

## DEQX PDC 2.6P

# Starting all over again

The main device in this test is of no use to you, unless you are prepared to rebuild your hifi sound system from scratch with the DEQX PDC as its key component.

by **AD BIJLEVELD**

*translated by Maarten van Delft*



*The flat DEQX PDC 2.6P is available in silver and black.*

What kind of device is the DEQX PDC? Asking this question is much simpler than answering it. First of all, it is a digital preamp with two analogue and two digital inputs. Signals, coming in via the analogue inputs - one balanced (XLR) and one unbalanced (cinch) - are at once digitized.

These music signals are then further processed by the DEQX. The entire frequency spectrum is split up in 2 or 3 ranges, depending on the loudspeaker system used, i.e. 2 or 3 speakers for each channel. Thus, the function of built-in crossover filters of regular loudspeakers is taken over by the DEQX. This Australian-made processor is therefore best used with loudspeakers from which the crossover filters have been removed. The loudspeakers for treble, mid range and bass must then be fitted with inputs for the signals from the DEQX. They can now be

fully controlled and effectively used for optimal sound reproduction.

But first the processor is connected to a computer and programmed with special DEQX-made software. To this end, RS232 and USB connections are available.

Importer AudioSense, based in Rhenen, has developed a 3-way loudspeaker system, without crossover filters, but instead only provided with 3 pairs of input connections. The characteristics of this system were entered and optimized in the DEQX tested by me. The supplied measuring microphone plays a crucial role in these steps. It is placed at a certain distance, for example 1 metre from the speakers. The processor then sends a number of test signals to the loudspeakers and proposes a number of adjustments based on the response received by the microphone. When the adjustments have

been made, well-nigh linear sound reproduction is possible. All frequencies in the entire range will be equally loud, given the potential of the whole system.

But something is, of course, still missing: the power amplifiers. The DEQX has a total of 6 outputs, 3 for each channel (L+R). Signals are presented to these outputs at line level, so it takes 6 power amplifiers to drive the 2 speakers in a 3-way system, thus creating triamping rather than biamping. If power amplifiers with cinch inputs are used, the DEQX PDC 2.6 (€ 3850,-) will be fine. Power amplifiers with balanced XLR inputs, as used in my test, will require the DEQX PDC 2.6P (€4350,-).

### Room acoustics

The AudioSense company not only import



*The 'P' version of the processor has 6 balanced output.*

the DEQX, they also look after its programming, setting up and adjustment during home delivery. They can supply a complete set of necessary components, such as Hawk D-701 power amplifiers (six housed in 4 cabinets). The set tested by me comprised the following: DEQX 2.6P, AudioSense-assembled interconnects between the balanced processor outputs and the balanced power amplifier inputs, digital power amplifiers, cables to connect the power amps with the 3-way



The power amps are class-D, so quite compact. They are supplied by AudioSense in various configurations.



The Tentlabs CD drive, supplied by AudioSense, is a 'toploader', with side panels matching the colour of the loudspeaker cabinets



Cables and interconnects are AudioSense-made and tailored to the required length..

#### DEQX PDC 2.6P specifications

inputs: 2x analogue (2x cinch plus XLR),  
2x digital (cinch plus XLR)  
microphone outputs: 2x 3 analogue (6x  
cinch plus 6x XLR)  
PC communication: RS232 plus USB  
A/D converter: 24 bit/96 kHz  
D/A converters: 24 bits/192 kHz  
S/N ratio: 107 dB  
distortion: < 0,001%  
dimensions: (wxhxd) 430x45x270 mm  
more information: [www.audiosense.nl](http://www.audiosense.nl)

loudspeakers which were designed and built by AudioSense, measuring microphone and tripod support which come with the DEQX.

The measuring microphone is, of course, vital in setting up the sound system and optimizing its performance, taking into account the acoustics of the listening room. After placing the microphone at the listening position, the DEQX again delivers a series of tests signals, so-called 'sweeps' of the entire frequency range from treble down to bass. The computer, connected to the processor, shows the measuring results and proposes adjustments to optimize sound reproduction. If desired, further manual adjustments to the processor's proposals are possible. Finally, the settings - optimized to the acoustics of your room - are stored in the DEQX and listening can begin. But not quite.... as there is no sound source yet. AudioSense offer the Tentlabs CD drive (€ 2075,-). Being a drive it has no onboard DAC, and only a digital output is provided. The combination of DEQX and CD drive-only is obvious as incoming signals are converted at once to the digital domain. By the way, the DEQX will not object to any other CD player, if only it has a digital output. In our test we also used a SACD player. As no signals are, of course, available from its digital output, we connected this player to the analogue input of the processor.

#### Personal sound reproduction profiles

The processor is supplied with a remote control which enables you to select four inputs (2 analogue and 2 digital). This is a rather limited number, especially given the fact that two inputs are of the less common XLR type. There is just one digital cinch input. After connecting the CD drive, there are no outputs left for your DVD player, TV set, DVD recorder or satellite receiver. There is also just one analogue cinch input (L+R), but this is not sensitive enough to be used for your record player. For our test, however, the available inputs are sufficient, and we can switch between the digital CD drive and the analogue SACD. In addition, there is a volume control which, when used, activates the pilot lamp located at the left side of the front panel. There is also the possibility of instantly selecting 3 sound reproduction profiles of which we prefer the second. The selected profile also activates one of the 3 corresponding pilot lamps on the right side of the front panel.

For an assessment of the entire sound system, we had the cellist Pieter Wispelwey perform through his recording on Channel Classics CCS SA 16501. Even considering the set's price of € 15.600,-, it was simple to conclude that I was treated to superb sound reproduction. Of course, the loudspeakers also greatly contribute to this, but the basis is clearly the active digital 3-way DEQX processing. The definition and spaciousness of the sound image, the way in which the cellist is accurately placed in front of the other musicians, the natural and effortless bass reproduction..... it is truly magnificent.

A direct comparison between the Tentlabs CD drive and an affordable SACD player (connected to the DEQX's analogue input), was won - against my expectations - by a small but clear margin by the Tentlabs CD drive, which succeeded in extracting just a little more dynamics and warmth from the splendid Channel Classics recording.

Then I was anxious to listen to the Brandenburg Concertos as performed by Musica Amphion (Brilliant Classics 93145), because in this recording nothing has been done to reduce the inevitable 'sharpness' of the strings in particular. The 'up front' recording is likewise reproduced by the set and made us reach for the remote control with which bass, mid range and treble can slightly be amplified or attenuated in small steps, with great accuracy and on both channels to an equal extent. With a little less 'mid' and a slightly greater reduction of 'treble', the reproduction of this recording is improved, without losing any of its delightful and direct character. Every recording can be adjusted to one's personal taste and preference. The adjustment can be stored in one of the 100 memory positions and you may consider marking the CD box so that the correct adjustment can instantly be applied in the next listening session.

#### Conclusion

The DEQX PDC 2.6P proves that active digital filtering is indeed a qualitative alternative which is well worth considering. In this consideration you should realize that your old sound system will have to be replaced by different components altogether. The system built by AudioSense around the DEQX does qualify some serious listening tests should you decide to opt for an entirely new sound system. ♦