

# Classic Series Public Address Amplifiers

## Models C35, C60 & C100



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### Description

The Bogen Classic Series Models C35, C60, and C100 are public address mixer amplifiers that provide mixing of microphones, telephone, and auxiliary sources.

Output screw terminals are provided for 4-ohm (direct) and 8-ohm, 16-ohm, 25V and 70V (transformer-coupled) speaker systems. Output jacks let you connect to a tape recorder or an additional booster amplifier, or feed a 600-ohm telephone line when an accessory transformer (Model WMT1A) is used.

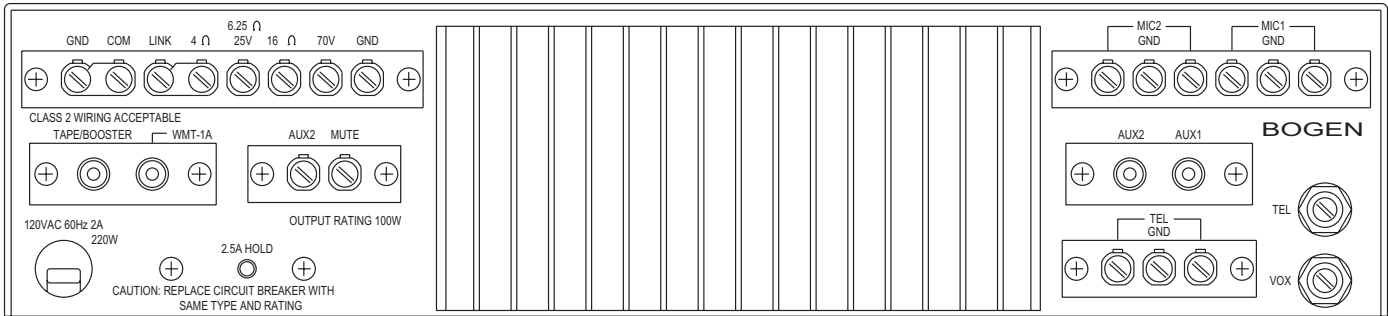
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### Features

- 3 models: 35, 60, and 100 watts
- 4 inputs: 1 MIC (Lo-Z), 1 AUX (Hi-Z), 1 TEL, plus 1 selectable MIC or AUX
- Each input controlled by an independent volume control
- Treble and bass controls
- AUX muting by external contact closure for push-to-talk mic's
- Tel input for telephone paging applications
- TEL input voice-activated (VOX) mute over AUX input
- Variable threshold for TEL input voice-activated AUX mute
- Audio output for tape recorder or booster amplifier
- Outputs for 4-ohm (direct), 8-ohm, and 16-ohm, 25V and 70V speaker systems (transformer coupled)
- Output jack to connect a tape recorder or booster amplifier
- Output jack to connect a general-purpose 600-ohm matching transformer (model WMT1A)
- Thermal protection and electronic shutdown
- Rack mountable with accessory mounting kit (model RPK50)
- UL and CSA listed

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Specifications subject to change without notice.  
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## Technical Specifications

**Power Output (RMS):** C35    C60    C100  
 Rated                    35W    60W    100W

### Frequency Response & Distortion:

Transformer† –                    70 - 16 kHz (± 2 dB) @ 1% max.  
 4-Ohm Direct Output –        20 - 20 kHz (± 1 dB) @ 0.5% max.

### Hum and Noise:

MIC                                    55 dB below rated output  
 AUX                                    70 dB below rated output  
 TEL                                    70 dB below rated output

### Input Sensitivity:

MIC Lo-Z Balanced –            600µV  
 AUX –                                    85mV  
 TEL –                                    75mV

### Outputs:

8, 16 ohms, 25V, 70V transformer-isolated balanced or unbalanced;  
 4 ohms direct unbalanced

**Output Connections:** Screw terminal strip, TAPE/BOOSTER jack; WMT1A jack (requires accessory transformer)

**Input Connections:** Screw terminals for MIC and TEL, two AUX Hi-Z jacks

**Controls:** MIC1, MIC2/AUX (switch selected), AUX 2, BASS, TREBLE, TEL, VOX

**Tone Control:** Treble, ±11 dB @ 10 kHz;  
 Bass ±11 dB @ 100 Hz

**Power Requirements:** 120V AC, 60 Hz  
 C35 - 85W; C60 - 148W;  
 C100 - 220W

**Dimensions:** 14-1/2" W x 3-3/4" H x 11" D

**Shipping Weight:** C35 - 16 lb; C60 - 18 lb;  
 C100 - 20 lb.

## Architect and Engineer 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 70 Hz to 16 kHz ±2 dB†, with less than 1% distortion†. Input sensitivity shall be 600µV for low-impedance balanced microphones, 85mV for auxiliary inputs, and 75mV for TEL input. Hum and noise shall be 55 dB below rated output for the MIC inputs and 70 dB below rated output for the AUX and TEL inputs.

The amplifier shall provide one dedicated low-impedance balanced microphone input, one dedicated Hi-Z auxiliary input, and one dedicated telephone line input, as well as a fourth input that is switch selectable to be either a microphone or auxiliary 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 (±11 dB @ 10 kHz) and BASS control (±11 dB @ 100 Hz) shall be incorporated. A precedence circuit shall mute the AUX 2 input when a customer-supplied external switch is actuated.

The amplifier shall include a TEL volume control to adjust the telephone paging level and a VOX volume control to adjust the TEL input signal level trigger point for automatic muting of the AUX inputs.

The amplifier shall provide output impedances of 4- (direct), 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 (WMT1A), to feed a 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 (Model RPK50). Dimensions shall be 14-1/2" W x 3-3/4" H x 11" D. Shipping weight shall be \_\_\_\_\_ lb. (Insert 16 lb. for C35, 18 lb. for C60 or 20 lb. for C100.)

† Measured @ 2 dB below FRP

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