# **Podium Pro Audio**

# Model PP802A

# 8" 2-Way Self-Powered Speaker

# User's Manual

# **Podium Pro Audio**

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## INTRODUCTION

Podium Pro Audio self-powered loudspeakers are a high performance yet economical source of portable live sound reinforcement. Applications include speech, vocals, stage monitor and music playback. Used in accordance with the information provided this product will give years of trouble free use.

### PP802A FEATURES

- Rugged, light weight ABS construction.
  - Rubber feet for added stability.
- Perforated metal grill. o Built-in 1-1/2" (38mm) pole mount socket.
- 8" steel basket woofer.
- High temperature woofer voice coil.
  - Titanium diaphragm horn loaded tweeter.
- High power amplifier.
  - Built-in MIC/LINE mixing capability. Midrange control.
  - Dynamic microphone input.
  - o Buffered and balanced loop through allows linking any
  - number of speakers.

### **BEFORE YOU BEGIN**

- Read these instructions.
- Follow these instructions.
- Heed all warnings.
- Do not use where the speaker may get wet.
- Avoid placing the speaker in direct sunlight.
- Never place this speaker in close proximity to a heat source such as a radiator, stove or heater vent. Never defeat the polarizing or safety ground on the AC cord.
- Be certain all equipment is OFF before making or breaking
- connections. Always lower the volume control to minimum (full counter-clockwise) before turning speaker ON or OFF.
- Never attempt to connect a power amplifier's speaker level output to
- the PP802A's inputs.
- Clean only with a damp (not wet) cloth. Refer all service needs to qualified personnel. There are no user
- serviceable components inside.

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### **TROUBLESHOOTING**

Symptom	Likely Cause	What To Do	
	AC power not connected or no AC power.	Verify the presence of AC power.	
No sound.	Power switch off.	Turn speaker on.	
	AC fuse blown.	Replace AC fuse (3A) If new fuse also blows speaker needs repair.	
Speaker is ON but no sound.	No input signal.	Verify signal present at input connector(s).	
	Source level set too low.	Turn the source output level up.	
	Volume control set too low (full counter-clockwise).	Turn MASTER volume up (clockwise).	
Microphone connected but no sound from microphone.	Microphone requires phantom power.	Change to a Dynamic Microphone or add a microphone preamp that provides phantom power.	
	Defective microphone.	Repair or replace microphone.	
	Defective microphone cable.	Repair or replace cable.	
Sound is distorted even when volume is low.	The source level is too high, overloading the LINE input.	Turn the source output down. Raise the MASTER volume (clockwise) to restore desired loudness.	
	AC line voltage too low.	Correct AC circuit fault.	
	Source signal is distorted.	Correct source fault.	
Excessive hiss in system.	Improper gain settings.	Lower MASTER volume. Then increase the source output leve and/or MIC level to restore desired loudness.	
Hum or buzz level rises and falls when volume level is raised or lowered.	Source has faulty safety ground.	Restore safety ground connection or repair source equipment.	
	Faulty cabling between source and speaker.	Repair or replace cable.	
Constant hum or buzz unaffected by volume setting.	Faulty safety ground connection.	Restore safety ground.	
	Induced from AC cords.	Re-route AC power cables awa from the audio interconnect cabling.	
	"Ground loop" (circulating ground current).	Break (lift) the <i>audio</i> ground using a ¼" PHONE plug adapted designed for this purpose.  Connect between the source and speaker.	
	Excessive length unbalanced cable from source.	Use balanced cables whenever possible. Use a Direct Injection Box (DI Box) to convert unbalanced sources to balanced.	
	Improper gain structure.	Increase source and/or microphone output level and decrease speaker volume and/or MIC level(s).	

# PP802A SPECIFICATIONS

System Description: Self powered, ported 8" two-way

Frequency range (-10dB): 30Hz - 20kHz Maximum acoustic output level: 109dB

MID control range: ±12dB @ 3kHz

System power rating: 200 Watts (program material) 400 Watts peak.

WARNING

Podium Pro Audio PP802A loudspeaker is capable of

generating sound pressure levels (SPL) sufficient to cause

permanent hearing damage to performers, production crew and

audience members. Caution must be taken to avoid prolonged

exposure to SPL levels in excess of 90dB. For example: Always

place the speakers in such a manner that no audience members

or personnel are continuously exposed to sound levels in

PROLONGED EXPOSURE TO HIGH SOUND LEVELS

Power requirements: 110VAC, 50/60Hz, up to 3A Enclosure: ABS plastic Weight: 18lb. (8.2kg)

# CONNECTIONS AND CONTROLS

1 MASTER This control adjusts the loudness of this speaker. It has no effect on LINK<sup>®</sup>.

② MID This control varies ±12dB centered at 3kHz. It has no effect on LINK<sup>®</sup>. 3 MIC This control adjusts the level of

the microphone connected to the MIC® input. 4 POWER LED lights green when the

speaker is connected to AC power and the **POWER**® switch is ON. **(5) MIC** This input will accept either an

XLR or 1/4" PHONE plug, balanced or

unbalanced. 6 LINE This input accepts a 1/4" PHONE plug, balanced or unbalanced.

