

# Multi-Graphic<sup>®</sup> Desktop Control Center

## Model SI35A



**Description** The SI35A provides fast, reliable, and efficient intercommunication and tone signalling in small to medium-sized schools. The SI35A provides a 20-watt intercom amplifier to permit instant intercommunication with any speaker-equipped location, and a separate 35-watt program amplifier for simultaneous distribution of program material to other rooms or locations. The system also features an emergency page capability for emergency announcements to all stations at once.

The SI35A provides complete facilities for distributing a variety of program materials from optional equipment such as microphones, CD player-AM/FM receiver, or other background music source. Selection of program material, as well as its distribution to selected rooms is accomplished with simple push-button program selection and by following the color-coded guidelines.

- Features**
- Cost-effective communication for 25 to 75 rooms
  - Can be furnished with 1, 2 or 3 room selector panels (each with 25 switches), to accommodate up to 25, 50, or 75 rooms (model SBA225)
  - Step-by-step instructions and color-coded guidelines for easy operation
  - Instant Emergency and All Rooms announcements
  - Remote emergency paging capabilities
  - 20-watt intercom; separate 35-watt program channel
  - Provision for time signalling, telco and voice call-in
  - Aural and visual monitoring of program material, as well as level controls
  - Transmit a time tone for classroom change, etc.
  - Emergency All-Call with a single push-button
  - Emergency announcements take precedence over all system functions and are transmitted at a predetermined level
  - Emergency paging from a remote telephone or microphone
  - Teachers converse hands-free with the control center operator over their individual classroom speaker
  - Calls to staff locations are announced by a supervisory tone signal, which repeats at regular intervals to indicate that the channel is open and the room is being monitored
  - Classrooms can be equipped with call-in switches to call the control center, with options for privacy to voice call-in
  - A CD player-AM/FM receiver can be installed when system capacity does not exceed 50 stations
  - Sturdy desktop cabinet finished in an attractive simulated wood grain finish

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Specifications subject to change without notice.

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**Architect and  
Engineer  
Specifications**

The school communication Control Center shall be a Bogen Model SI35A, or approved equivalent. The Control Center shall be engineered for optimum simplicity of operation, made possible by the use of function-identified push buttons with associated color-coded guidelines, and supported by step-by-step instructions printed on the front panel.

Communication Control Centers, which are difficult to operate and do not provide push-button operation, color-coded guidelines, and operating instructions permanently printed on the panels shall not be considered. The Control Center shall provide at least the following features and functions:

1. Direct two-way voice communication between the Control Center and any classroom or speaker-equipped location, with simultaneous distribution of program material or voice announcements to any other classroom or location.
2. Distribution of voice announcements from the Control Center to any or all speakers.
3. Facilities for automatically sounding a supervisory tone signal over any loudspeaker selected for two-way communication, to alert the teacher to the call, and to prevent unauthorized monitoring. The tone signal shall sound whenever the classroom is being monitored and shall repeat at regular intervals.
4. Distribution of program material to any or all classrooms.
5. Ability to transmit a program or announcement simultaneously to all classrooms by simple operation of a program source push button and the All Rooms push button.
6. Separate inputs for two low-impedance balanced microphones and one high-impedance auxiliary program source (CD player/tuner, etc.). Program source selection shall be accomplished by simply pressing the appropriately labeled push button.
7. Aural and visual monitoring of all program material.
8. Facilities for voice call origination to the Control Center from any classroom equipped with a voice call origination switch.
9. Facilities for annunciator call-in to the Control Center from any classroom equipped with a call origination switch. (Note: Specify Bogen CA10A Call Switch for this feature.)
10. Facilities to positively prevent the Control Center from monitoring any classroom whose call origination switch is in the Privacy position. (Note: Specify Bogen CA11A Call/Privacy Switch for this feature.)

11. Provision for the instantaneous distribution of emergency messages from the Control Center to all locations equipped with loudspeakers, simply by pressing a single, red push button. This action shall override all other programs and bypass all other controls. The emergency message shall be transmitted at a predetermined level.

12. Provision for an optional emergency page feature which shall permit emergency announcements from a remote telephone or microphone to all locations equipped with loudspeakers.

13. Classroom call origination with light annunciation and tone signal at the Control Center. Call origination shall require only a momentary depression of the call-origination switch, which shall activate a repetitive tone signal and light the annunciator lamp associated with the calling classroom. The annunciator lamp shall remain lit until the call is answered and then be automatically cancelled.

14. Provision to optionally distribute a classroom change signal to all speaker-equipped stations.

15. Functionally-identified push buttons and color-coded guidelines for each function of the Control Center. The intercom channel shall be identified by green guidelines. The program channel shall be identified by amber guidelines. The emergency page push button shall be red.

16. Provision to include an optional CD player-AM/FM tuner. (Note: Specify Bogen Model CDR1.)

To fulfill the above requirements, a Bogen Model SI35A, or approved equivalent Control Center shall be used, meeting the following technical requirements:

It shall be designed for continuous duty service in institutional and industrial applications on line voltages of 120 volts, 60 Hz AC, over a temperature range of 0°F to 130°F. Power consumption of the MCP35A control panel, at rated output, shall not exceed 100 watts.

