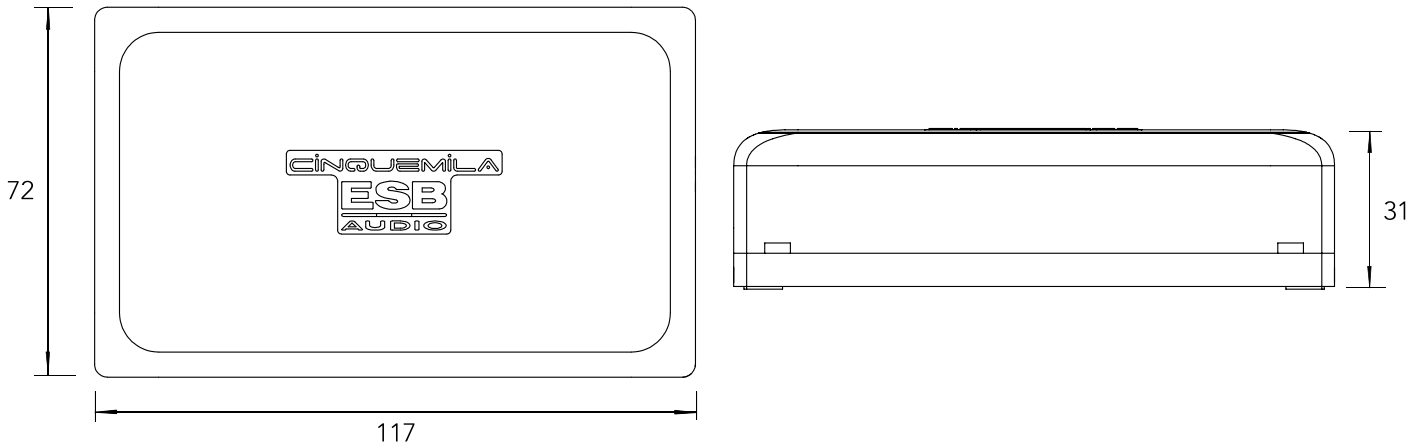
5.6K2CX

2-WAY PASSIVE CROSSOVER

Type: 2-way Passive Crossover Network
Polypropylene or Mylar dielectric capacitors
Over-sized and non-inductive resistors
Tweeter 2-level adjustment
Crossover Frequency: 2.1 kHz
Slope: 12 dB/Oct LP Butterworth type
12 dB/Oct HP Butterworth type
High Frequency Leve: 0/-2 dB
Low Frequency Section: ESB 5165
High Frequency Section: ESB 5028
Power Handling: 300 W

Dividing networks are used in two-way loudspeaker systems to electrically channel low tones to the bass loudspeaker and high notes and overtones to the high frequency transducer. If a dividing network is to fulfill its function without compromise, it must be able to handle extreme variations in dynamics, the full range of audio frequencies, complex transients, and the varying impedance of a loudspeaker load. ESB dividing networks are carefully designed to complement the exact characteristics of the ESB loudspaekers. Each crossover network circuit controls the signal to the high and low frequency loudspeakers in a way that smooth acoustic response is maintained through the full audio spectrum.
Naturally, such sophisticated engineering demands very close tolerances in production. Ordinary networks, for example, often use electrolytic capacitors with tolerances of +/- 20% and metal core on inductors. Response through the crossover region is ragged, and characteristics vary from unit to unit. All ESB networks, on the other hand, use only non-inductive polypropylene or mylar dielectric capacitors (not electrolytic units) individually tested to meet ESB tolerances. The special inductors used in ESB networks have extremely low insertion loss so that none of the driving power to the loudspeaker system is wasted in the network. To avoid interference between the inductors, these have been installed with a rotation of 90°, this arrangement cancels the interactions. All the resistors used to align the level of the various speakers with each other are of the non-inductive type and their power is greatly over-sized. A switch located on the output side allows you to adjust the tweeter level on two options according to the distance of the tweeter from the listener. Both the input and output connections are made using robust two-way audio connectors with screw locking. They accept cables with section up to 4.5 mm (6 AWG). Even the PCB was not left to chance, the copper tracks are of high thickness to limit the maximum signal losses.



