DEQX PreMATE™ Specifications

Stereo inputs
- Analogue: RCA unbalanced, XLR balanced (+17dBu)
- Digital: TOSLINK, S/PDIF BNC, S/SPIF RCA, AES3 XLR, USB (optional)

Stereo outputs
- Analogue: Bass/Subwoofer/s (mono or stereo), Full-range: RCA unbalanced and XLR balanced
- Digital: Full-range only*: S/PDIF BNC
- *Subwoofer/s outs are analogue only

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 (5.5 Vrms)
- Input impedance (balanced and unbalanced): 50 kohms

Analogue output maximum levels
- Balanced default level: +15 dBu differential (4.4 Vrms)
- Balanced minimum level: +8 dBu differential (2.0 Vrms)
- Balanced maximum level: +21 dBu differential (8.8 Vrms)
- Unbalanced default level: +9 dBu (2.2 Vrms)
- Unbalanced minimum level: +2 dBu differential (1.0 Vrms)
- Unbalanced maximum level: +15 dBu (4.4 Vrms)

Total harmonic distortion: <0.0005% (analogue–analogue)

D/A converters (x3): 32-bit

PC connections: USB or RS232

Crossover slope (software selectable): 6dB/octave to 300dB/octave

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

A/D converter: 24-bit

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

Your DEQX dealer:

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PreMATE™

PROCESSOR

Unlock the potential in your speakers

DEQX™
master the art of timing

PreMate™

PROCESSOR

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

One of a kind

The PreMate can be described as an analogue preamplifier with a high quality built-in DAC also featuring the DSP powers that have made DEQX world-famous. It shares many of the features of DEQX's flagship HDP4. The DEQX mandate for the PreMate was to provide an almost plug-n-play component that seamlessly integrates into existing audio enthusiasts' systems without upsetting traditional —and more conservative—configurations. For the more adventurous music lover the PreMate continues to provide fully customizable industry leading digital correction.

At its most fundamental level the PreMate may be used as a high-quality preamplifier with a 32-bit resolution DSP volume control. It can accept a digital signal from a CD transport or computer audio via USB while also taking a balanced and single-ended analogue input. The various inputs can be switched remotely via the provided infrared remote control. The in-built high-quality PCM1795-based DACs then do the number crunching and pass it on to analogue line outputs for connection to the amplifier of your choice. Connectivity to an integrated amplifier would require setting the volume control to maximum and riding the levels on the PreMate with its high-resolution volume control, or vice versa.

Reviewer was floored

PreMate™ delivers extraordinary resolution from both analogue and digital sources such as vinyl to HD 24/96 and 24/192 digital. As one reviewer‡ experienced the PreMate's new USB input option: "...takes computer sourced audio to not only a viable alternative but one that vies to be your primary source".

PreMate uses DEQX's new generation low-jitter asynchronous re-clocking utilizing DSP memory to buffer and re-clock the audio in just a few milliseconds. This fluid analogue sound is further enhanced by PreMate's virtually zero impedance multilayer PCB design that provides a noise floor that's so low that one reviewer commented, "the noise floor is virtually sitting at the –140dB limit of the test analyzer"‡‡.

The PreMate accepts inputs from optical, S/PDIF and balanced digital sources that also utilize 32-bit floating point DSP re-clocking. For ultimate results its optional USB digital input entirely avoids the losses associated with encoding to and from S/PDIF. Instead a separate DSP regenerates original clock and data integrity that results in awesome bass and midrange authority.

Taking your system to its ultimate potential requires measuring and compensating for the inevitable timing-coherence, phase and frequency response errors that all loudspeakers introduce. Do-it-yourself or use our on-line DEQXpert™ installation and calibration service (see DEQXpert panel).

Need more extended bass? PreMate allows single or stereo subwoofers to be time/phase-aligned and calibrated with the main speakers. Steep crossovers relieve the main speakers from strong bass excursion that increases distortion. The crossovers also quarantine upper-bass output from subwoofers to maximise bass resolution.

‡Martin Appel, *Audiphilia.com* ‡‡Steve Holding, *Australian Hi-Fi May 2014 issue.*

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**

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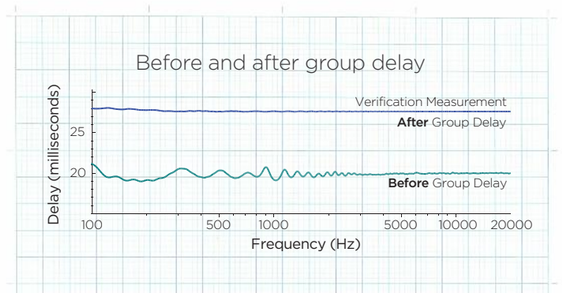
Unique technology that makes it easy to immerse yourself in music and video



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 (1/12th octave) to four octaves wide. And you can save settings to 99 presets.