



RESOLUTION SERIES

Car Subwoofer units, 10", 12", 15"



Congratulations on your purchasing a new 'Peerless' Resolution Series car subwoofer!!! Subwoofer installation requires woodwork skill and experience on dis/reassembling car interiors .If you are not sure you have such an experience, please let your local authorized dealer to do it.

Warning: Playing too loud music in automobile can permanently damage your hearing as well as hinder your ability to hear traffic. We recommend that you play low level when driving.

Bass reproduction in your car: Depending on the interior size in your car, bass frequency below 80Hz is boosted by nearly 12dB/oct as the frequency decreases . This effect plays an important role along with free space response on the enclosed datasheet for your subwoofer .

Adjusting amplifier to suit your subwoofer: The subwoofer level can be adjusted to suit the environment ,placement and personal preference. The sound should be an integrated part of your system. Too high bass level will destroy the clarity of the sound.

Choose an Enclosure : Resolution Series subwoofer are optimized to perform the best bass in small sealed or vented ,band pass enclosures. It can still work in finite- baffle mounting. But power handling will be greatly reduced because there is no enclosed volume of air to prevent the cone to pass its excursion limits. For this reason, we don't recommend this way of mounting. First you should choose the type of enclosure based on the music you normally listen to, how much power your amplifier can deliver, how much space you can devote to the subwoofer system inside your vehicle.

Sealed cabinet: Sealed cabinet will give your most controlled and accurate bass than any other type of enclosure, it is well suited for all kinds of music. The required sealed enclosure is always smaller than other type of cabinet. Existing enclosures can easily be found. Sealed cabinets requires more power because of the low sensitivity of the system. So you need to choose an amplifier with more power output. We don't recommend this kind of installation if you want to achieve highest SPL, especially for competition purpose.

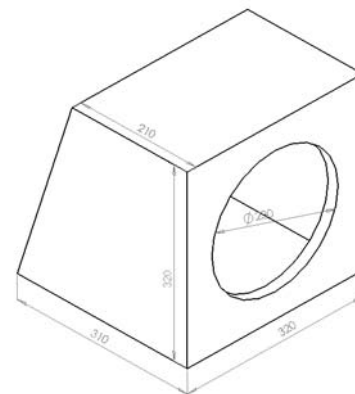
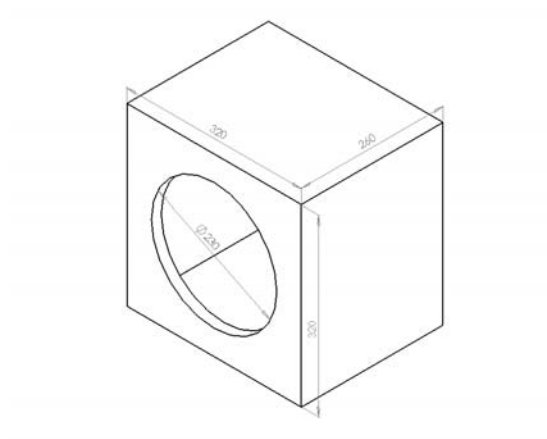
Vented cabinet: Vented cabinet will provide better efficiency in 40-50Hz.If you use small amplifier, the vented system will still provide more bass from less power. The vented cabinet also suits for all kinds of music, but the enclosure must be made **exactly** as the specifications like the size of cabinet, port. Normally an optimized vented system is always bigger than sealed system, it will take more space inside car. You can ask 'Peerless' authorized dealer to verify if you want to build the cabinet yourself.

Band pass cabinet: If highest SPL (Sound pressure level) is what you want, choose band pass. On the other hand, you will lose some sonic accuracy for expense. Band

pass enclosure is very critical to the size of cabinet and port. Normally it needs computer aid tool to make the design. If you are an experienced installer and have woodwork skill, you may be interested in making it by yourselves. We don't recommend none-professional people to do this. Normally band pass enclosure requires lots of space in your car.

