Early 2012 – transitioning from old Dali analogue system to new UE4 system.

At this stage, only the UE subwoofers were completed – measurements in progress.

And more measurements. This time, on the remaining surround loudspeakers….
1. Entertainment unit raised to accommodate centre loudspeaker under it.
2. PC monitor changed to smaller size and placed on the PC to avoid direct vibrations from subwoofer.
3. TV upgraded from Hitachi 55” to Sony 70” 3D TV.
1. New PC with Windows7/64bit, Delta1010LT, the Gigabyte GA-Z97X-UD5H motherboard and LynxAES16e (PCIe) sound card, in 48kHz/24bit configuration.

2. Amplifiers are now PWR-ICE AES/EBU amplifiers from miniDSP (cooling slots at the front panel).
1. Replaced older Foxtel PayTV box with newer Foxtel iQ2 version – 5.1HT surround sound and HD picture quality are now available.

2. Replaced older Samsung DVD player with OPPO-103D player. The new player improves audio performance and solves several problems:

3. OPPO-103 has all 8 analogue outputs for surround sound. Output DACs are excellent quality and output SNR is better than 115dB. This is perfect for UE operation and better than the old player.

4. On video side - OPPO-103 is a Blu-ray player with 4k up-scaling.

5. It has two HDMI inputs, and one of them is used as an input for Foxtel PayTV satellite box. So, that LED TV has only one HDMI input occupied by the OPPO-103D output.

6. Switching between Blu-ray playback and Satellite TV is done via OPPO’s HDMI inputs.

7. More importantly, the OPPO-103D player decodes audio signals from any of its HDMI inputs and presents them on its 8 analogue outputs for the UE. This solves my problem of switching audio inputs – OPPO does this for me.

8. Now, I have full surround sound from Blu-ray player and from Foxtel PayTV box – thanks to the OPPOs HDMI decoding capabilities (Foxtel Pay TV box does not have the 5.1 surround sound analogue outputs).

9. Many Blu-ray players can expand the screen by 1.3 times, so that the top and bottom black bars visible on many Hollywood movies will disappear. OPPO-103D can do this in 3D as well. So, it provides full-screen viewing from any current video source.

There is a lot more to be said about the OPPO-103D player, but I have only highlighted the benefits it has delivered being incorporated into Ultimate Equalizer system.
1. TV upgraded from Sony 70” 3D TV to Samsung 85” 4k TV with active 3D system.

This is the final AV system, and currently (December 2015), I have no plans for any further expansions.

This journey took several (almost 4) years and started with small 55” Hitachi HD screen and a prototype of Ultimate Equalizer V4. The prototype used two Delta1010LT PCI soundcards. The PC used i7-960 CPU.

The final version incorporates 85”, 4k, active 3D TV, OPPO 4k/Blue-ray Player, Ultimate Equalizer V9, for Foxtel PayTV decoder with 5.1 surround sound.

In active 3D video system, each eye receives full 1080 lines, as opposed to passive 3D, where each eye receives only half of the lines. The difference in picture quality and resolution is quite pronounced.

Audio system is a linear-phase, 5.2HT system with AES/EBU amplification on the output-side of the DSP processing.
Thank you for reading

Bohdan