PLAYBACK DESIGNS

PLAYBACK DESIGNS‘ HIGH-REZ IMMERSION

On the Ultimate Audio & Musical Experience Ever!

Playback Designs has committed its world famous enterprise to a set of audio „break through“ design concepts affiliating Sonoma wineries with a unique and ongoing demonstration of the exquisite synchronic pleasure conjoining cutting-edge audio enhancement with the complex aesthetic experience of rare vintage wines.

„It dawned on me awhile back,“ Andreas notes, „that I am not alone in recognizing the wonderful if somewhat counter-intuitive symmetry that links the enjoyment of good wines with the enhancement of both joy and awareness derived from profound musical experiences. Both seem to lift consciousness and expand our sense of the universe itself. Each is a somewhat magical realm of human relaxation and feeling. But I‘ve realized for quite some time that thrilling music and exquisite wine enhance each other. It‘s as if they come from the same place in the cosmos or nature... as if they speak to one another or, at least, reinforce the sense of well-being each contributes to our lives.“

It was indeed already in 1998 when Andreas was developing the world‘s first native DSD recorder and workstation for Sony‘s SACD project. At the time Sony‘s chairman assessed DSD‘s potential and performance as being similar to a good wine: its flavor, characteristics and bouquet penetrate deeply into your inner soul by spreading the feeling of joy, harmony and happiness. Andreas agreed so much with this statement that he christened his newly developed workstation „Sonoma“, after an area in California where some of the finest wines in the world are produced. And like with wines that improve with age, so did Sonoma: still today it is being used throughout the world for many high quality DSD recordings.

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PLAYBACK DESIGNS‘ AUDIO-MAGIC WINE-TASTING MUSICAL MYSTERY ADVENTURE

From the beginning Playback Designs‘ state-of-the-art products directly challenged a longstanding disappointment that members of the music-loving world and the high-end audiophile community have dealt with to continually inferior outcomes. Digital audio playback has never, since the inauguration of digital music encoding and digital playback gear, resembled anything ever approximating „perfect sound forever.“ That phrase is a joke that lingers to haunt those who seek musical realities that resemble the unrivaled thrill and bold immediacy of superior wine‘s sensuous pleasure and impact. Life is short. Enjoy it each day... music is among those few deeply distinctive elements of a well-lived life that accomplish that mantra. Great wine exists in a heaven of its own exhilarating welcome. Playback Designs‘ path-breaking gear recovers the audio and musical delicacy and power of analog recording and reproduction at its greatest realization.

For this the designers at Playback Designs, Andreas Koch and Bert Gerlach, created a number of technologies to maximize the connection of the experience of listening to music to the psychological processes in the brain and the emotional immersion of the body per se that result from it. In most cases the designers received their inspiration from observing or experiencing nature or from studying other seemingly unrelated sciences, such as medicine or psychology of mental illnesses for instance.

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SONOMA PRODUCT PHILOSOPHY

Most manufacturers of CD and SACD players for the audiophile markets lack the resources to develop basic drive components themselves and, therefore, have to rely on large scale manufacturers for these components. 2013 was the year when most of these large scale manufacturers announced the end of their production and when small audiophile manufacturers had their last chance to fill their stock of drive components.

While the movement from packaged media to high resolution downloads was already on its way, this single event in 2013 reinforced and secured its entry in the history books.

Already then, Playback Designs embarked on a development of alternative technologies culminating now in the new Sonoma series, mostly the Syrah server and its companion the Merlot DAC. They are a giant leapfrog into the future by being based on an open architecture with no constraints for format or sample rate - a philosophy that already paid off well for Playback Designs' customers with the classic product line. This will lead the company into the world of downloads, streaming and file playback from software based players.

Playback Designs' uniquely leading position and expertise, clearly, is in discrete DAC technology where Andreas and Bert developed such disruptive technologies that it took the audiophile industry by surprise already back in 2008 with the launch of the MPS-5. Its line of CD and SACD players proved to the world that the Achilles heel in the digital audio playback chain is in the DAC. Both players were virtually immune to their digital input sources, because their DACs were designed to isolate them almost completely from their sensitive analog outputs.

