/60W/20W	PM3180	3	0 (1)	2 (1)	4																												47
100W	TPU100B	1	1	1	1																												43
100W	V100	1	1	1	1	8																											38
100W	WV100	1	1	1	1	8																											40
125W	HTA125A	1																															46
150W	GS150	1	0 (1)	6 (4)	1 (2)																												41
150W	V150	1	1	1	1	8																											38
150W	WV150	1	1	1	1	8																											40
250W	GS250	1	0 (1)	6 (4)	1 (2)																												41
250W	HTA250A	1																															46
250W	TPU250	1	1	1	1																												43
250W	V250	1	1	1	1	8																											38
250W	WV250	1	1	1	1	8																											40
300/600W	M300	2/1	1	1	1	2																											45
300W	X300	2																															44
450/900W	M450	2/1	1	1	1	2																											45
450W	X450	2																															44
600/1200W	M600	2/1	1	1	1	2																											45
600W	X600	2																															44

● Feature Included
 ● Features determined by type of module installed
 ● Balanced input available with accessory plug-in transformer (TL100 or TL600)
 ● Accessory kit required for mounting
 ● Contact closure activation only
 * Some inputs are switch selectable. The number in parentheses shows the maximum number of inputs when switched.
 † BALS balanced input module included standard; uses one modular input bay.
 Specifications subject to change without notice.

