Subject: Re: Mangum 12 HO as a midrange
Posted by Wayne Parham on Wed, 20 Jul 2005 11:56:15 GMT
View Forum Message <> Reply to Message

That's right. Shorting rings aren't a low-pass filter. They reduce harmonic distortion by making diaphragm motion more symmetrical. The magnetic field of the voice coil adds to the fixed magnet in one direction and subtracts from it in the other direction, making a slight asymmetry of motion. One way to correct for this is to use a conductive ring in the magnet structure, acting as a shorted secondary turn. Induced EMF from voice coil energy creates an opposing magnetic field and with proper ring geometry, this field makes the forward and backward forces symmetrical.
Magnet Structures