

# Modular Lectern Array Models MLA40, MLA40T (Top)

**Instruction Manual** 



#### **Notice**

Every effort was made to ensure that the information in this guide was complete and accurate at the time of printing. However, this information is subject to change.

#### **Important Safety Information**

Always follow these basic safety precautions when installing and using the unit:

- 1. Read all instructions.
- 2. Follow all warnings and instructions marked on the product.
- DO NOT block or cover the ventilation slots and openings. They prevent the product from overheating.
  DO NOT place the product in a separate enclosure or cabinet, unless proper ventilation is provided.
- 4. Never spill liquid on the product or drop objects into the ventilation slots and openings. Doing so may result in serious damage to the components.
- 5. Repair or service must be performed by a factory authorized repair facility.
- The product is provided with a UL-CSA approved, 3-wire ground type plug. This is a safety feature. DO NOT defeat the safety purpose of the grounding type plug. DO NOT staple or otherwise attach the AC power supply cord to building surfaces.
- 7. DO NOT use the product near water or in a wet or damp place (such as a wet basement).
- 8. DO NOT use extension cords. The product must be installed within 6 feet of a grounded outlet receptacle.
- DO NOT install telephone wiring during a lightning storm.
- 10. DO NOT install telephone jacks in a wet location unless the jack is specifically designed for wet locations.
- Never touch uninsulated wires or terminals, unless the line has been disconnected at the paging or controller interface.
- Use caution when installing or modifying paging or control lines.

#### **Maintenance & Service**

#### Caution

There are no user-serviceable parts within the unit. Have all internal servicing performed by a qualified technician. The warranty will become void if repairs are made by other than the Bogen Service Department or an authorized service agency.

Our Applications Engineering Department is available to help you troubleshoot problems with your Bogen equipment. Engineers are available from 8:30 AM to 6:00 PM, Eastern Standard Time. Phone 1-800-999-2809.

Service can be obtained from our factory service department. No merchandise may be returned for repair without prior written authorization. Please contact our factory service department at 1-800-999-2809 for a RA number. Only merchandise specified in the return authorization form can be returned to obtain warranty or non-warranty repair. When shipping your unit, pack your system well using the original shipping carton or a similar container and filler material to prevent damage in transit. Send the unit fully insured and prepaid via UPS or other responsible carrier.

**Domestic and International Listings** UL and CSA Listed.

### Introduction

Bogen's MLA lecterns represent an innovative approach to podium and table-top lectern design. The multi-speaker array concept offers wider horizontal dispersion than traditional podium style lecterns. The modular design ensures flexibility. Performance advantages make it well suited for demanding applications in schools, churches, hotel and rental situations.

Please take the time to read the instructions. You will receive the greatest benefit if you understand how the system operates.

# **System Overview**

The MLA40 consists of two modular components: the table-top portion and the podium base.

The MLA40T is a table-top only lectern.

The MLA40 contains the amplifier and a 2 speaker array.

The podium base contains a 4 speaker array. It connects electrically to the MLA40T table-top section. The MLA40T consists of the amplifier and a 2-speaker array. Note: The MLA40 can be unassembled so that it can also be used as a table-top only lectern, when needed. The amplifier is specifically designed to meet virtually all applications needs.

#### It includes:

- 2 microphone inputs (Mic I and Lectern Mic)
- · Aux input for a music source
- Tape out to a tape recorder or secondary amplifier
- Phantom power (DC power for certain types of microphones)
- Automatic Level Control (ALC)
- Speech filter (reduces low-frequency feedback)
- Bass and Treble controls
- Switched and unswitched outputs for external systems.

The product is shipped unassembled. Before attempting to assemble or operate the system, please read through these instructions to familiarize yourself with the unit.

# **Assembly**

Begin assembly by removing contents from cartons. Handle all parts carefully to avoid damage to finished surfaces.