**TINK** Use this output to link multiple speakers to a single source.

LINK is the sum of the MIC<sup>®</sup> and LINE ® inputs, including the MIC® control setting. The MASTER® and MID®

controls have no effect on LINK.

8 POWER ON/OFF Switch. 9 FUSE AC protection, 3A.

(1) AC 110V 50/60Hz power cord input.

# Figure 1

# INSTALLATION

excess of 90dB.

Podium Pro Audio speakers are intended for portable applications where the speakers will be placed directly on the stage floor or mounted on a suitable speaker stand. **VERY IMPORTANT:** This product is **NOT** intended for permanent

installations. Such installations must follow rigorous standards, including cable or chain rigging for safety. No rigging anchor points are provided and any attempt to modify the enclosure for this purpose will weaken the structure. Therefore, any overhead placement requiring rigging cannot be considered safe. FLOOR PLACEMENT: Speakers should be placed in a secure, dry and level

location. Be sure to cover or tape down any cabling that crosses a traffic lane.

Try to place the speakers between the microphone(s) and the audience. This will minimize acoustic feedback.

STAGE "FOLDBACK" MONITOR: Place the PP802A on its side, along the front edge of the stage aimed toward the performers. Exact placement is strongly influenced by type and placement of the microphone(s).

STAND MOUNTING: Podium Pro Audio speakers are compatible with standard 1-1/2" (38mm) stands.

Tip: Sound quality and coverage area are best when the tweeter is between 2 to 4 feet above the audience ear level. Speaker stands must only be used on smooth level surfaces.

- Be certain you select a stand rated for at least 20lb. Contact your dealer for recommendations.
- NEVER MOUNT MORE THAN ONE SPEAKER ON A STAND.
  - Do not attempt to mount the speaker on a stand without an assistant. 1. Mount the speaker on its stand *prior* to making any electrical
    - Check that the set screw in the speaker base is backed out enough to clear the stand post.
    - 3. After placement, verify that the stand post is fully seated in
    - the speaker base. 4. Tighten the set screw (by hand) to lock the speaker in place.
    - Failure to do so may result in injury or equipment damage. Route and secure all cabling such that there are no tripping hazards. Use gaffer's tape or other retaining system liberally.
  - Any cabling which crosses a traffic lane must be covered or taped
  - Add weight (i.e. sandbags) to the base of the stand for added stability. In a windy outdoor location this is vitally important!

# AC POWER DISTRIBUTION

It is very important to provide adequate AC power to each speaker in the system. Performance of the PP802A may be degraded if the AC voltage drops more than five volts. The length of the run and the number of speakers connected dictate the appropriate gauge AC cord (extension cord) to use. Use the following table to establish the correct gauge AC cord to use.

**CAUTION** Never connect more than five PP802A speakers to a single AC cord run. If more than five speakers are used add additional AC cords in parallel as needed.

Gauge	PP802A	PP802A	PP802A	PP802A	PP802A		
16	up to 200'	up to 100'	up to 60'	up to 50'	up to 40'		
14	up to 300'	up to 150'	up to 100'	up to 75'	up to 60'		
12	up to 500'	up to 250'	up to 150'	up to 125'	up to 100'		
SIGNAL DISTRIBUTION							

# Podium Pro Audio speakers can accept either balanced or unbalanced line

level sources and/or microphones. A balanced interconnect is a three conductor system. Two inner

- wires carry the audio signal differentially (opposite phase) and the third wire is for ground reference and shielding only. An unbalanced interconnect is a two wire system wherein the center
- conductor (aka "HOT") carries the signal and the shield/ground conductor is also a signal conductor. The PP802A will accept two common interconnects, XLR and 1/2" PHONE.

XLR cables are always balanced. 1/2" PHONE cables can be balanced or unbalanced. Balanced interconnects provide superior noise immunity, especially for runs over 10 feet. It is recommended that you use balanced interconnects whenever possible.

linked!

LINKING MULTIPLE SPEAKERS

See Figure 1 for control and connection locations. To link (daisy-chain) multiple speakers, use a 1/4" PHONE interconnect from the LINK® connector of the first speaker to the LINE® connector of the second speaker. The PP802A employs a buffered, fully balanced LINK® circuit. Therefore there is no practical limit to the number of speakers that can be

Tip: To use this feature effectively it is necessary to understand exactly what LINK® is. It is the sum of the MIC® and LINE® inputs. This includes their relative levels as set by the MIC<sup>3</sup> control.

Note that the MASTER® and MID® controls have no effect on LINK®. This allows you to optimize each speaker as necessary without altering the other linked speakers.