It shall include two separate amplifiers. The program amplifier shall be capable of producing 35 watts RMS at less than 1% distortion at rated power and bandwidth. The frequency response shall be within +1, -3 dB from 80 Hz to 15 kHz. The intercom amplifier shall have an output rating of 20 watts RMS; frequency response shall be shaped for maximum intelligibility. Both amplifiers shall have a balanced 25-volt line output.

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**Architect and  
Engineer  
Specifications  
(continued)**

It shall include inputs for two Lo-Z balanced microphones, one Hi-Z unbalanced AUX input, telephone paging accessories, and booster amplifier. Terminals shall be provided for the time signalling and telco page (activation) features.

It shall provide all controls necessary for two-way intercom communication with any classroom, distribution of general announcements or program material to any or all classrooms, and transmission of emergency announcements to all classrooms. Provisions shall be included for optional emergency paging from a remote telephone or microphone.

Complete facilities for aural (monitor speaker) and visual (LED) monitoring of all program material shall be provided.

It shall include three-position (Program, Off, Intercom) room selector switches and associated LEDs, and Press To Talk, All-Call, and Emergency Page push buttons. The Emergency switch shall gather all station lines to permit single push-button distribution of announcements to all speaker locations. Similarly, the All Rooms switch shall

permit single push-button distribution of program material to all speaker locations, except for those on the intercom channel.

It shall include facilities for voice-call origination from classrooms and for selective classroom privacy; the latter shall prevent the Control Center from monitoring any classroom whose call origination switch is in the Privacy position.

The Control Center shall measure 20-1/2" W x 12" H x 11" D (with sloped top). The cabinet shall be constructed of sturdy material and finished in simulated wood grain finish; control panels shall be finished in black. Product weight shall be 29 lb.

(Also include all program source equipment, classroom loudspeakers, call origination switches, and other associated material, hardware and cable required.)

The system shall be supplied or installed by or under the direct supervision of an authorized local distributor who has been trained by the manufacturer in the proper installation, operation, and service of the equipment.

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**Technical  
Specifications**

<b>Rated Output:</b>	<i>Program</i> – 35WRMS <i>Intercom</i> – 20WRMS
<b>Frequency Response:</b>	<i>Program</i> – +1, -3 dB from 80 Hz to 15 kHz <i>Intercom</i> – Shaped for maximum intelligibility
<b>Distortion:</b>	Less than 1% at rated power and bandwidth
<b>Inputs:</b>	Two Lo-Z balanced MIC; Hi-Z unbalanced AUX; Telco Page; 25V Booster
<b>Output:</b>	25V Balanced line, Line Out to Booster
<b>Phantom Power:</b>	15V DC
<b>Input Sensitivity:</b> (for rated output)	<i>Program</i> – MIC Input: 300 $\mu$ V balanced Lo-Z; AUX: 100mV unbalanced Hi-Z Telco Page: 100mV unbalanced Hi-Z; <i>Intercom</i> – Listen Mode: 300 $\mu$ V balanced Lo-Z (Console MIC: 1mV unbalanced Lo-Z)
<b>Controls:</b>	<i>Front Panel</i> – Program Selection: MIC 1, MIC 2, AUX; Level: Monitor/ Listen, Program; Distribution: All Rooms, Emergency, Press To Talk; Indicators: Program Talk/ Level LED <i>Rear Panel</i> – Input Gain: MIC 1, MIC 2, AUX, Telco Page, Talk, Listen <i>Internal</i> – Gain: Emergency Page, Supervisory Tone, Time Tone Enable/Disable: MIC 1/Console MIC; MIC 2/Telco Page, Phantom Power, Supervisory Tone, MIC 1/Monitor Mute
<b>Tone Specifications:</b>	<i>Time Tone</i> – 750 Hz <i>Supervisory Tone</i> – Repeating, 500 Hz <i>Call-in Tone</i> – Repeating; oscillates between 500 Hz and 750 Hz (Switching Freq., 16 Hz)
<b>Power Requirements:</b>	120V AC, 60 Hz, 100W maximum
<b>Dimensions:</b>	20-1/2" W x 12" H x 11" D (with sloped top)
<b>Cabinet:</b>	Simulated wood grain finish
<b>Panels:</b>	Black with color-coded lines and instructions for Intercom, Program, Emergency Page
<b>Product Weight:</b>	29 lb.
<b>Operating Temp.:</b>	0-130° F
<b>Accessory Equipment:</b>	CDR1 – CD player and AM/FM Receiver SCR25A – Call-in module (for switches w/o SCR) SBA225 – Three-Channel (Program A, Off 0, Intercom C), 25-Station Switchbank WMT1A – Line-matching transformer for telephone paging TAMB2 – Telephone access module for telephone paging DDU250, MBS1000A – Desktop paging microphones CA10A, CA11A, CA17 – Call-in switches (2-pos., 3-pos., and push-button, respectively) TWK351 – 2-Wire call-in adapter kit 2518, 2520, 2522 – Connector Kits (18-, 20-, and 22-gauge respectively) TL156 – Insertion Tool for connector kits

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