Carton 1 Contents (MLA40T/Top for table-top version, this is the only carton you will receive.):

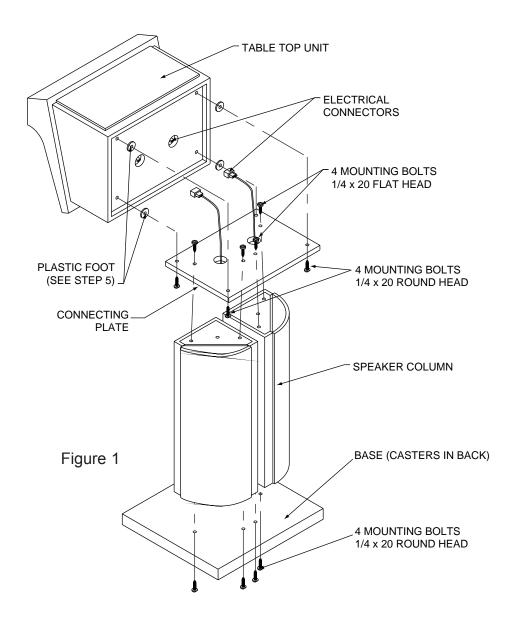
- MLA40T lectern top section
- Gooseneck microphone
- Power cords (2)
- 4 plastic feet
- 4 Mounting bolts (1/4" x 20, round head)
- · Instruction manual

#### Carton 2 Contents (MLA40B/Base):

- · Base with casters
- Speaker column
- Connecting plate
- 4 round head bolts (1/4" x 20)
- 4 flat head bolts (1/4" x 20)

Follow the instructions below and refer to Figure 1 to assemble the lectern.

- 1. Attach the column(s) to the base plate using 4 round head mounting bolts. The casters go toward the rear of the assembly.
- 2. Attach the connecting plate to the top of the speaker columns with 4 flat head bolts. Make sure the electrical connectors pass through the connecting plates and are not crimped or pinched.
- 3. Connect the electrical connectors from the column into the jacks on the underside of the tabletop portion.
- 4. Set the table top section onto the connecting plate and secure with 4 round head bolts.
- 5. If using the MLA40 tabletop section alone or the MLA40T, attach the 4 plastic feet to the underside of the tabletop using the 4 round head bolts.



# **Operation**

### **Install Lectern Microphone**

The gooseneck lectern microphone plugs into the three-pin receptacle located on the top of the lectern.

#### **Connect Power**

Use the power cord supplied. Plug one end of the cord into the receptacle on the lectern labeled AC LINE INPUT. Plug the other end of the cord into a properly grounded three-wire AC receptacle.

**Caution:** For safe operation, it is important to ground the amplifier properly. Do not attempt to defeat the grounding pin of the 3-wire plug. If you use a "pigtail" adapter to connect the plug to a two-wire outlet, you must ensure that the adapter is connected properly and that the outlet is properly grounded.

#### **Apply Power**

- 1. Rotate the MIC and LECTERN MIC controls to their full counterclockwise positions.
- 2. Place the POWER switch in the ON (illuminated) position.

#### Adjust Volume, Bass and Treble

While speaking into the lectern gooseneck microphone, rotate the LECTERN MIC control to a comfortable listening level. Rotate the BASS and TREBLE controls as necessary to enhance audio output.

#### **Adjusting Reading Lamp**

The lamp is controlled by the amplifier POWER switch. Use the switch on the lamp line cord to set the lamp to always on or always off.

# **Additional Amplifier Functions**

#### **Install Additional Microphone**

The lectern amplifier supports an external microphone. Plug the additional microphone into the 3-pin receptacle labeled MIC 1. Use the MIC 1 control to adjust the level.

#### **Aux Input**

The lectern amplifier can accommodate input from an auxiliary (music) source, such as a cassette deck. Connect the source via a mono RCA plug to the jack labeled AUX. Use the AUX control to adjust the level.

#### **Tape Out**

The lectern amplifier includes a Tape Out jack to permit recording. Connect a tape recorder using an RCA plug to the jack labeled TAPE OUT. Note that the level at this output is not affected by the volume controls.

#### **Phantom Power**

The lectern provides phantom power to condenser microphones. When shipped from the factory, phantom power is enabled. To turn off phantom power, use a phillips head screwdriver to remove the locking tab(s) from the switches labeled PHANTOM. Place the switch in the OFF position. Replace the locking tab(s) to lock the switch in place.

