

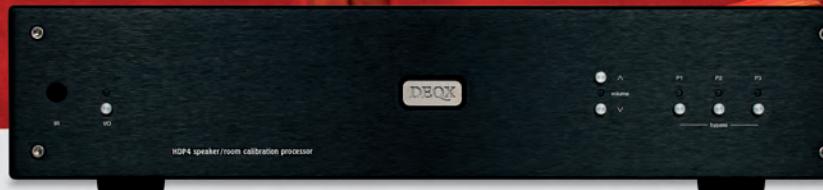


HDP-4<sup>TM</sup>

PRE-AMP

Unlock the potential  
in your speakers

DEQX<sup>TM</sup>



HDP-4™

PRE-AMP

*Correct the speakers first, then the room  
for dynamic, precise and powerful sound*



*Rectifies speaker frequency-response and timing errors,  
adjusting thousands of frequency groups to arrive on time*

#### Master the art of timing

DEQX processors correct the distortion that all speakers make—electro-mechanical devices that they are—and offer room compensation as an added extra. While righting frequency-response errors as other units do, they also uniquely fix critical timing errors by adjusting thousands of frequency groups so that they arrive on time.

Other ‘room correction devices’ simply adjust amplitude response (uneven output at different frequencies) to offset room modes. But they can’t address the fine details of phase coherence; the group-delay timing issues that manifest in all real-world speakers.

The results are startling; two-channel and surround systems open up in a dramatic way when timing, phase and amplitude accuracy are restored to the speakers, with judicious room compensation added.

#### DEQX HDP-4™

The HDP-4 can be installed between your preamp and amplifier or more directly used as a preamp processor. It accepts up to 24/176.4 and 24/192 digital inputs and now supports TOSLINK in, plus an optional USB input module. Stereo digital and analog inputs include SPDIF, AES/EBU, unbalanced analog and balanced analog. The HDP-4 comes standard with many output options such as SPDIF on 75 ohm BNC connectors, with another digital output configured as a DSP Input Pass-Through for connecting selected inputs for further processing. Additionally, it includes balanced and unbalanced analog outputs.

Audiophile quality throughout, the HDP-4’s balanced and unbalanced analog inputs are built around highly transparent analog-to-digital converters (ADCs) running at 24-bit/96kHz resolution. Two SHARC 32-bit floating-point DSPs provide internal processing resolution greater than 140dB, followed by 24/96 digital-to-analog converters (DACs). Nine separate power-supply regulation stages deliver extremely low measured distortion for fatigue-free listening.

And it also does the impossible by precisely integrating one or a pair of subwoofers into your system while supporting 2- or 3-way active speakers for those opting for DEQX XO™ Active configurations, now or in the future.

#### Measure (and correct) speakers first, then the room

In correcting the speakers—before the room—our comprehensive DEQX-Cal™ software generates correction filters for phase, timing coherence and frequency-response. Only then does DEQX-Cal measure from the listening area for room correction.

#### DEQX technology is unique.

It corrects speaker frequency-response and timing errors by adjusting thousands of frequency groups, depending on your speakers’ measurements, so that they arrive at the correct time.

Traditional analog and digital EQ corrupts the timing coherence around the frequencies that they’re trying to equalize for volume. DEQX Processors slow down on-time and early-arriving frequencies so that slower frequencies can catch up.

That just can’t be done in the analog domain!

DEQX uses real computing horsepower to make that happen with a 240-megaflop, 32bit floating-point Digital Signal Processing Engine that essentially achieves zero distortion.

#### We’re DEQXperts

A DEQXpert agent can run the comprehensive DEQX Cal™ software for you on a secure, remote connection for a surprisingly affordable price. You’ll need a simple USB link to your PC (Windows compatible computer) using a measurement microphone and a broadband connection. Or, if you prefer to calibrate it yourself, we can lend a hand via email or phone with tips and directions on getting the best from your setup.

For more information and our dealer list, visit: [deqx.com](http://deqx.com)  
Get DEQXified today!



#### The Forensic Tone Control

The remote control features Standby, Profile Select, Volume, Mute and Input Select, and what must be the world’s most powerful tone controls.

Its three bands include bass, mid and high with up/down buttons for +/- 1dB adjustments.

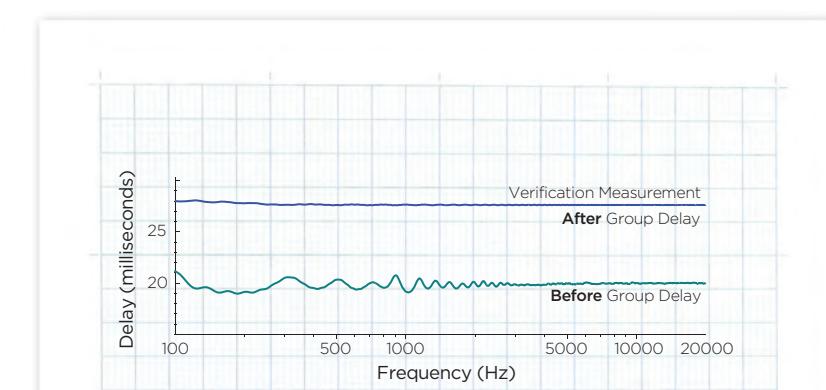
Bass shelf defaults to below 100Hz and high shelf above 3kHz, but frequency is user definable.

The Mid band is fully parametric and adjustable from the remote. Its center frequency can be set in octaves from lowest bass to highest highs then fine-tuned in semitones.

Bandwidth is from one semitone (1/2th octave) to four octaves wide. And you can save settings to 99 presets.



*Unique technology that makes it easy to immerse yourself in music and video*



## HDP-4™ Specifications

### Stereo inputs

- Analogue: RCA unbalanced, XLR balanced  
Digital: TOSLINK, S/PDIF BNC, S/SPIF RCA, AES3 XLR

### Stereo outputs

- Analogue: Low, Mid (or full-range), High: RCA unbalanced and XLR balanced  
Digital: Low, Mid (or full-range), High: S/PDIF BNC  
Digital thru: S/PDIF BNC

Measurement mic input: XLR balanced with 48V phantom power

Mains input voltage: Switchable 115V-230VAC, 50-60Hz • Power consumption: 50VA

Dimensions: height: 2U / 97mm • depth: 325mm • width: 430mm

DSPs: Dual Analogue Devices SHARC 32-bit floating point

### Analogue input maximum levels

- Balanced: +17 dBu differential  
Input impedance (balanced and unbalanced): 50 kohms

### Analogue output (jumper set) maximum levels

- Balanced maximum level: +21 dBu differential  
Unbalanced maximum level: +15 dBu differential

Total harmonic distortion: <0.0008% (analogue-analogue)

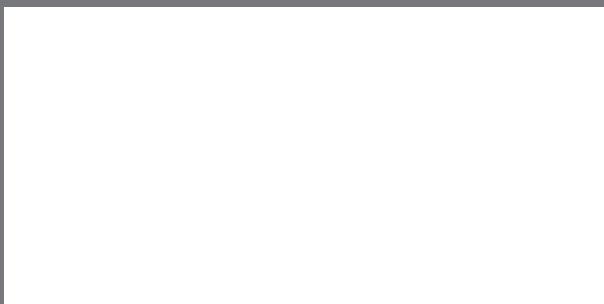
PC connections: USB or RS232

Crossover slope (software selectable): up to 300dB/octave

Latency: from 2.5ms, typically 15ms with speaker correction filters (video sync OK)

*Due to our policy of continuous product improvement the above specifications may change without notice.*

Your DEQX dealer:



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