Subject: New speakers again...
Posted by hurdy_gurdyman on Tue, 24 May 2005 12:25:21 GMT
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Since I put away my EV LS-12 open baffles I've went through a pair of Klipsch Heresys and was using my EV Sx100 pro speakers untill a few days ago. I picked up a pair of old Avid 60 speakers at a garage sale. These are small, thin towers with a 6 x 9 whizzer coned driver run fullrange in a bass reflex box with a small cone tweeter augmenting it (crossed with a 2 uF cap.) They had a bad case of surround foam-rot. Being the cheapskate I am (and a poor beggar to boot), I decided to make my own cloth-roll surrounds. I've done this on several speakers in the past, so I was pretty sure it would work. It did. I've been listening for a couple of days now and must say I got my $6 worth for these.The 6 x 9 drivers just appear to be common stamped frame drivers of the type that was popular in the late 70's. About a 10 ounce magnet on them. The sound is typical Avid, being taunt and detailed. Not a lot of bass extension, maybe down to 60-70 Hz, making them nice for use with my 12" CV sub. Sensitivity seems to be in the low to mid 90 dB range, but I haven't done any real testing yet to verify this. I'm having to much fun listening to them to bother with testing them. I'll try to get some pics in the next few days. Gotta get back to listening now...Dave

Subject: Re: New speakers again...
Posted by Bob Brines on Tue, 24 May 2005 12:41:17 GMT
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Dave,Would you like to expound on how you make cloth roll surrounds? I have a pair of foam surround drivers that will ultimately need new surrounds.Bob

Subject: Re: New speakers again...
Posted by Wayne Parham on Tue, 24 May 2005 12:45:35 GMT
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Do you remember a couple of years ago, there was a guy making the rounds on the internet with his "Worlds Best Speakers" that were just like those? He was going to every audio discussion board plugging his 6x9 speaker in a tower cabinet of some sort. Seems like they were Jensen or Pioneer triaxials or some such thing.

Subject: Re: New speakers again...
Posted by hurdy_gurdyman on Tue, 24 May 2005 12:49:00 GMT
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Hi Wayne,One things for sure, I'd never claim these were the worlds best speakers. However, they "might" just be the worlds best $6 garage sale speakers.Dave:)

Subject: Re: New speakers again...
Posted by hurdy_gurdyman on Tue, 24 May 2005 13:15:28 GMT
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Hi Bob,I'll try and explain my method of making cloth roll surrounds. It's messy and time consuming, and doesn't look as nice as comercial ones, but it will last almost forever and costs very little.I use thin cotton sheet material. Cut a series of strips just wide enough to fit from the speaker frame edge to the cone surface to be fastened to. Allow enough for the bend in the surround. All the strips should be as close to the same witdth as you can cut them. Now, remove the gasket on the driver and clean the frame by scraping until all old glue is gone. Carefully scrape old foam off the cone edge. Now, cut small sections about 1/2 to 3/4 inch wide from the cotton strips, cutting them with a slight taper making one end a bit longer then the other. Now, you'll need some silicone sealer and a can of naptha and a small mixing jar (I use a yogert container.) Pour about 1/8 inch of naptha in the cup (use in a well ventallated area with no flames or sparks around.) Sgueeze a bead of silicne into these and stir vigorously for while. What you end up with is very soupy silicone. Lay the speaker on it's back and make sure the voice coil is not rubbing. Apply silicne to both sides of the cloth and rub the cloth. Th idea is to saturate the cloth without adding a build up. Put a bit extra silicone on the cone and frame where the cloth is going and carefully place the large end of the cloth on the frame and the more pointy end on the cone and gently prees the ends down. There should be a roll in the cloth where the origional surround had one. Do the same for the opposite side of the driver. Now come back and repeat this with the next strip just slightly overlapping the first and gently rub the two clothe strips so they seal together. Repeat on the other side. Keep doing this until you get all the way around (this will take awhile.) You'll have to mix new batches of sealer every 15-20 minutes, as it starts to solidify. When the speaker is done and has dried a bit, apply a this coat over the whole surround and make sure there are no openings needing to be glued together. Let dry a few hours and it should work. Glue the gasket back on (I use silicoe, as it sticks to the silicne soaked cloth stips.)I'd practice this on some dispossable drivers first. It takes a bit of practice to get the cloth just the right size and make everything go together just right.Let your fingers dry for a half hour or so and the silicone will just peel off like shedding your skin. Much eisier than trying to clean them while wet.All in all, a messy job to save a few bucks, but is a good alternative for unusual sized drivers. It works well. The surround is very flexible and soft.Dave

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Subject: Re: New speakers again...
Posted by Wayne Parham on Tue, 24 May 2005 13:19:01 GMT
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I've actually heard some pretty good coaxial car speakers. Pioneer makes a good sounding little 6x9, to tell the truth. They're tuned to work well in large cabinets, so they sound nice loaded in a trunk, just like they should. The tweeter isn't too bad. Replace the capacitor and you actually have a pretty good speaker. Very workable if you want to improve the sound of an older classic car but keep the original locations of factory installed components.I just remember the "World Best Speakers" ads all over the place, and thought they were pretty funny. The guy was popping up in discussions about real high end stuff, shilling his car speakers in towers. It was like going to an exclusive jewelry store and having a guy walk up to you with a dozen watches on his arm, selling "Rolex's."