#### **Speech Filter**

The Speech Filter can be used to reduce low-frequency feedback, most often caused by speaking too close to the microphone. Place the switch labeled SPEECH FILTER in the ON position to enable the filter. Place the switch in the OFF position to bypass the filter.

#### **ALC**

The Automatic Level Control keeps the amplifier output constant when different people use the system. Place the switch labeled ALC in the IN position to enable the circuit. Place the switch in the OUT position to bypass the circuit. You should set the volume control for the person who speaks the quietest. The amplifier will then reduce the volume for louder persons.

### **External Speakers**

The lectern permits the connection of an external speaker system. The external system should be terminated in a 1/4" mono phone plug. To add an external system *in addition* to the lectern speakers, insert the phone plug into the jack labeled EXTERNAL SPEAKER UNSWITCHED. To bypass the lectern speakers and use *only the external system*, insert the plug into the jack labeled EXTERNAL SPEAKER SWITCHED.

**Important Note:** The total external speaker impedance should not be less than 16 ohms.

### **Accessory Outlet**

Caution: The POWER switch does not control the auxiliary receptacle.

An unswitched three-wire outlet (AUX POWER) is provided to power accessory equipment (tape recorder, auxiliary source, etc.). Ensure that the equipment does not require more than 300 watts maximum. Use the accessory power cord to connect external equipment.

# Feedback Control

Feedback can occur when part of the output signal returns back to the input side of the amplifier. It is often caused by the microphone being too close or in front of the speakers. It can also result from the proximity effect, that is, when a person speaks too closely to a microphone. If you encounter feedback while using the lectern, try these techniques:

If using the Lectern Microphone (gooseneck mic):

- Reposition the microphone
- Reduce volume level
- Reduce the Treble level
- Enable the Speech Filter

If using another microphone (Mic 1):

- Make sure that the person using the microphone stays in back of the lectern
- · Reduce the volume level
- · Reduce the Treble level
- Enable the Speech Filter

## **Maintenance**

The exterior surfaces should be cleaned with a soft cloth moistened with a mild soap solution. Do not use abrasives or solvent-based cleaners. Do not allow liquid to enter the black grille material.

### **Service**

**Caution:** There are no user serviceable parts within the amplifier. To avoid an electric shock, do not remove any of the amplifier covers.

Have all internal servicing performed by a qualified technician. The warranty will become void if repairs are made by other than the Bogen Service Department or authorized service agency. In the event of difficulty, contact our technical support group, 1-800-999-2809, 8:30 AM until 6:00 PM, Eastern Standard Time, Monday through Friday.

# **Specifications**

Rated Power Output: 40 watts RMS

Frequency Response: 20Hz to 20kHz ±1dB @ -2dB < rated power

THD: Less than 0.5%, 20Hz to 20kHz @ -2dB <

rated power

Hum & Noise (20Hz to 20kHz): MIC: -55dB below rated output

Aux: -70dB below rated output

Input Connections: MIC 1/Lectern Mic: 3-pin

AUX: RCA jack (mono)

Input Sensitivity: MIC: Lo-Z (250 ohms), balanced, 800mV

AUX: Hi-Z (10 Kilohms), unbalanced > 85mV

Microphone: High-quality cardioid condenser microphone

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

ALC: Switch IN/OUT

Speech Filter: -15dB @ 80Hz

Volume Controls: MIC 1, Lectern Mic, Aux

Tone Controls: Bass and Treble

Switches: Phantom Power, ALC, Speech Filter, Power

External Speaker Impedance: 16 ohms (minimum)

Tape Output: 500mV

Output Connections: Tape Out — RCA jack

Speaker Out (2) — 1/4" mono phone jack

Auxiliary AC Power: 300 watts max., unswitched

Dimensions: MLA40 — 21-5/8" W x 48" H x 19-1/2" D

MLA40T — 21-5/8" W x 17" H x 19-1/2" D

Shipping Weight: MLA40T (carton 1) — 53 lbs.

MLA40B (carton 2) — 70 lbs.

