

Multi-Graphic® Channel B Control Panel



Model MCP-B

Features

- Adds a second program channel to Bogen Series 2233 Communication systems
- Provides in/out for two microphones and an auxiliary program source
- Selective monitoring of A or B channel
- Matches the color-coded operating system for Bogen Multi-Graphic equipment
- UL listed

Description

The Bogen Model MCP-B is a program control panel designed to operate with Bogen Series 2233 Centralized School Sound Systems. It includes input and preamplification facilities, as well as monitoring control, for a separately amplified program channel (Channel B). The panel is used in conjunction with the MCP35A Master Control Panel (which provides the Channel A program facilities), the SBA325 room selector and annunciator panels (used to distribute A and B programs to selected speakers), and a separate amplifier. The MCP-B panel permits the distribution of a variety of (Channel B) program and microphone material to selected loudspeakers, with simultaneous distribution of a different (Channel A) program to selected loudspeakers from the MCP35A.

The MCP-B includes inputs for two Lo-Z microphones and an auxiliary program source (e.g., cassette-tape player, tuner, etc.). Rear panel mounted input gain controls are provided to adjust the input level of each program source. Phantom power is available for the microphone inputs, selectable with a printed circuit board jumper. Optional MCP-EXP panels may be used to provide up to eight (8) additional MIC and/or AUX inputs per panel.

Selection of the Channel B program source is by simple push-button operation, following the color-coded guidelines. A two-position switch (MONITOR A/B) allows selective monitoring of either program channel through the built-in monitor speaker on the MCP35A control panel. A level control and LED meter are provided to adjust and visually monitor the level.

A special All-Call feature overrides the Channel B buss when the MCP35A is used to make emergency announcements, telephone pages, or All-Call announcements.

The MCP-B pre-amplifier circuitry features a frequency response that is shaped for maximum intelligibility. Distortion is less than 1% at rated power and bandwidth. The signal-to-noise ratio is 60 dB below rated output on the microphone channels and 80 dB below rated output on the auxiliary channel.

Interconnection with the MCP35A, SBA325 room selector panels and program B amplifier is quickly and easily accomplished. A line level output and 25V balanced input are provided for quick connection with any standard Bogen amplifier.

ENGINEERED SYSTEMS
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Technical Specifications

Rated Output:

B Program —
1.8V into Hi-Z load (line out to booster)
Note: The output is unbalanced; nominal output impedance is 5.6 kilohms

Frequency Response (at rated output):

B Program —
Mic Inputs: Shaped for maximum intelligibility (-3 dB points at 300 Hz and 15 kHz)
Aux Input: +1/-3 dB from 80 Hz to 15 kHz

Distortion: Less than 1% at rated power and bandwidth

Input Sensitivity:

B Program —
Mic Inputs: 300 μ V balanced Lo-Z for rated output
Aux Input: 100mV unbalanced Hi-Z for rated output

Signal-to-Noise Ratio:

B Program —
Mic Inputs: 60 dB below rated output
Aux Input: 80 dB below rated output

Controls/Indicators:

Input Gain (rear panel) — Adjusts input gain for MIC 1, MIC 2, AUX

Program selection — MIC 1, MIC 2, AUX Monitor — Two-position switch selects program channel for monitoring from MCP35A (Program A/Program B)

Program — Adjusts level of Program B channel
Program Level — LED indicators (N - normal, P - peak, O - overload)

Dimensions: 19" W x 1-³/₄" H x 10" D

Accessory Equipment: MCP-EXP Input expander panel

Architect & Engineer Specifications

The "B" program channel shall be controlled from the Bogen Model MCP-B, Master Control Panel - Channel B, or approved equivalent. In accordance with the operating method of the MCP35A-based system, the MCP-B panel shall provide simple push-button operation, with instructions and color-coded guides printed on the front panel.

The MCP-B panel shall have input facilities for two Lo-Z balanced microphones, and one auxiliary program source. Input gain controls shall be provided for each input and shall be mounted on the rear panel. Phantom power shall be provided for condenser microphones, selectable with a printed circuit board jumper. The use of optional MCP-EXP panels shall provide up to eight (8) additional MIC and/or AUX inputs per panel.

The frequency response of the microphone channels shall be shaped for maximum intelligibility. The frequency response of the auxiliary channel shall be within +1/-3 dB from 80 Hz to 15 kHz. Total harmonic distortion shall be less than 1% at rated power and bandwidth.

A line level output shall be provided for connection to an amplifier. The rated output shall be 1.8V into a Hi-Z load. The output shall be unbalanced with a nominal output impedance of 5.6 kilohms.

The MCP-B shall be designed so that All-Call, telephone pages, and emergency announcements from the MCP35A override the B channel and connect the output from the A channel amplifier to the B channel buss.

Input selection push buttons shall be provided for MIC1, MIC 2, and AUX channels. A two-position switch, labeled MONITOR A/B shall be provided, and shall selectively connect the A channel or B channel to the monitor speaker of the MCP35A, for program monitoring. A control, labeled PROGRAM, shall be provided to adjust the level of the B program. Three LEDs - labeled N (normal), P (peak), and O (overload) - shall be provided for visual monitoring of the program level.

The MCP-B shall derive its power from the MCP35A panel. Connection to associated equipment shall be easily accomplished and shall require a minimum of wiring. Two connector cables shall be provided to interconnect the MCP-B panel with the associated Bogen Model MCP35A Master Control Panel and Bogen Model SBA-325 room selector and annunciator panels.

The MCP-B panel shall have overall measurements of 19" W x 1-³/₄" H x 10" D and shall include flanges for rack-mounted installation.