All measurements in millimeters

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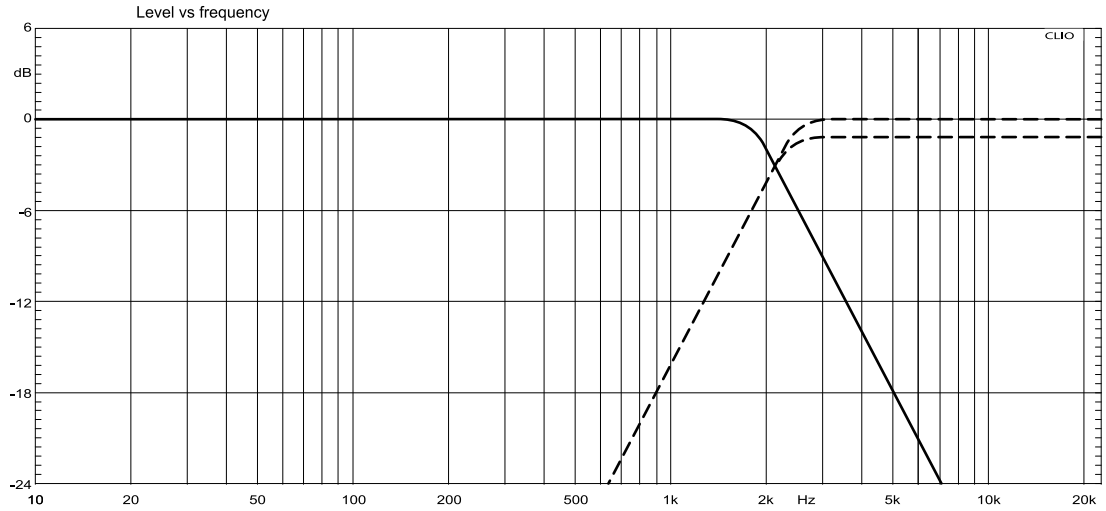
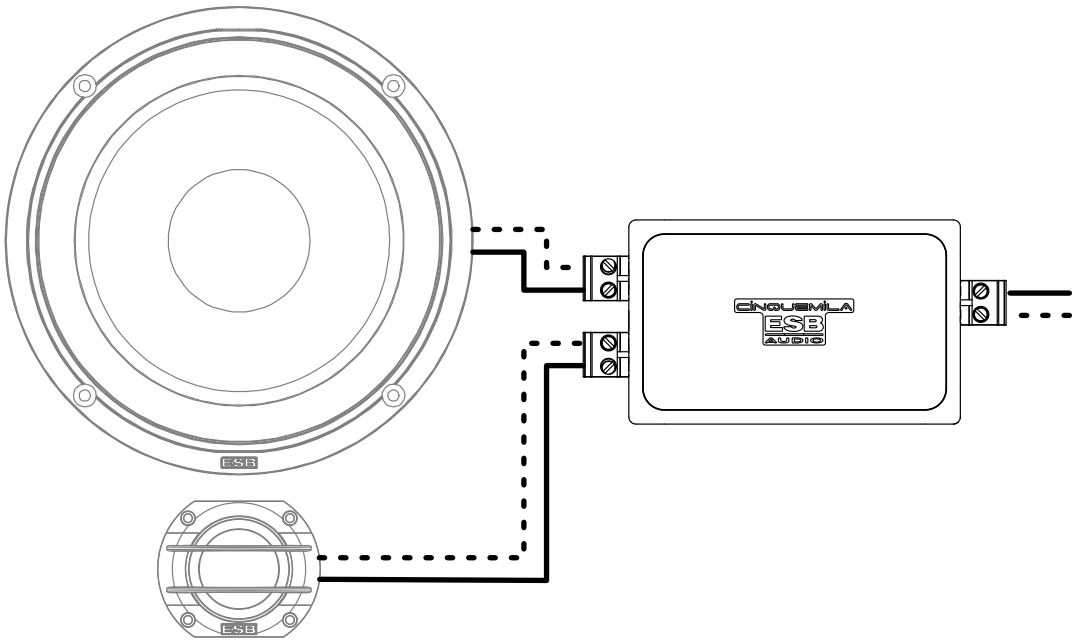
LEVEL CURVE

RESPONSE CURVE :

LF

HF

On resistor