



ASP90/ASP120

6.5" Indoor/Outdoor Wired Patio Speakers
With Adjustable 70v Options



ASP60

5.25" Indoor/Outdoor Wired Patio Speakers
With Adjustable 70v Options



Instruction Manual



Before you begin

A passive outdoor loudspeaker system is one of the best audio entertainment investments you can make for both residential and commercial installations. Investing the time and labour to install a wired speaker system will provide the safest and most dependable sound solution that can be easily upgraded and customized over time.

Before connecting the speakers, please take the time to design and review the overall system, making sure the speakers are well-situated to provide an even coverage with adequate sound level. Depending on the specific model, the speaker may or may not include a wire tail. You will likely need to purchase additional speaker wires to connect the entire sound system. The longer the distance covered, the higher gauge of speaker wires should be used to maximize audio performance.

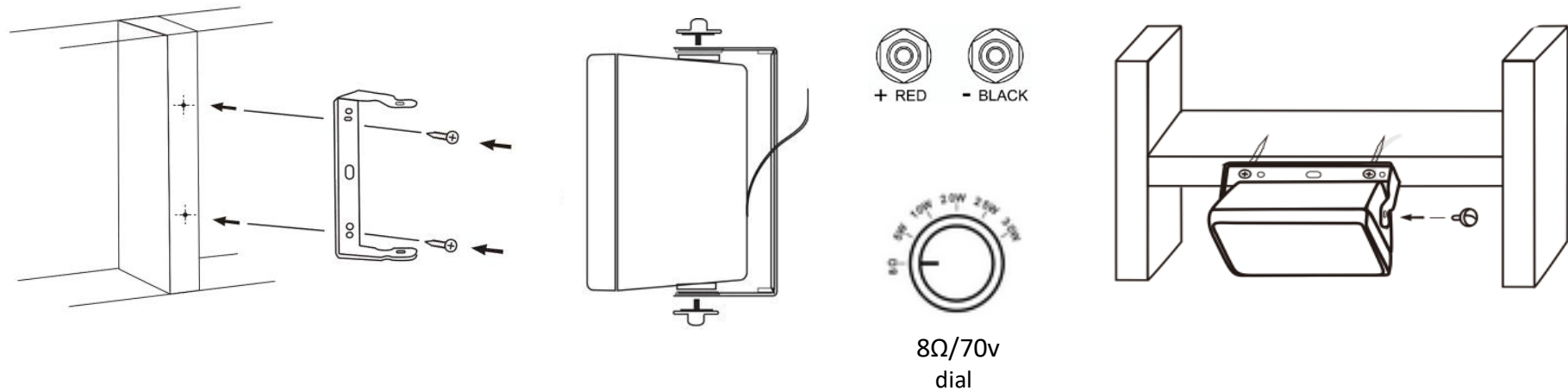
When selecting and connecting an amplifier to a passive loudspeaker, it is important to understand the relationship and impact of impedance load and power wattage between amplifier and loudspeaker. Caution must be used to ensure impedance load of loudspeaker system is compatible with the selected amplifier's operable range, especially when loudspeakers are wired in parallel, series, or a combination of the two. Incorrect impedance matching may cause irreparable harm to your audio equipment.

When considering power of your amplifier, most audio professionals and audiophile will recommend an amplifier with an output power above the loudspeaker's power handling rating. This is the ideal set up to maximize audio performance as the extra power will ensure delivery of sufficient power during short periods of audio peaks along with fuller dynamic range and effortless loud volume output. However, the ability to deliver extra power may cause potential damage to the loudspeaker, especially when playing loudly in a sustained period. Caution and restraint must be used to ensure longevity of the loudspeaker under the ideal set up. If longevity and safe operation is more important than optimal audio performance, you should select an amplifier with a RMS power rating at or slightly below the loudspeaker's rating. Please consult a professional installer if you are unsure about impedance and power level matching.

If you need help or have further question, please contact us at www.ticaudio.nl.



Installation



1. Remove the bracket from the speakers by unscrewing the end caps. Secure the bracket to the desired location with the appropriate mounting screws/anchors (not included). Please ensure the screws/anchors match with the material of the mounting location and can safely support the weight of the speaker. We recommend installing each pair of patio speakers anywhere between 5-20 feet apart.
2. Remove the wire cover by gently pulling from each corner. Plying the cover from the wire opening may break the cover. Once the cover is removed, connect speaker wire from amplifier to the terminals. Make sure the polarity is matched. See "Wiring Diagram" for various wiring methods. Set 8Ω/70v dial setting as instructed in "70v Operation". Reattach the cover by firmly pressing each corner. The cover can be placed in four directions. The wire opening should face downward to the ground for best water-protection.
3. Attach and install the speaker by screwing back the end caps. Be sure to adjust the desired angle before tightening the end caps.



70V Operation

A constant voltage system offers significant advantages over traditional 8Ω sound system for multi-speaker installation over long distance due to ease of wiring and impedance management. When using ASP-series with a standard audio amplifier, select 8Ω on the dial. When using with a 70v amplifier, you must choose one of the 70v wattage settings (2.5W, 5W, 10W, 15W, 20W) that matches your sound coverage need. For optimal performance, the total summation of all speakers' wattage in the entire system should not exceed 80% of the 70v amplifier's output power. Consult TIC or an AV professional if you are unsure about setting up and using a 70v system.

