Subject: Home theater with 4PI & 1 Pi

Posted by bolducaj on Tue, 18 Mar 2014 01:15:59 GMT

View Forum Message <> Reply to Message

Hi guys,

I started buildin my cave man with high WAF. I was able to include PI speakers but I had to use creativity to integrate. I integrated left and right(4 PI) into columns on each side of the screen. Center is behind the screen (4PI sealed) - I had issues in compromizing here. Side columns include 1 PIs (hear level) and I have two others 1 PI at the rear (ceiling) to make a 7.1 system.

Here are a few pictures (sorry, really messy...). I am finishing the ceiling and will install flooring within the next two months.

I will paint speakers black (add PI logo) and add shakers (cabinet style) on all columns.

The final idea is to not see any speakers (sorry Wayne!...).

Everything is up and running but all the cosmetic has to be done. Sound is amazing, dynamic, very big. Thanks Wayne for sharing drawings. I will update once in a while to show progression.

File Attachments

- 1) SAM_1711.JPG, downloaded 3843 times
- 2) SAM_1712.JPG, downloaded 3714 times
- 3) SAM 1709.JPG, downloaded 3731 times

Subject: Re: Home theater with 4PI & 1 Pi

Posted by Wayne Parham on Tue, 18 Mar 2014 03:06:20 GMT

View Forum Message <> Reply to Message

Looks great!

Subject: Re: Home theater with 4PI & 1 Pi

Posted by Nick77 on Tue, 18 Mar 2014 11:11:48 GMT

View Forum Message <> Reply to Message

Nice built in effect, that has got to sound amazing. Nice work!

Subject: Re: Home theater with 4PI & 1 Pi Posted by bolducaj on Tue, 18 Mar 2014 17:00:21 GMT

View Forum Message <> Reply to Message

Thanks guys. Yes the sound is really good.

A little more info: I downsized the volume of the Center 4 PI (stupidly thinking it will only affect bass), despite advise from Wayne, to fit behind the screen. It was terrible mistake in term of quality - low mid were way too strong on some sound tracks. As a result, I will have to re-do it - keeping intact the internal volume (I will have to re-size, I assume the risk).

I resized all four 1PI to fit, keeping internal volume unchanged. No issue here (I have not measured but it sounds good.

Personnal opinion: To my hear 4PIs and 1PIs are not perfect fit together since the 1PI seem to play higher in frequency. It attracts my attention when watching a movie. However the system is not yet balanced. Not a major concern.

The equipment that drives everything:

- OPPO 105 (used as a preamp and HT processor)
- Main amp SIMAUDIO 4150 (2 channels)
- Surround and center amp SIMAUDIO HT-5 (5 channels)
- Sub amp Dayton SA-1000
- Projector Optoma HD-33
- Everything hook up to my home network with Audio-Video Server
- Room treatment to come...

Subject: Re: Home theater with 4PI & 1 Pi Posted by rkeman on Thu, 20 Mar 2014 18:41:55 GMT

View Forum Message <> Reply to Message

All of the elements for an excellent home theater are there! The planned acoustic room treatments should include an appropriate acoustic ceiling tile, first reflection point and corner bass absorption, and as much diffusion as possible. The Oppo BDP-105 is a superb BluRay player and can serve as a good basic preamplifier/processor if only a few sources will be required. What it doesn't provide is electronic room correction. This can be accomplished in the bass region with any of a number of devices (Velodyne SMS-1, mini DSP, etc...) feeding the subwoofer(s) amplifier. A few inexpensive basic measurement tools would allow the response to be optimized at the listening position with relative ease and can greatly ease the tuning process. More advanced room correction (Audyssey MultiEQ XT-32, Anthem ARC, and Dirac among others) would require a dedicated preamplifier/processor and may yield even more benefit. Good luck!

Subject: Re: Home theater with 4PI & 1 Pi

Posted by bolducaj on Sat, 22 Mar 2014 01:32:38 GMT

View Forum Message <> Reply to Message

Thanks for sharing ideas, rkeman.

No tiles for me (I will use gyproc) but I am planning to use treatment on first reflection as a minimum and probably a little more. Mini DSP is the plan as well as mic and software for measurements (bass only). Sub woofers are the weak element and I can probably improve through correction.

Honestly, i can live with the quality of the sound as it is (even if I consider myself a very demanding person) - keeping in mind it is the home theater not the music room. I listen to music but it is rock as well as loud stuff while player pool.

WAF is more important in that room than great image with Jazz and acoustic stuff.

Bottom line, the way I setted up, the 4 PI are excellent in a home theater and I recommend with little to no risk to assume. Trust me, I made many mistakes in buying stuff in the past costing me many thousand of dollars. You cannot go wrong with PI speakers. I have seen better in some areas but dynamics and speed is outstanding

Annecdote: When I started "the Hobbit" (not a fan of that type of movie by the way) I immediatly got goose bums. The sound was so rich, so big, so real!

3 more weeks, and I will be able to paint, finish the floor, install pool table, start having fun...