

# Classic Series Public Address Amplifiers

**Models  
C35, C60 & C100**



## Features

- UL and CSA listed
- Balanced, low-impedance microphone inputs; high-impedance auxiliary input
- Front-panel switch permits 2 MIC/1 AUX or 1 MIC/2 AUX operation
- Microphone precedence over AUX 2 input
- Tel input for telephone paging applications
- Provision to drive tape recorder, booster amplifier, 500/600 ohm telephone line

## Description

The Bogen Classic Series Models C35 and C60 and C100 are the latest evolution of the long line of popular "C" series of amplifiers from Bogen Communications. They surpass previous models in both performance and flexibility, and include new features and sleek 1990's styling. The C35 is rated at 35 watts, the C60 is rated at 60 watts and the C100 is rated at 100 watts. All three models are UL and CSA listed.

The Classic Series amplifiers accommodate up to four inputs: two low-impedance balanced microphones, one high-impedance auxiliary source, and input from a telephone line, **or** one microphone, two auxiliary sources and one telephone input. A front panel selector switch is used to select either MIC 2 or AUX 1 input. Built-in circuitry provides microphone precedence over the AUX 2 input when a customer-supplied SPST normally-open switch is actuated.

Each channel (MIC, AUX, TEL) is equipped with its own volume control. TREBLE and BASS controls are also included to adjust tonal balance of the amplifier output.

Output screw terminals are provided for 8-, and 16-ohm balanced and 4-ohm unbalanced systems, and also for 25-volt and 70-volt constant voltage systems. Output jacks let you patch in a tape recorder or an additional booster amplifier, or feed a 500/600-ohm telephone line when an accessory transformer (Model WMT-1A) is used.

The Classic Series amplifiers are designed with all-silicon semiconductors, advanced complementary transistor circuitry to assure highest reliability of power transistors, and special circuit protection against heat build-up, overload, or short circuits.

The Model RPK-50 Rack Mounting Kit is available optionally to mount the amplifiers in a standard 19-inch equipment rack.

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## Technical Specifications

<b>Power Output:</b>	
C35 –	35W RMS
C60 –	60W RMS
C100 –	100W RMS
<b>Distortion:</b>	Less than 1%, 70Hz to 16KHz @ -2dB
<b>Frequency Response:</b>	
Transformer –	70Hz to 16KHz $\pm 2$ dB @ 2dB
4-Ohm Direct Output –	20Hz to 20KHz $\pm 1$ dB
<b>Hum and Noise:</b>	
MIC –	55dB below rated output
AUX –	70dB below rated output
<b>Input Sensitivity:</b>	
MIC Lo-Z Balanced –	600 $\mu$ V
AUX –	85mV
<b>Outputs:</b>	8, 16 ohms, 25V, 70V balanced; 4-ohms unbalanced
<b>Output Connections:</b>	Screw terminal strip, TAPE/BOOSTER jack; WMT-1A jack (requires accessory transformer)
<b>Input Connections:</b>	Screw terminals for MIC and TEL, two AUX Hi-Z jacks,
<b>Controls:</b>	MIC 1, MIC2/AUX (switch selected), AUX 2, BASS, TREBLE
<b>Tone Control:</b>	Treble, $\pm 11$ dB @ 10KHz; Bass $\pm 11$ dB @ 100KHz
<b>Power Requirements:</b>	120V AC, 60Hz
C35 –	85 watts
C60 –	148 watts
C100 –	220 watts
<b>Dimensions:</b>	14-1/2"W x 3-3/4"H x 11"D
<b>Shipping Weight:</b>	
C35 –	15 lbs.
C60 –	18 lbs.
C100 –	20 lbs.

## Architects and Engineers Specifications

The public address amplifier shall be a Bogen Model \_\_\_\_\_, or approved equivalent, with a full power rating of \_\_\_\_\_ watts. (Specify: C35/35 watts, C60/60 watts or C100/100 watts.) The frequency response (transformer) shall be 70Hz to 16KHz  $\pm 2$ dB @ 2dB, with less than 1% distortion 70Hz to 16KHz @ -2dB. Input sensitivity shall be 600 $\mu$ V for low-impedance balanced microphones, and 85mV for auxiliary inputs. Hum and noise shall be 55dB below rated output for the MIC inputs, and 70dB below rated output for the AUX input.

The amplifier shall provide two low-impedance balanced microphone inputs, two Hi-Z auxiliary inputs, and one telephone line input. Active mixing of the inputs (2 MIC/1 AUX plus TEL, or 1 MIC/2 AUX, plus TEL) shall be provided. A switch shall be provided to select either the MIC 2 or AUX 1 input.

The microphone inputs shall be equipped with filters to protect against RF interference. Independent volume controls for each input as well as TREBLE control ( $\pm 11$ dB @ 10KHz) and BASS control ( $\pm 11$ dB @ 100Hz) shall be incorporated. A precedence circuit shall mute the AUX 2 input when a customer-supplied switch is actuated.

The amplifier shall provide output impedances of 4, 8, and 16 ohm speaker systems as well as for 25V and 70V constant voltage systems. Two high-impedance outputs shall be provided to drive a tape recorder or booster amplifier and, when used with an accessory transformer, to feed a 500/600-ohm telephone line.

The amplifier shall contain a resettable thermostat in the power transformer to protect against heat build-up and short circuited or overloaded connections.

Provision shall be included to mount the amplifier in 19-inch equipment racks, using an optional rack panel kit (Bogen Model RPK-50). Dimensions shall be 14-1/2"W x 3-3/4"H x 11"D. Shipping weight shall be \_\_\_\_\_ lbs. (Insert 15 lbs. for C35, 18 lbs. for C60 or 20 lbs. for C100.)

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