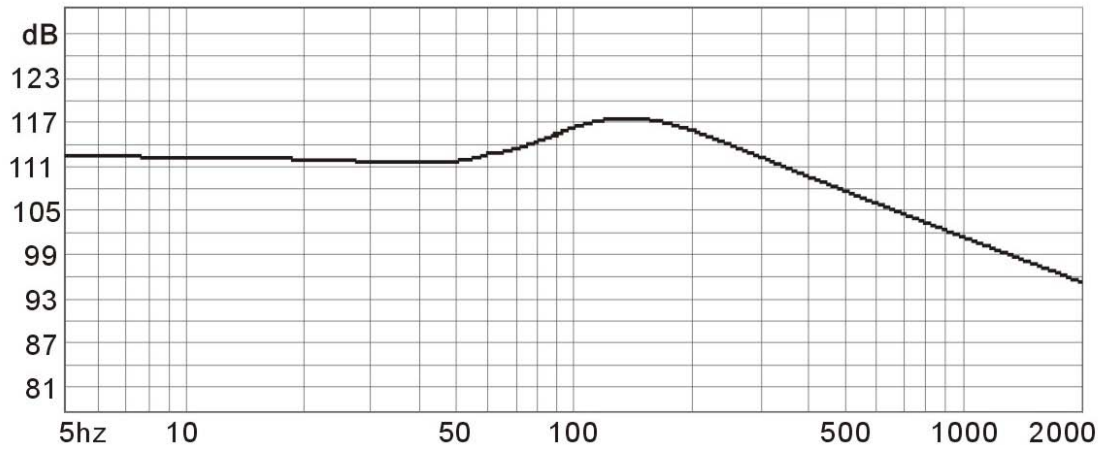
Specifications/Models	Resolution10	Resolution12	Resolution15
Impedance(Ohm)	4	4	4
DCR(Ohm)	3.5	3.5	3.2
Fs(Hz)	30	25	22.3
Qts	0.33	0.33	0.34
Vas(Litres)	40.6	99.7	183.9
BL(N.A)	14.4	14.8	17.7
Moving Mass(g)	107	139	255
Cms(mm/N)	0.26	0.29	0.2
Sensitivity 2.83V/1m	90	91.5	92.3
Recommended Amplifier Output (W)	30-400	30-400	30-1000
Xmax(mm)	10.2	10.2	11.4
Thickness of top plate(mm)	8	8	8
Diameter of Voice Coil(mm)	50	50	65

Resolution 10 cabinet/response:

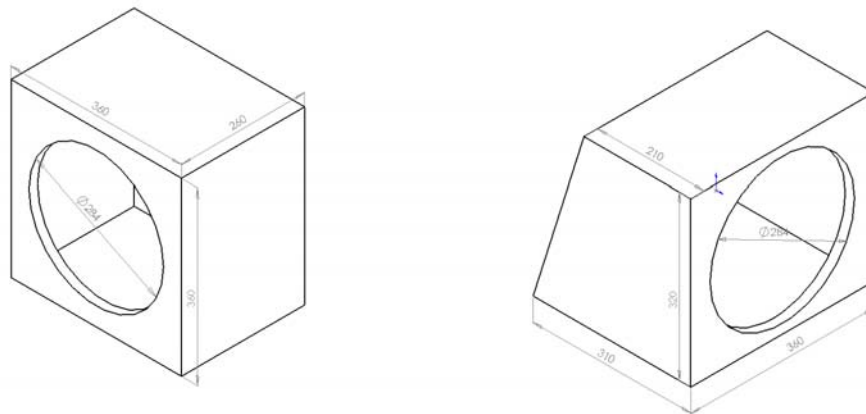


18mm MDF board ,filled with 100% absorptive material.

Sealed box,14 liters in car simulation(dB SPL at 1m) with 300W

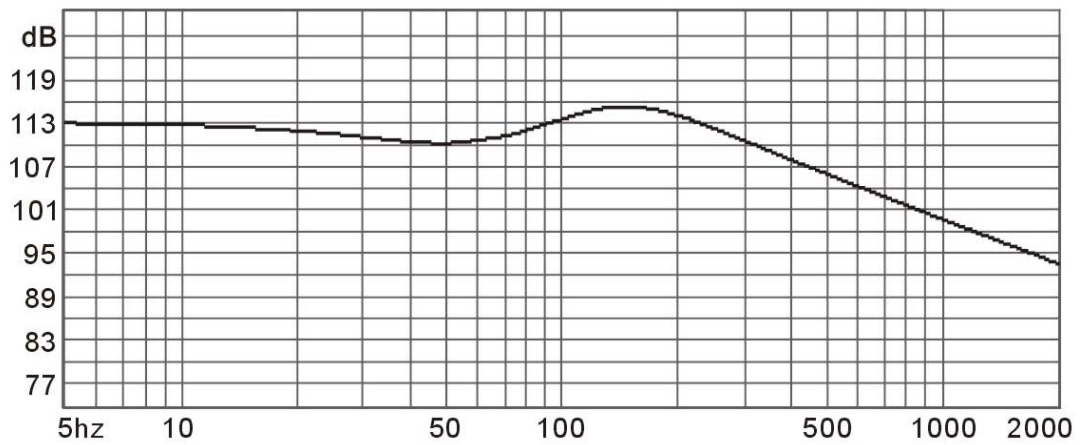


Resolution 12 cabinet/response:

