

Commercial Audio

Metro Wall Mount 6.5-inch 2-way 70V/100V Speaker



P/N 36377

User's Manual

SAFETY WARNINGS AND GUIDELINES

Please read this entire manual before using this device, paying extra attention to these safety warnings and guidelines. Please keep this manual in a safe place for future reference.

- This speaker is intended for indoor use only. Do not expose this speaker to water or moisture of any kind.
- Clean using a soft, dry cloth only. Do not use chemical cleaners, solvents, or detergents. For stubborn deposits, moisten the cloth with warm water.
- This speaker has no user serviceable parts. Do not attempt to open, service, or modify this device.

INTRODUCTION

Thank you for purchasing this Metro Wall Mount Speaker! We understand that a commercial sound system needs to be articulate and able to run 24/7. We also know that speakers should look good or blend into their environment. These Metro wall speakers do it all. They sound great for the spoken word or light background music (BGM) and have a minimal aesthetic that will not distract from the décor.

The unique up-firing tweeter to a down-firing baffle and down-firing woofer allows installers to keep sound where it needs to go, off the walls and ceilings, minimizing reflections that cause phase and modulation that require more EQ and DSP. The 90° horizontal coverage gives these Metro wall speakers flexibility for mounting in several configurations. Simply mount a single unit to the wall for basic coverage or mount two side-by-side for full 180° coverage. Use the optional Quad Hanging Bracket (P/N 36378) to hang four in a center cluster for 360° of sound.

FEATURES

- 70V/100V constant voltage speaker rated for 13 and 25 watts
- Up to 104dB $\pm$ 2dB sound pressure level
- 60 Hz ~ 20 kHz frequency response

CUSTOMER SERVICE

The Monoprice Customer Service department is dedicated to ensuring that your ordering, purchasing, and delivery experience is second to none. If you have any problem with your order, please give us an opportunity to make it right. You can contact a Monoprice Customer Service representative through the Live Chat link on our website www.monoprice.com or via email at support@monoprice.com. Check the website for support times and links.

PACKAGE CONTENTS

Please take an inventory of the package contents to ensure you have all the items listed below. If anything is missing or damaged, please contact Monoprice Customer Service for a replacement.

1x Metro wall mount speaker with attached mounting bracket

1x User's manual

CONSTANT VOLTAGE VS 8-OHM SPEAKER SYSTEMS

A constant voltage speaker system differs from a traditional 8-ohm speaker system in that it uses a step-up transformer at the audio source to raise the voltage and lower the current on the transmission line. At the speaker end, a step-down transformer converts the signal back to a normal speaker level voltage. This reduces power loss during transmission, which allows for the use of longer speaker wire runs using smaller gauge wire.

Additionally, a constant voltage speaker system allows for the use of multiple speakers on each channel, without the need for complicated impedance calculations and configurations. In a constant voltage system, all speakers on a given channel are connected in parallel and the complicated impedance calculations are replaced by simple wattage calculations.

For example, if you want to connect two speakers per channel in a traditional 8-ohm speaker system, you must either connect them in series, which results in an overall 16-ohm impedance, or in parallel, which results in an overall 4-ohm impedance. In the first case, the 16-ohms impedance effectively halves the output power of your amplifier,

resulting in lower overall volume levels. In the latter case, the 4-ohms impedance means that your amplifier will have to work harder and must be rated as stable at 4 ohms. Adding a third speaker to the mix would complicate it further, producing either a 24-ohm or 2.67-ohm overall impedance. Note that very few amplifiers are stable under 2-ohm loads, so that is usually not an option.

On the other hand, with a constant voltage system, you consider first the RMS output wattage of the amplifier. This should be reduced by 20% to compensate for insertion loss. For example, if using a 100-watt amplifier, the total load from speakers should not exceed 80 watts.

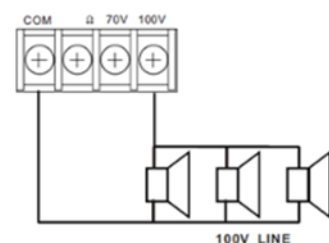
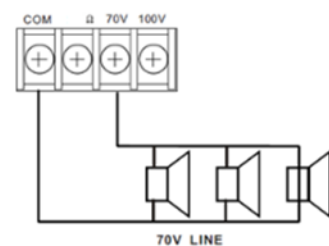
Each individual speaker on a given channel is set to a value such that the total does not exceed the rated power, less 20%. You do not need to worry about making the total as close as possible to the limit; just ensure that the total does not exceed the limit.

If all speakers are set to the same wattage value, they will all have the same volume level. If one speaker is set to a higher wattage value, it will be louder than the others, while a speaker set to a smaller value will be quieter than the others. This allows you to compensate for the environment in which the speaker is placed. For example, a speaker placed outside would need to be louder than a speaker placed in a small room.

SPEAKER WIRING

Most constant voltage speaker installations will consist of multiple speakers per channel, with all speakers connected in parallel, as shown in the diagram to the right.