AMPLIFIER SPECS CHART

Model Numbers	Output Power Rating/Channel	Channels	Frequency Response*	Distortion**	Speaker Outputs	AC Line Draw***	Dimensions	Product Weight
BP460	60W	1	20 Hz to 20 kHz	2% Max	8-ohm/25V, 16-ohm, 25VCT, 70V	180W	15-1/4" W x 3-1/2" H x 8-1/4" D	17 lb.
C10	10W	1	70 Hz to 16 kHz	1% Max	70V, 25V, 16-ohm, 8-ohm, 4-ohm	38W	11-3/8" W x 2-7/8" H x 7-3/8" D	5 lb.
C20	20W	1	70 Hz to 16 kHz	1% Max	70V, 25V, 16-ohm, 8-ohm, 4-ohm	50W	11-3/8" W x 2-7/8" H x 7-3/8" D	6 lb.
C35	35W	1	70 Hz to 16 kHz - Transformer; 20 Hz to 20 kHz - Direct	1% Max	70V, 25V, 16-ohm, 4-ohm direct	85W	14-1/2" W x 3-3/4" H x 11" D	15 lb.
C60	60W	1	70 Hz to 16 kHz - Transformer; 20 Hz to 20 kHz - Direct	1% Max	8-ohm on C35 and C60	148W	14-1/2" W x 3-3/4" H x 11" D	17 lb.
C100	100W	1	200 Hz to 15 kHz	2% Max	8- & 600-ohm	220W	5-1/2" W x 4-1/8" H x 2-1/4" D	19 lb.
GA2	1.5W	1	30 Hz to 12 kHz	2% Max	70V, 25V, 8-ohm	4W	8-1/2" W x 2-3/4" H x 6" D	2 lb.
GA6A	6W	1	30 Hz to 12 kHz	2% Max	70V, 25V, 8-ohm	16W	8-1/2" W x 2-3/4" H x 6" D	5 lb.
GS35	35W	1	65 Hz to 20 kHz - Transformer; 20 Hz to 20 kHz - Direct	0.5% Max	70V, 25V, 25VCT, 8-ohm, 4-ohm direct	0.9A	16-1/2" W x 3-1/2" H x 13-1/2" D	17 lb.
GS60	60W	1	65 Hz to 20 kHz - Transformer; 20 Hz to 20 kHz - Direct	0.5% Max	70V, 25V, 25VCT, 8-ohm, 4-ohm direct	1.3A	16-1/2" W x 3-1/2" H x 13-1/2" D	20 lb.
GS100	100W	1	65 Hz to 20 kHz - Transformer; 20 Hz to 20 kHz - Direct	0.5% Max	70V, 25V, 25VCT, 8-ohm, 4-ohm direct	2.2A	16-1/2" W x 3-1/2" H x 13-1/2" D	23 lb.
GS150	150W	1	65 Hz to 20 kHz - Transformer; 20 Hz to 20 kHz - Direct	0.5% Max	70V, 25V, 25VCT, 8-ohm, 4-ohm direct	3.0A	16-1/2" W x 3-1/2" H x 13-1/2" D	29 lb.
GS250	250W	1	65 Hz to 20 kHz - Transformer; 20 Hz to 20 kHz - Direct	0.5% Max	70V, 25V, 25VCT, 8-ohm, 4-ohm direct	5.0A	16-1/2" W x 3-1/2" H x 13-1/2" D	30 lb.
HTA125A	125W	1	20 Hz to 20 kHz	0.5% Max	70V, 25VCT, 25V, 8-ohm, 4-ohm	260W	19" W x 5-1/4" H x 11" D	36 lb.
HTA250A	250W	1	20 Hz to 20 kHz	0.5% Max	70V, 25VCT, 25V, 8-ohm, 4-ohm	520W	19" W x 5-1/4" H x 11" D	50 lb.
M300	300/600W	2	20 Hz to 20 kHz	0.5% Max	4- to 8-ohm (2 channel mode); 70V (1 channel mode)	12A	17" W x 3-1/2" H x 18-1/2" D (not including brackets)	41 lb.
M450	450/900W	or 1	20 Hz to 20 kHz	0.5% Max	4- to 8-ohm (2 channel mode); 70V (1 channel mode)	15A	17" W x 3-1/2" H x 18-1/2" D (not including brackets)	44 lb.
M600	600/1200W	1	20 Hz to 20 kHz	0.5% Max	4- to 8-ohm (2 channel mode); 70V (1 channel mode)	20A	17" W x 3-1/2" H x 18-1/2" D (not including brackets)	46 lb.
PMS180	100W 60W 20W	3	70 Hz to 20 kHz - Trans (Amp 1 & 2); 70 Hz to 15 kHz - Trans (Amp 3); 20 Hz to 20 kHz - Direct (Amp 1 & 2); 20 Hz to 15 kHz - Direct (Amp 3)	0.5% - Amp 1 & 2; 1% - Amp 3 (Max)	70V, 25V, 8-ohm, 4-ohm direct	430W	17" W x 5-1/2" H x 12-1/2" D	38 lb.
TPU15A	15W	1	70 Hz to 12 kHz	2% Max	70V, 25V, 8-ohm	0.5A	11" W x 2-3/4" H x 2-3/8" D	4 lb.
TPU35B	35W	1	70 Hz to 12 kHz	2% Max	70V, 25V, 8-ohm	0.75A	11" W x 2-3/4" H x 2-3/8" D	12 lb.
TPU60B	60W	1	70 Hz to 15 kHz	1% Max	70V, 25V, 25VCT, 16-ohm	1.5A	14-1/4" W x 8-3/8" H x 3-5/8" D	15 lb.
TPU100B	100W	1	70 Hz to 15 kHz	1% Max	70V, 25V, 25VCT, 16-ohm	2A	14-1/4" W x 8-3/8" H x 3-5/8" D	18 lb.
TPU250	250W	1	70 Hz to 15 kHz	1% Max	70V, 25V	5A	19" W x 10-1/2" H x 3-7/8" D	28 lb.
V35	35W	1	45 Hz to 20 kHz - Transformer; 20 Hz to 20 kHz - Direct	0.5% - Transformer; 0.1% - Direct (Max)	70V, 25V, 8-ohm, 4-ohm direct	0.6A	17" W x 3-1/2" H x 14-3/4" D	22 lb.
V60	60W	1	45 Hz to 20 kHz - Transformer; 20 Hz to 20 kHz - Direct	0.5% - Transformer; 0.1% - Direct (Max)	70V, 25V, 8-ohm, 4-ohm direct	1.3A	17" W x 3-1/2" H x 14-3/4" D	26 lb.
V100	100W	1	45 Hz to 20 kHz - Transformer; 20 Hz to 20 kHz - Direct	0.5% - Transformer; 0.1% - Direct (Max)	70V, 25V, 8-ohm, 4-ohm direct	2.0A	17" W x 3-1/2" H x 14-3/4" D	28 lb.
V150	150W	1	45 Hz to 20 kHz - Transformer; 20 Hz to 20 kHz - Direct	0.5% - Transformer; 0.1% - Direct (Max)	70V, 25V, 8-ohm, 4-ohm direct	3.5A	17" W x 3-1/2" H x 14-3/4" D	31 lb.
V250	250W	1	45 Hz to 20 kHz - Transformer; 20 Hz to 20 kHz - Direct	0.5% - Transformer; 0.1% - Direct (Max)	70V, 25V, 8-ohm, 4-ohm direct	5.5A	17" W x 3-1/2" H x 14-3/4" D	32 lb.
WV100	100W	1	20 Hz to 20 kHz	0.5% Max	70V direct	2.0A	14-1/8" W x 21" H	27 lb.
WV150	150W	1	20 Hz to 20 kHz	0.5% Max	70V direct	3.5A	14-1/8" W x 21" H	29 lb.
WV250	250W	1	20 Hz to 20 kHz	0.5% Max	70V direct	5.5A	14-1/8" W x 21" H	28 lb.
X300	300W	2	20 Hz to 20 kHz	0.5% Max	70V direct	12A	17" W x 3-1/2" H x 18-1/4" D (not including brackets)	41 lb.
X450	450W	2	20 Hz to 20 kHz	0.5% Max	70V direct	15A	17" W x 3-1/2" H x 18-1/4" D (not including brackets)	44 lb.
X600	600W	2	20 Hz to 20 kHz	0.5% Max	70V direct	20A	17" W x 3-1/2" H x 18-1/4" D (not including brackets)	46 lb.

* @ -240 FRP Transformer output;
@ FRP for Direct outputs

** Bandwidth limited to frequency response

*** FRP @ 120V AC line voltage

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