CARVIN

802 Loudspeaker System

The 802 two-way 200 watt 12" speaker system provides good projection and frequency response from a portable cabinet. It is ideal for use in small clubs or halls as a sound reinforcement loudspeaker. When placed on optional speaker stands, it has even greater projection, making it an obvious choice where portability and performance are of equal importance.



COMPONENTS

The 802 loudspeaker system features our dynamic new PS12 Woofer, with 200 watts of power handling and extended frequency response. The C210 crossover feeds our PS490 High Frequency Horn, which handles mids and highs with authority. Response is smooth out to 17kHz, and the cabinet is solid core wood covered in durable OZITE™ with steel corners and a strong recessed handle. All top quality components and construction assure you years of superb and trouble free performance from the 802 loudspeaker system.

CROSSOVER & CONNECTIONS



CARVIN C210 CROSSOVER

Carvin's C210 crossover is designed to provide a highly accurate frequency response when the sound output from the woofer combines with the output of the tweeter. This advanced crossover makes a difference you can hear, especially at the high sound levels typically used on stage. The C210 is also extremely flexible, allowing you to run the speakers in bi-amp configurations for even greater output. The C210's features are as follows:

• Response Adjustment Switch (Normal/Bright) - This switch allows you to take advantage of the high efficiency of the horn tweeter. Setting the switch to "Bright" increases the drive to the tweeter by 4 dB thereby increasing overall system efficiency. Treble can then be cut at the mixer to provide increased headroom for the power amp. The 802 is a compact two-way loudspeaker system designed for high level sound reinforcement. A natural sounding frequency balance is achieved through the use of professional grade transducers combined with a uniquely superior crossover.

•Biamp Switch (Normal/Biamp) - This switch allows you to access the built-in crossover for normal use (switch in Normal Position), or to bypass the crossover (Biamp Position) giving you the option to run separate power amps to the woofer and tweeter components for additional distortion free output. Set the switch to normal at all times when not biamping.

• Normal Inputs/Biamp High Inputs - These input jacks are the connection to the built in crossover when the biamp switch is in the Normal position. When switched to Biamp position, these inputs become Biamp high inputs, bypassing the built-in crossover and directly accessing the tweeter or horn through a DC blocking capacitor. NOTE: DO NOT switch the Biamp switch to Biamp position when a full range signal is connected to the Normal inputs as this can cause immediate and severe damage to the tweeter. Set the Biamp switch to the Biamp position only when using an external electronic crossover along with separate power amps for woofer and tweeter.

-Biamp Low Inputs - These connections are to be used <u>exclusively</u> when the Normal/Biamp switch is in the **Biamp** position <u>and at no other time</u>. The purpose of this connection is to bypass the built-in crossover, allowing you to send power to the woofer separately. It is **never** to be used with the Normal/Biamp switch in normal position or damage could result to the speaker.

• Parallel Wiring - Both the Normal/ Biamp High Inputs and the Biamp Low Inputs are parallel wired. This means you can chain together additional speakers by taking your input cable from the power amp and plugging into one jack of the Normal Inputs of the first speaker and by taking a cable out of the other Normal Input jack in the pair and into the <u>SAME</u> Normal Input jack located on the other speaker crossover. When Biamping, the same rule applies to both high and low inputs as long as all inputs are <u>Matched</u> (High to High, Low to Low). CAUTION: Your load impedance will be reduced in half if you add another speaker of the same impedance. DO NOT daisy-chain more than two systems because of the limited power capacity of the main feed cable.

• SUGGESTIONS FOR OPTIMAL PERFORMANCE

1) Raise the enclosure to the ear level of your audience. 2) Control feedback with a graphic or parametric equalizer. Keep microphones in back of or pointed away from speakers. 3) Placement of any speaker can greatly affect bass output. Place the enclosure close to walls and the floor to increase the bass response. Raise the speaker off the floor and move it away from the walls to reduce the bass. 4) For higher sound levels consider biamping the system.

5). For even higher sound levels add additional enclosures (Parallel speakers will also draw additional power from the power amp but be careful not to load the amp below its rated minimum load impedance).

PRECAUTIONS

This system will give exceptional performance with years of service, providing the operator does not abuse the system. Please be advised of the following caution areas: 1) **DO NOT EXCEED THE POWER HANDLING CAPACITY**-this could result in damage to the speakers. 2) Do not allow excessive power amp clipping. 3) **KEEP THE SPEAKER AWAY FROM:** water, moisture, dust and intense heat, as such damage to the speakers is <u>not</u> covered under warranty.

SPEAKER PROTECTION

All Carvin speakers come with a special protection circuit designed to keep the tweeter system virtually free from harm. This circuit attenuates the drive level to the tweeter automatically to maintain safe driving levels. Also, it does so in an essentially inaudible fashion, so you never notice it working. NOTE: This circuit is designed to provide protection to the tweeter, but not the woofer. As a result, care must be taken to stay within the power rating of the system.

WARRANTY

Carvin loudspeakers are covered by a ONE year limited warranty. Warranty coverage is limited to original manufacturing defects only. IT DOES NOT COVER: 1) Opened or burned voice coils. 2) Torn cones caused by improper packing or abuse. 3) Damage from rain, moisture, etc.

• RETURN FOR REPAIR

Any defective speakers/drivers should be removed from the enclosure and returned directly to Carvin. If your speaker(s) have been damaged, there will be a reconing fee. We advise placing the speakers on a 1/4" piece of plywood when returning. DO NOT stuff paper into the speaker as it will damage the cone. Ship PREPAID by UPS. Include your address and a detailed description of the problem. Your speaker will be returned COD for the cost of shipping and reconing.

MODEL 802 LOUDSPEAKER SYSTEM

TECHNICAL SPECIFICATIONS:

Frequency Response:
Useable Low Frequency Bandwidth:
Power Handling:
Sensitivity:
Coverage Angles:
Nominal Impedance:
Transducer Components:
Crossover Type:
Crossover Frequencies:
Input Connectors:
Woofer Enclosure Type:
Enclosure Covering:
Dimensions

Weight:

80 Hz to 17 kHz ± 3dB 50 Hz (-10 dB) 200 Watts Continuous Program Power 99 dB SPL, 1Watt @ 1 meter 90° Horizontal, 45° Vertical 8 Ω PS12, PS490 Constant Voltage Quasi Second Order 2 kHz Four 1/4" Phone Jacks Closed Box OZITE™ (Charcoal Color) 17.5"W x 12"D x 22"H



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