Subject: pics of the Avids
Posted by hurdy_gurdyman on Wed, 25 May 2005 14:20:24 GMT
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Here are some pics of the Avid 60 speakers. Scroll to the bottom of the page. There are some close-ups of my homemade surrounds,
also.http://pg.photos.yahoo.com/ph/the_hurdy_gurdyman/album?.dir=6d5d&.src=ph&store=&prodid=&.done=http%3a//pg.photos.yahoo.com/ph/the_hurdy_gurdyman/my_photosDave
 My photos

Subject: Re: pics of the Avids
Posted by Manualblock on Wed, 25 May 2005 19:11:14 GMT
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Say Mr Hurdy-Gurdy; Scott 299/Thorens TD 160/Heresies. Was that you that bought all my old stuff? I have since moved on but am not so sure I moved up. Why don't you put some of those recordings in the buy site?Beautiful Husky.

Subject: Re: pics of the Avids
Posted by hurdy_gurdyman on Wed, 25 May 2005 22:07:46 GMT
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manualblock, I don't think I bought any of my old stuff from you. The Heresys came from a local yard sale for $5 (collage girl was selling her boy friend's speakers.) The Scott is a LK-48-b (kit version of a 222D) and was bought from ebay almost three years ago. The Thorens TD-160 costs $3 at another garage sale about 6 or 7 years ago.Isha appreciates the complement.Dave:)

Subject: Re: pics of the Avids
Posted by Wayne Parham on Wed, 25 May 2005 22:14:49 GMT
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Oh my, my, my. Those numbers are killing me. You totally scored on a bunch of that stuff, didn't you Dave?!!

Subject: Re: pics of the Avids
Posted by hurdy_gurdyman on Wed, 25 May 2005 22:51:18 GMT
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>Oh my, my, my. Those numbers are killing me. You totally scored on a bunch of that stuff, didn't you Dave?!!

Subject: response graph
Posted by hurdy_gurdyman on Thu, 26 May 2005 14:21:52 GMT
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I added a couple of warble tone response graphs of the Avid 60's to my photos. Scroll to bottom of the page.http://pg.photos.yahoo.com/ph/the_hurdy_gurdyman/album?.dir=6d5d&.src=ph&store=&prodid=&.done=http%3a//pg.photos.yahoo.com/ph/the_hurdy_gurdyman/my_photosThere seems to be a problem around 1200 Hz, otherwise looks pretty good. Not sure if the response peak is a driver problem or a box/grill problem.Dave
 My photos

Subject: Re: response graph
Posted by hurdy_gurdyman on Thu, 26 May 2005 16:11:27 GMT
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I'm trying to track down the reason for a peak around 1200 Hz on my Avid 60's response. See them and the response graph at the bottom of the page here.http://pg.photos.yahoo.com/ph/the_hurdy_gurdyman/album?.dir=6d5d&.src=ph&store=&prodid=&.done=http%3a//pg.photos.yahoo.com/ph/the_hurdy_gurdyman/my_photosI'm open to suggestions on what is causing this and what the cure is. I don't know if this is a whizzer problem, box/grill problem, surround problem (not the factory surround)or something else altogether. Maybe a notch filter, or perhaps dammar varnish on the whizzer? Open to anything right now.Still love the way these sound and image, but there is always room for improvement.

Subject: Re: response graph
Posted by Wayne Parham on Thu, 26 May 2005 17:28:49 GMT
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I suspect it's cone breakup. To test that, I'd measure something else (to make sure it wasn't a measurement system anomaly) and in a different location (to make sure it wasn't introduced by the environment). That would help know that what you were seeing was caused by the speaker. Then, if so, you might do something that stiffens the cone or makes it heavier to see if the peak changes shape. If so, it's due to cone flex. You can do reversible things like using radial lines of masking tape on the cone.

Subject: Re: response graph
Posted by hurdy_gurdyman on Thu, 26 May 2005 21:39:16 GMT
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Thanks Wayne. I'll play with that idea early next week.Dave

Subject: frustrated...
Posted by hurdy_gurdyman on Sun, 29 May 2005 16:18:43 GMT
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I'm beginning to wonder if warble tone tests at the listening position have any real value. I've moved the SPL meter forward and back a couple of feet and it changes the various peaks measured from the Avid 60's by 2-3 dB. The peak I get at 5-6 kHz is also on the measurements I took of my EV Sx100 pro speakers, Klipsch Heresys and EV LS-12 and LS-8 open baffles. Funny they would all peak at the same place with such different speaker configurations. The 1200 Hz peak on the Avids is similar, but larger, than that measured on the EV LS-12 open baffles. They are both whizzer speakers, but with great differences in cone and whizzer size. Can a whizzer cone cause problems down in the 1200 Hz range? I figured them to come in much higher. The somewhat broad dip at 315 Hz is similar to all my other speakers, which all exibit dips between 200-400 Hz. Probably floor-bounce phase cancelation, as all of them are rather low down in height. So far, I've added thinned silicone damping to the outer half of the whizzer cone, added poly-fill behind the whizzer and damped the driver frame with caulk. All helped the sound and measurements bit, but nothing earth-shaking.All in all, I'm quite pleased with the open, natural sound of the Avids, and the nice imaging. I think I'll just ignore the measurement flaws and enjoy.Dave

Subject: Re: frustrated...

Posted by Wayne Parham on Sun, 29 May 2005 17:17:25 GMT
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It's more than difficult to get useful data with measurements like that. Don't trust it, trust your ears instead. Might grab a copy of Speaker Workshop if you're itching to make measurements.