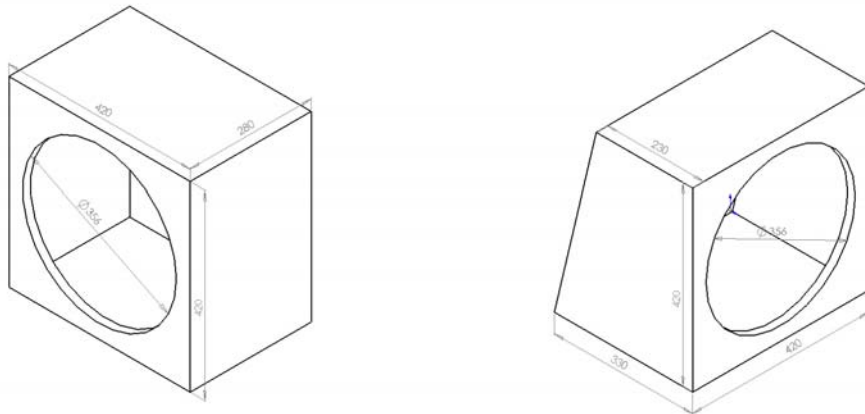


18mm MDF board ,filled with 100% absorptive material.

Sealed box,17 liters in car simulation(dB SPL at 1m) with 300W

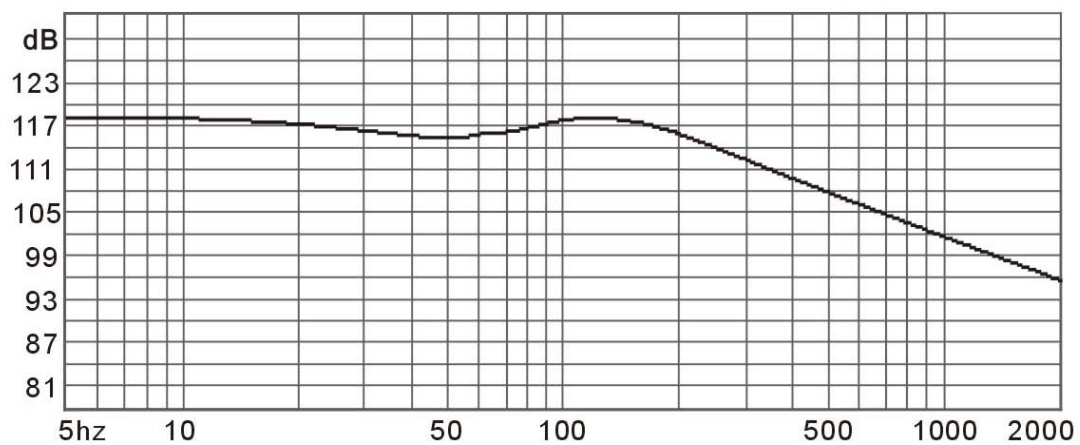


Resolution 15 cabinet/response:



18mm MDF board ,filled with 100% absorptive material.

Sealed box,34 liters in car simulation(dB SPL at 1m) with 300W



Recommended Enclosure Tuning

Model of unit	Sealed	Vented	Bandpass
R.10	Vabr=14Liters/Bessel Tuning=58Hz	Vabr=15Liters/QB3 Tuning=36Hz	Vabr=10+8 Liters/Butterworth Tuning=68Hz
R.12	Vabr=17Liters/EQ Tuning=65Hz	Vabr=28Liters/Bessel Tuning=28Hz	Vabr=24+19 Liters/Butterworth Tuning=57Hz
R.15	Vabr=35Liters/Butterworth Tuning=65Hz	Vabr=60Liters/Bessel Tuning=24Hz	Vabr=49+39 Liters/Butterworth Tuning=48Hz



RESOLUTION 10



RESOLUTION 12



RESOLUTION 15



Peerless RESOLUTION subwoofer units are packed individually in gift boxes