Based on this experience over many years now, it is Andreas' strong belief that if careful design efforts are put into the development of the DAC, most sonic improvement measures that many competing manufacturers put into their digital sources, become meaningless - no benefit.

As a result, when developing the new Merlot DAC Andreas and Bert could use all their latest ideas and experiences towards sonic improvement in the context of various digital sources of very different kinds. This allowed for increased focus of design efforts in ease-of-use and graphic user interface for the Syrah server. In both cases the focus was in areas that matter the most: sonic performance in the DAC and ease-of-use in the server.

Where does that leave customers with their collections of CD's and SACD's who find the task of ripping them all onto a server too daunting? Playback Designs wanted to offer those customers a solution as well. Again, by applying the same philosophy of focusing and maximizing design efforts in areas that matter and minimizing them where they don't matter, Playback Designs partnered with Oppo Digital, a developer and manufacturer of disc drive technology and players. Early tests have shown that Oppo's disc drive technology is quite advanced and reliable, and that great sonic performance can be achieved with it when combined with Playback Designs' converter technology. The only challenge was to get the native audio data stream out of the Oppo player and into the Merlot converter. Playback Designs developed a small interface card (OpBox) that intercepts all the native audio data inside the Oppo player, applies its proprietary de-jitter algorithms and then sends the native data via its proprietary and optical PLink interface to the DAC, where a multitude of algorithms await them for further isolation from the digital source.

Why would Playback Designs with its ultra high performance products embark on a product strategy relying on Oppo's technology that is designed for different market applications?
The answer is simple: Playback Designs always offers honest deals for its customers and believes in designing products with the simple goal of maximizing performance based on proven science, rather than overpriced technologies in areas that either hinder performance or don't enhance it.

Case in point: the combination of Merlot DAC and Oppo player with OpBox modification can achieve sonic performance equal or better than many other systems costing many times as much. We couldn't justify any expense re- or over-engineering the already existing Oppo player. It would not result in an honest product.

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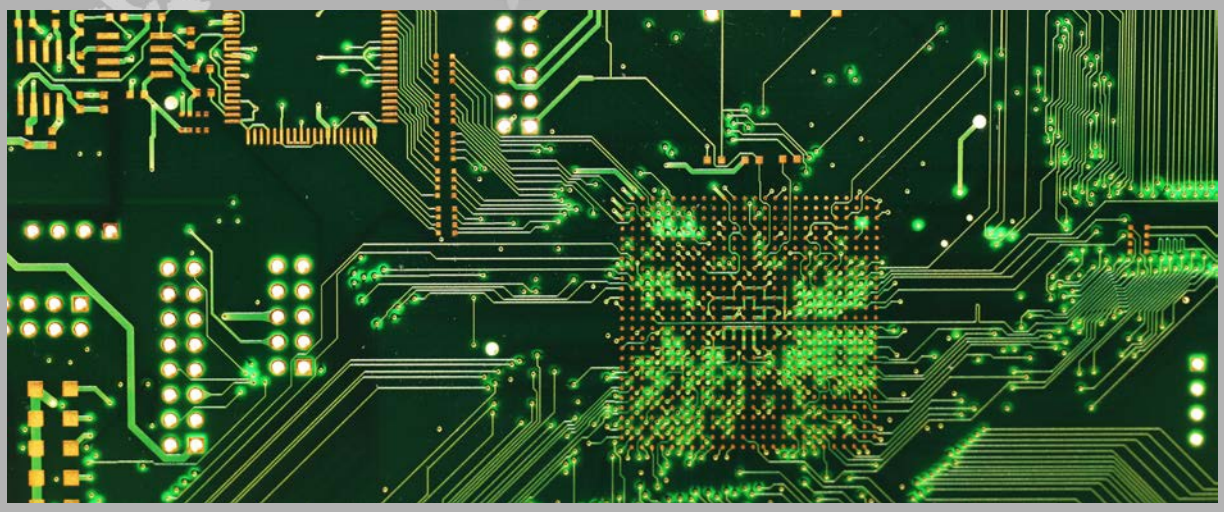