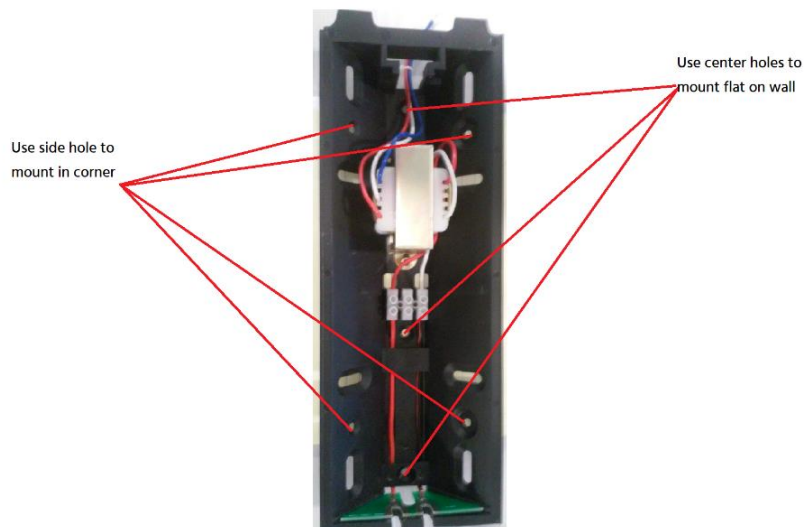
To wire speakers in parallel, connect the first speaker to the amplifier as normal. Connect the positive terminal on the first speaker to the positive terminal of the second speaker, and the negative terminal on the first speaker to the negative terminal on the second. Repeat for each additional speaker in the array.



INSTALLATION

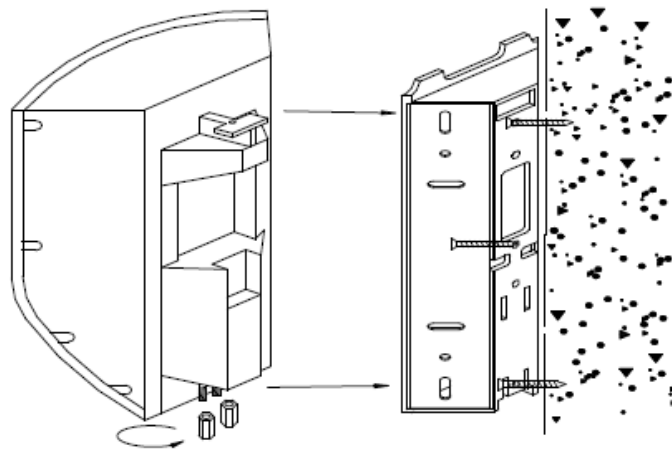
Perform the following steps to mount the speaker to a wall.

1. Unscrew the two caps at the bottom of the speaker.
2. Remove the back panel bracket from the speaker box.
3. Use the image below as a guide for which mounting holes to use for the installation. Use a pencil to mark the hole locations on the wall.



4. Using an appropriately sized and type of drill bit for the type of wall, drill pilot holes into the wall.
5. If mounting to a drywall surface, insert wall anchors (not included) into the pilot holes.
6. Using appropriately sized and type of screws (not included), mount the bracket to the wall.

7. Attach the speaker to the bracket, then tighten the screw caps removed in step 1 to secure the speaker to the bracket.



8. Using 2-conductor speaker wire (not included) to connect the speaker to other speakers in the system and to the amplifier. Refer to the following table to determine which leads to connect for the two voltage and wattage ratings. Refer to the *CONSTANT VOLTAGE VS 8-OHM SPEAKER SYSTEMS* and *SPEAKER WIRING* sections above for help in determining which values to use.

Power Terminals	Constant Voltage Level	
	70V	100V
Red and Blue	13 watts	25 watts
Red and White	25 watts	N/A

TECHNICAL SUPPORT

Monoprice is pleased to provide free, live, online technical support to assist you with any questions you may have about installation, setup, troubleshooting, or product recommendations. If you ever need assistance with your new product, please come online to talk to one of our friendly and knowledgeable Tech Support Associates. Technical support is available through the online chat button on our website www.monoprice.com or through email by sending a message to tech@monoprice.com. Check the website for support times and links.

SPECIFICATIONS

Model	36377
Tweeter Driver Size	1"
Woofer Driver Size	6.5"
Frequency Response	60 Hz ~ 20 kHz
Maximum Sound Pressure Level	104dB ±2dB
Sensitivity	90dB ±2dB
Coverage	90° x 60° down-firing
Dimensions	13.2" x 6.3" x 5.4" (335 x 160 x 136 mm)
Weight	7.1 lbs. (3.2 kg)

REGULATORY COMPLIANCE

Notice for FCC



This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Modifying the equipment without Monoprice's authorization may result in the equipment no longer complying with FCC requirements for Class A digital devices. In that event, your right to use the equipment may be limited by FCC regulations, and you may be required to correct any interference to radio or television communications at your own expense.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Notice for Industry Canada

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.