
Subject: Re: The AudioKarma Econo-Waveguide Speaker

Posted by [AudioFred](#) on Sat, 23 Apr 2011 14:36:56 GMT

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Here's the BOM. All parts from Parts Express. The total cost of the parts for a stereo pair is about \$440. (For a stereo pair order two of each unless otherwise noted):

16 ohm 10 W resistor #004-16
25 ohm 10W resistor #004-25
2 ohm 10W resistor #004-2 (in series with 25 ohm resistor)
8 ohm 20W resistor #017-8 (woofer zoebel)
0.47uF capacitor #027-406
4.7uF capacitor #027-422
10uF capacitor #027-428 (woofer zoebel)
12uF capacitor #027-430
#8 X 3/4 screws black 100 pcs #081-422 (one pkg required)
1/4" female disconnects 50 pcs #095-290 (one pkg required)
Speaker binding post #260-303
Eminence Delta-12LFA #290-416
0.60mH 18awg air core inductor #255-234
1.5mH 15awg air core inductor #255-426
2.5" flared port tube #260-478 (two required per speaker)
Selenium D220Ti-8 driver #264-270
H6512 waveguide #270-318

These speakers are capable of sustained high power/output levels, but only if you quadruple the wattage ratings of all the resistors. For typical home audio levels the 10 and 20 watt capacities in the BOM are ok, because they will play to room filling levels with only a few watts.

If you don't have the equipment to build diy enclosures you can use the (\$69/ea) Parts Express flat pack trapezoid birch cablnets #245-324. (Be sure to cut all the holes before you assemble them). These are marginally small for the Delta 12LFA and will have little output below 70hz, so you'll want to use a subwoofer with them.