TECHNOLOGIES AT PLAYBACK DESIGNS

The standard audio cookbook teaches about fixed frequency domain filters that work great with periodic test signals (sine waves), but cause havoc with transient music signals (digital ringing effects). Playback Designs uses time domain variable filters that continuously adjust to momentary transient characteristics of the music being played. With this even the shortest transients in music signals remain pure and natural and without the effects of standard fixed frequency domain filters.

Again the standard audio cookbook teaches about the necessity of phase-locked-loops (PLL) in order to re-generate a clean (i.e. low jitter) clock out of a digital audio signal received by the D/A converter. By nature a PLL's ability to control and minimize jitter is limited by its inherent need to maintain phase coherence with the incoming signal. Playback Designs' approach is very different by eliminating the need of PLL's altogether. A unique and proprietary algorithm is used to extract a clock from any incoming digital audio stream that results in less harmful clock jitter than any other known method.

Playback Designs' has a take-no-hostage philosophy and does not use any off-the-shelf components (such as DAC chip sets) for its core technologies. The overall performance would be far too depending on such components. Rather it developed its own algorithms from scratch on a general purpose and user programmable platform (FPGA). Not only does this allow higher precision arithmetic than feasible in standard-off-the-shelf components, but also new and unique algorithms developed by Andreas Koch that no other manufacturer has. On top of that the programmable architecture of all its products allows the end user to upload any new algorithm as it becomes available from Playback Designs, free of charge.

The analog signal path of Playback Designs' products have a double differential structure. That means each half of the differential output signal is derived from differential signals thus minimizing common mode distortions. The resulting performance of the analog section, developed by Bert Gerlach, is right at the limit of the most sensitive measurement tools.

Once the audio signal is converted to analog we are already very close to the human ear. Rather than optimizing the analog output filters for optimum measurements Playback Designs basically incorporates the human ear into the design, because already by itself the human ear is a very sensitive correlation filter. This allows for amazing simplifications in the analog filter that make this unique connection between natural music and emotional listening experience possible.

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PLAYBACK DESIGNS AND CARHARTT VINEYARD

Playback Designs has teamed with Carhartt Vineyard because the philosophies of both companies are so similar: both work hard to stay small, family owned and operated, and to produce quality products. Both take pride in their work and believe that the only way to maintain a consistent style, maximize quality, and preserve their values is to have a hand in every step. Carhartt Vineyard is located in Los Olivos, California on an old cattle ranch that was converted to a winery in the mid 1990's. Its rich history in farming, ranching and family ownership makes its connection to nature a unique experience which can be tasted in its wine products.

Carhartt's slogan "from ground to glass" matches Playback Designs' slogan "from instrument to ears" perfectly. The combination of music through Playback Designs equipment with a glass of Carhartt's wines evoke a deeply gratifying satisfaction as nature reaches our deepest selves in the most soothing way.

Wine is an expression of time. Every time a cork is pulled on a Carhartt wine there is an invitation to experience the harvest moon under which the grapes were picked, meet the workers who filled each barrel and taste the winemaker's tireless effort to translate the beauty of the fruit to wine in the glass. What remains is the wine, which will forever tell the story of each harvest. The best part? It only needs a corkscrew to reveal the magic.

Every time music is played through Playback Designs' music equipment there is an invitation to experience the presence of the musicians, their personal emotions, their call to savor the place and moment where the performance was made and the recording engineer's tireless efforts to translate the beauty of the performance to a string of electronic signals. What remains is the recording, which will forever tell the story of the recording event. The best part? It only needs Playback Designs equipment to reveal the magic.