

How to connect the SubElectro 100



All you need on your amplifier is an output called "pre out" or "sub". The rest is simple adjustment of the facilities on the SubElectro 100.

Adjustment of the volume

Adjustment of the frequency range for SubElectro. Adaptation to your existing speakers

Input. Use one or two input cables depending on the facilities on your amplifier

Output. For other active loudspeakers or other amplifiers

Power indicator. Red light means "on"

Phase. Useful in some living rooms

Power on/off. Or auto if the SubElectro is only to be turned on when there is use for it

Fuse

Mains

The System Audio SubElectro 100

The extremely different active subwoofer



Speed is vital for a loudspeaker. In an active subwoofer speed means that you never hear a boring and boomy bass

Technical description

Built-in amplifier: 100 Watts (max.)
Output devices: Discrete
Frequency range: 18-160 Hz
Variable crossover frequency: 40-160 Hz
Crossover slope: 24 dB per octave
Maximum SPL: 109 dB
Available input voltages: 110 or 230 Volts (CE approved)
Power functions: On, Auto, Off
Phase: 0 or 180 degrees
Input: Line in (mono or stereo)
Dimensions (WxHxD) cm: 66.6x50x22
Finish: Cherry, Rosewood or Black ash (real wood veneer)

Other System Audio products :

- The 1100 series
- The 70 series

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System Audio SubElectro 100

SubElectro 100 is an unusually versatile active subwoofer. It is designed only to reproduce deep frequencies with high precision. That is why it can be used in a Home Theater system where it will add energy and drama to the movie experience. Rather unusual for an active subwoofer, it can also be used in a HiFi system where it provides a deeper and more precise bass than a conventional speaker can offer – even if it is much bigger. All you need is a "pre out" or "subwoofer" output on your amplifier. Mono or stereo, that does not mean anything for SubElectro 100.

Faster is better

Everybody knows the problems of a boomy bass from active subwoofers. The sound becomes imprecise and it is difficult to distinguish the different sounds from each other. The reason is that the loudspeaker membranes are too heavy and are working too slowly. They are not able to start and stop as quickly as the signal demands. Vital sound details disappear and even quite different instruments will sound alike.

This is not the case with System Audio SubElectro 100 because it is built differently than a conventional active subwoofer.

Four small fast woofers instead of one big slow one

The four 13 cm woofers in SubElectro 100 are capable of reproducing the same deep bass as one big woofer as the four woofers together have a big membrane area. However, they work far more precisely than a big woofer, as the weight of the membranes is much lower. In fact, each membrane does not weigh more than a quarter of a usual piece of paper! The benefits of the light technology are quite obvious, as a fast speaker will reveal more musical details. A loudspeaker can be compared with a computer. The fastest will always process more information. But here the comparison ends because a slow computer will complete the work, if you have enough time. In a slow speaker the sonic details will be lost forever because the heavy membranes does not have the necessary acceleration.



SubElectro 100 is mounted with four System Audio BIG 3000 woofers. They have an extreme magnetic power to drive their incredibly light membranes. A feature that indicates high sonic precision



A different way of thinking

Ole Withthøft founded System Audio in 1984 and leads the product development. He explains: "When still more manufacturers get the same technology at their disposal, they will tend to reach the same results. That is why many loudspeakers are so similar both as to sound and technology.

What happened to the originality? System Audio is run by fascination of better sound experiences. Some of our technical details are so old that others have stopped using them. Others are so new that nobody has started to use them yet. That is the advantage of working with the sound as the most important target. You do not need to worry about following the technical fashion or not".

Cabinet without vibrations

To achieve precision in bass reproduction you have to have a mechanically stable cabinet. The cabinet is the foundation of the loudspeaker and vibrations of just some tenths of a millimetre will colour the sound. At this point the cabinet for SubElectro 100 is designed quite differently, but also very simply. Notice that the four woofers are mounted in pairs in each side of the cabinet. Therefore they balance out each other's vibrations. The vibrations from the woofers in one side will always counterbalance vibrations from the woofers in the opposite side. Simply because they are mounted each in their own direction.

This design makes the cabinet completely vibration-free. You can even place a glass of water on top of a SubElectro 100 when it plays so loud that the whole house is shaking. You will not see one ripple at the surface of the water. It almost seems magical, but it is only pure physics working in the service of sound.