Note

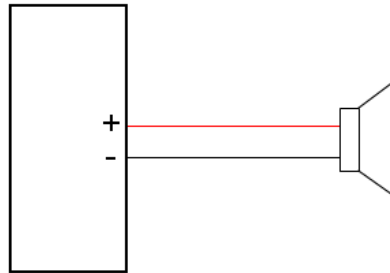
- The ASP series is designed to be water-resistant, not waterproof. The front of speaker should point at least 5° downward to minimize water pooling on drivers and entering into the sound port. To maximize longevity, the speaker is best installed under an overhang (ie. patio, beam, awning, etc.). During periods of prolonged inactivity and extreme weather, we recommend removing the speaker from the bracket and storing it indoor.
- We recommend testing all speakers in sound system before finalizing the installation/mounting.
- If sound is muddled or multiple speakers are not in sync, please check to ensure wire polarity is correct.
- To clean speaker, you can wipe with a damp cloth. If needed, use mild detergent to remove dirt. Do not spray water directly into the grill. In addition, the driver can be wiped with a damp cloth after removing the grill cover.



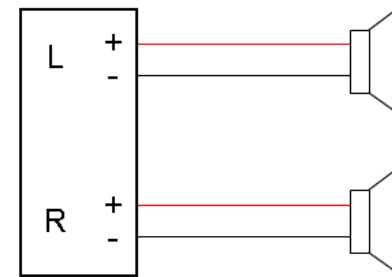
Wiring Diagram

Choose the appropriate wiring option depending on your model and overall system design.

Simple 8Ω installation



mono or bridged mode

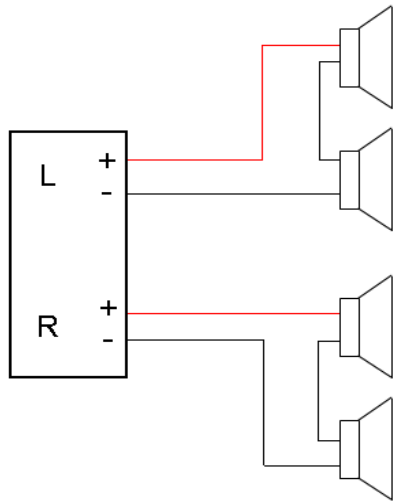


stereo mode

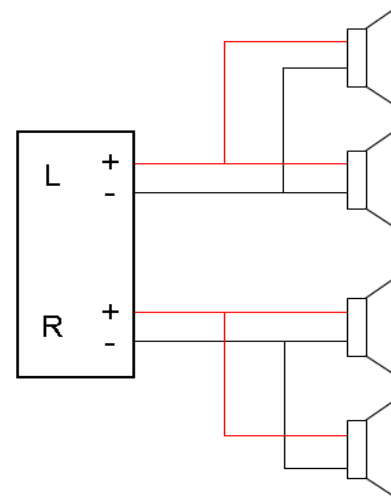
** Colorized version of wiring diagrams and manual is available on our website (www.ticcorp.com). In typical installations, positive terminals are connected to red wires and negative terminals are connected to black wires.*



Four 8Ω speakers 2-channel installation



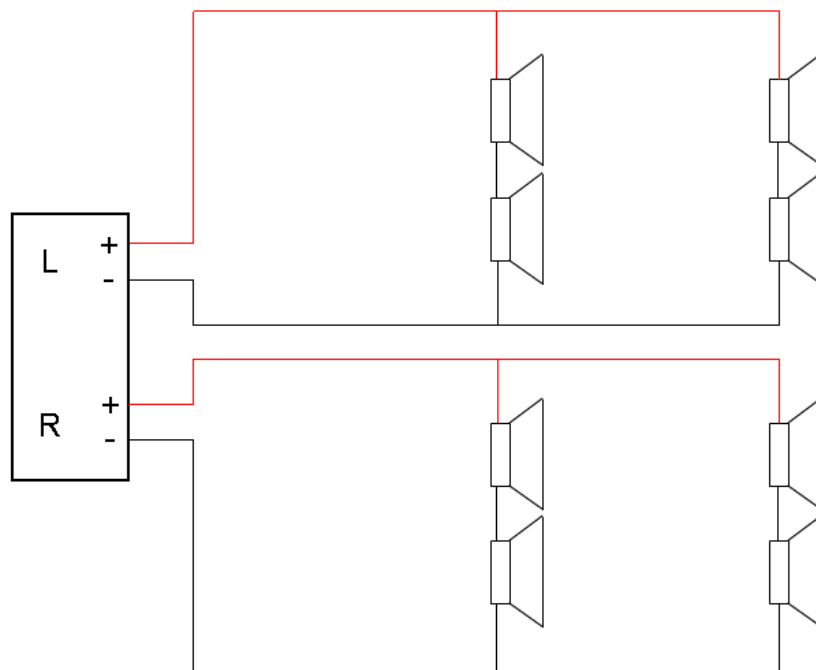
series wiring (16Ω/channel)



parallel wiring (4Ω/channel)



Eight 8Ω speakers 2-channel installation



series-parallel wiring (8Ω/channel)



Specification by model

	<u>ASP60</u>	<u>ASP90</u>	<u>ASP120</u>
Driver Size	5.25" woofer 0.75" tweeter	6.5" woofer 1" tweeter	6.5" woofer 1" tweeter
70v Option	2.5W – 20W	5W – 30W	5W – 30W
8Ω Power Handling (RMS/Peak)	75W/150W	75W/150W	75W/150W
Impedance	8Ω / channel 4Ω / parallel 16Ω / series	8Ω / channel 4Ω / parallel 16Ω / series	8Ω / channel 4Ω / parallel 16Ω / series



TIC Audio Inc./TIC Audio Europe vof. All rights reserved. The TIC logo is a trademark of TIC Audio Inc. and TIC Audio Europe vof, registered in the United States and Europe. Features, specifications, and appearance are subject to change without notice.

Please consult audio professionals if you have any question regarding sound system design and installation.
For more information, please visit our website: www.ticaudio.nl

